<u>Final</u> Initial Study/Mitigated Negative Declaration
for the proposed
Bridge Street Fuel Break Project
San Luis Obispo County, California
State Clearinghouse Number 2011081093

prepared by:

The California Department of Forestry and Fire Protection (CAL FIRE)
The Lead Agency Pursuant to Section 21082.1 of the
California Environmental Quality Act (CEQA)

CAL FIRE's Resource Management Program – Room #1516-37
P.O. Box 944246
Sacramento, CA 94244-2460
(916) 653-0839

~~**August 29, 2011**~~
<u>December 5, 2011</u>

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Introduction and Regulatory Context

Stage of CEQA Document Development

☐ **Administrative Draft.** This CEQA document is in preparation by California Department of Forestry and Fire Protection (CAL FIRE) staff.

☐ **Public Document.** This completed CEQA document has been filed by CAL FIRE at the State Clearinghouse on August 29, 2011 and is being circulated for an agency and public review period. This review period began on August 29, 2011 and closes at 5:00pm on October 10, 2011. An electronic version of the Notice of Intent (NOI) and the complete CEQA document are available for review on CAL FIRE's Internet Web Pages at:

http://www.fire.ca.gov/resource_mgt/resource_mgt_EPRP_PublicNotice.php

Addition methods of viewing the NOI, along with instructions for submitting written comments are provided on Pages 5-6 of this document.

☒ **Final CEQA Document.** This Final CEQA document contains the changes made by the Department following consideration of comments received during the public and agency review period. The changes are displayed in strike-out text for deletions and underlined text for insertions. The CEQA administrative record supporting this document is on file, and available for review, at CAL FIRE's Sacramento Headquarters which is located in the Natural Resources Building, 1416 Ninth Street, Room #1516-37 on the 15th Floor, Sacramento, California.

Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND[1]) describes the environmental impact analysis conducted for the proposed project. This document was prepared by California Department of Forestry and Fire Protection (CAL FIRE) staff utilizing information gathered from a number of sources including research and field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA), the Lead Agency, CAL FIRE, has prepared, reviewed, and analyzed the IS/MND and declares that the statements made in this document reflect CAL FIRE's independent judgment as Lead Agency pursuant to CEQA. CAL FIRE further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in significant adverse effects on the environment.

Regulatory Guidance

This IS/MND has been prepared by CAL FIRE to evaluate potential environmental effects which could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code [PRC] §21000 *et seq*.) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq*.).

An Initial Study (IS) is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063[a]), and thus, to determine the appropriate environmental document. In

[1] A list and definition of the acronyms and symbols used in this CEQA document is presented on pages 69-70.

accordance with CEQA Guidelines §15070, a "public agency shall prepare … a proposed negative declaration or mitigated negative declaration … when: (a) The Initial Study shows that there is no substantial evidence … that the project may have a significant impact upon the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions will reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/MND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

Purpose of the Initial Study

CAL FIRE has primary authority for carrying out the proposed project and is the lead agency under CEQA. The purpose of this IS/MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and describe the adjustments made to the project to avoid significant environmental effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public, and reviewing agencies, for review and comment. The IS/MND is being circulated for public and agency review and comment for a review period of 30 days as indicated on the ***Notice of Intent to Adopt a Mitigated Negative Declaration*** (NOI). Refer to the NOI for dates of the 30-day public review period for this project. The information below discusses the publication and posting of the NOI for this project.

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CAL FIRE to notify the general public by utilizing at least one of the following three procedures:

- Publication in a newspaper of general circulation in the area affected by the proposed project,
- Posting the NOI on and off site in the area where the project is to be located, or
- Direct mailing to the owners and occupants of property contiguous to the project.

CAL FIRE has elected to utilize the first two of the three notification options. An electronic version of the NOI was published in ***San Luis Obispo Tribune*** (newspaper) on September 9, 2011. It appeared in the Legal Notices Section within the Classified Section and is also available on the on-line version of this newspaper at: http://www.sanluisobispo.com/classified-ads/ad/1543006 The NOI was posted at four prominent locations on and off site in the area where the project is located for the entire public review period. The four locations where the NOI was posted during the public review period are:

1. At Cambria Public Library, 900 Main Street, Cambria, CA 93428.

2. At Cambria Fire Station #10, 6126 Coventry Lane, Cambria, CA 93428.

3. At the public information counter of the CAL FIRE/County Fire Unit Headquarters, 635 North Santa Rosa Street, San Luis Obispo, CA 93405.

4. At the San Luis Obispo County Clerk/Recorder's Office in San Luis Obispo.

A complete copy of this CEQA document was made available for review by any member of the public requesting to see it at Locations #1, #2 and #3 above. An electronic version of the NOI and the CEQA

document were made available for review for the entire public review period through their posting on CAL FIRE's Internet Web Pages at:
http://www.fire.ca.gov/resource_mgt/resource_mgt_EPRP_PublicNotice.php

If submitted prior to the close of public comment, views and comments are welcomed from reviewing agencies or any member of the public on how the proposed project may affect the environment. Written comments must be postmarked or submitted on or prior to the date the public review period will close (as indicated on the NOI) for CAL FIRE's consideration. Written comments may also be submitted via email (using the email address which appears below) but comments sent via email must also be received on or prior to the close of the 30-day public comment period. Comments should be addressed to:

Dan Foster, Senior Environmental Planner
California Department of Forestry and Fire Protection
Resource Management – Environmental Protection Program
P.O. Box 944246
Sacramento, CA 94244-2460
Phone: (916) 653-0839
Email: sacramentopubliccomment2@fire.ca.gov

After comments are received from the public and reviewing agencies, CAL FIRE will consider those comments and may (1) adopt the Mitigated Negative Declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project.

Project Description and Environmental Setting

Project Location

The proposed project is located in San Luis Obispo County within the community of Cambria along the central coast, just east of Highway 1 and approximately 30 miles south of the Monterey County line. The majority of the project area is located on the 1,465 acre Covell Ranch. One additional landowner, Coalinga-Huron Parks & Recreation Dept. – Camp KEEP (Camp Yeager), makes up the remaining portion (approx 1-2 acres) of the project area. The legal description of the proposed project area is portions of T27S, R8E, Section 15, & Rancho Santa Rosa (Estrada) MDBM (Figure 1). The proposed project falls on two county assessor's parcels: 013-111-005 (Covell), and 013-111-004 (Camp KEEP).

Background and Need for the Project

The proposed project lies within one of the world's five native Monterey pine stands. A number of factors have influenced the pine stand within the project area including selection logging, grazing, alteration of fire regimes, pathogens and non-native species. The result is a dense understory throughout most of the project area that has created competition resulting in a generally poor, overstocked condition for much of the pine stand. The forest is in a senescent condition and will likely continue to decline in health and vigor except where sound forest management techniques are used. Significant mortality of pine overstories has occurred in portions of the project area over the last twenty or more years, leading to areas with high concentrations of snags and downed material (Staub 2011).

Local fire officials, including CAL FIRE, and stakeholders in the Covell Ranch have recognized the need for fuel reduction treatments in order to reduce the fire hazard and improve the fire resiliency of the forest. The Nature Conservancy (TNC) has entered into a partnership with the owner of the Covell Ranch through the

implementation of a conservation easement. As a result of this partnership, TNC has completed the *Forest Management Plan for Covell Ranch* (Staub 2011) to provide recommendations that address future activities on the ranch, focusing largely on fuel reduction treatments and fire protection improvements. The plan incorporated fire behavior predictions produced from *Potential Wildfire Behavior* (Schmidt 2010), which modeled fire behavior for the Covell Ranch area. Six forest management priorities for fire control treatments and implementation are listed in Staub's plan:

1. Establish a primary shaded fuel break from the southern property line up the hogback ridge to the S turn on Bridge Street and thence along the west side of Bridge Street to the Cemetery.

2. Establish defensible space fuel reduction zones adjacent to residences along the western boundary from Sunbury south toward downtown and to residences on either side of the Cemetery in Cambria Pines.

3. Investigate the feasibility of establishing gated emergency access for authorized personnel over the ranch road from the top of Bridge Street to Cambria Pines.

4. Improve internal fire road access for prevention and suppression activities on the ranch east of Bridge Street.

5. Install an emergency water supply tank for fire control purposes on the ranch near the Cemetery.

6. Establish a defensible space fuel reduction zone adjacent to the Cemetery itself.

The proposed project is generally consistent with and will accomplish the objectives of recommendations 1, 2 and 6 of the plan.

The intent of the *Cambria Forest Management Plan* (Jones and Stokes 2002), funded by the State and developed under the guidance of the Cambria Forest Committee, is to provide a framework for the management of Monterey pine and coast live oak forest in the Cambria community. This plan identifies hazard reduction in the forests of the Cambria area, in particular the control of fire-hazard materials, as one of its three primary goals and objectives. The treatment methods of the proposed project are generally consistent with the recommendations of this plan as well.

Project Objectives

Ultimately the intent of the proposed fuel break is to reduce the threat of a catastrophic wildfire in the Cambria area; in terms of both fires moving from wildland areas into developed areas, or from developed areas into sensitive habitats, such as the Monterey pine forest. A closely associated secondary objective is to accomplish the fire hazard reduction work while maintaining or improving forest health and vigor. The proposed project will create areas of defensible space in portions of the wildland-urban interface (WUI) of Cambria and create a shaded fuel break along an existing roadway (Figure 1a). The creation of the roadway fuel break will serve two important functions. First, it provides critical emergency egress and ingress, and second, it creates more favorable conditions for fire officials during fire suppression activities. These needs are specified in the aforementioned forest management plans and are also recommended by local fire officials.

Project Start Date

CAL FIRE anticipates the project will begin ~~in~~ after the ~~summer or~~ fall of 2011.

Project Description

The proposed project would treat approximately 50 acres by reducing the fuel loading throughout the understory of the project area resulting in a shaded fuel break. Along Bridge Street, the fuel break provides a strategic area to stop an advancing wildfire. Along the cemetery and the residences bordering the Covell Ranch the fuel break provides additional defensible space. The fuel break will be constructed through a variety of treatment methods that could include mechanical shredding (mastication) and/or the use of hand crews (chainsaw use with material either: chipped, lopped and scattered, or piled and burned). The fuel reduction methods will treat a majority of the smaller diameter live and dead woody vegetation in the understory, creating a shaded fuel break. Most dead and down material, including both trees and shrubs, less than 10 inches in diameter will be treated. To reduce ladder fuels, most live brush and trees less than 10 inches in diameter at breast height (dbh) will be removed when beneath the canopy of overstory trees. When not beneath the canopy of overstory trees, live brush and trees less than 10 inches dbh will be retained to achieve an average horizontal spacing of 10-15 feet between crowns. In some cases, retained trees will be limbed (pruned) with hand crews to reduce the chances of fire moving from the ground up into tree crowns.

A fully intact forest will be retained with a modified stand structure including trees of all sizes. Pines and oaks of all sizes including seedlings, saplings, and pole-size trees will be retained with the objective of retaining the healthiest, best formed trees at an average stem spacing of 10-15 feet. Mature shrubs, primarily toyon and manzanita, will be retained where suitable trees are lacking and where they are not likely to create ladder fuels. Important habitat components including wildlife snags, large down logs and woodrat houses will be retained. All trees and shrubs less than 10" DBH to be retained will be flagged with ribbons by a Registered Professional Forester or supervised designee prior to operations.

The proposed fuel reduction activities will extend 100 feet on the west side and about 10 feet (road shoulder) on the east side of Bridge Street for a length of ¾ mile, 100 feet on one side (east or south) of property lines adjacent to homes for a length of 2.5 miles, and 150 feet along a ridgeline west of Bridge Street for a length of ¼ mile (distances are approximate). Refer to Figure 1. Fuel break widths were determined based on input from local fire officials, foresters, a fire ecology study, and expected fire behavior. A generally rule for discouraging fire spread between fuels in wildland settings is a separation or reduction in fuels of at least 1 ½ times the height of the fuel. Fuel heights vary in the project area, but a 100-150 foot wide fuel break is considered the minimum width needed for proper functionality.

Mechanically shredded (masticated) material will remain on site and be distributed fairly uniformly with an average depth not to exceed 4 inches. Fuels that are treated by hand crews will be left on site and disposed of through any or all of the following methods: chipping, lop and scatter or pile and burn.

It is anticipated the initial establishment of the fuel break will take approximately 20 to 100 working days, based on the number and type of resources and treatment methods used. For example, hand crew work will typically be longer in duration than mechanical work due to difference in production rates. It is anticipated a majority of the initial treatment will be conducted with mastication equipment.

Future periodic treatments may be conducted where necessary to maintain the integrity of the fuel break. Future maintenance activities will likely be conducted primarily with hand crews and will occur every

several years as conditions and funding warrant. Mastication was chosen as the primary treatment method because the mulched material is incorporated with the litter/duff layer and helps retard the growth of plants, including invasive species, thereby reducing maintenance needs. Future maintenance needs will be assessed over time depending on the conditions that develop. It is expected that French broom will be the most difficult species to control and will require the most work. CAL FIRE, The Nature Conservancy, and the landowner plan to address this need using the best available means at the time. This could include prescribed herbivory, herbicide use, prescribed fire, harrowing, and re-cutting using various tools or equipment. The scope of the maintenance need will be determined over time and appropriate measures will be developed. A detailed maintenance plan is not possible since the exact scope of this need will only develop over time as plants grow. In general, fuelbreaks in conifer forests require less maintenance and at greater intervals than fuelbreaks in oak woodland or shrub dominated areas. Fuel loads will be less with future activities so durations of maintenance activities will typically be less than those of the initial treatment; again however, durations will vary based on the number and type of resources or treatment methods used.

Note regarding future fuel break maintenance: *Additional CEQA documentation will be required for any future treatment methods, including but not limited to the methods listed above (prescribed herbivory, herbicide use, prescribed fire, harrowing, and re-cutting using various tools or equipment) including any future treatment methods CAL FIRE may propose that were not discussed in this document, including maintenance options that currently may not be available to the Department or are not appropriate to use with the current stand conditions. Furthermore prior to any future maintenance activities that are discussed in this document (beyond the initial establishment of the fuel break), a CNDDB query and DFG consultation will reoccur to address potential changes to any sensitive species occurrence and status. ~~Furthermore additional CEQA documentation will~~ Additional CEQA documentation will also occur for any ~~maintenance~~ project activity conducted beyond a five year period from the filing date of the ~~NOI~~ NOD associated with this document.*

Prior to constructing the fuel break, hand crews will be utilized to conduct preparation work. Large accumulations of downed woody debris too large for mechanized equipment to process will be arranged so that equipment can access needed areas of the fuel break without pushing this material into, and without causing damage to, residual vegetation that is intended to remain in the fuel break. Hand crews will also be used to remove French broom (*Genista monspessulana*) in the project area. Broom is present, particularly along roadsides and trails. Broom may be pulled from the ground if feasible, provided soil disturbance is minimized. When soil conditions are too dry for hand pulling, or soil disturbance is too great, broom will be cut just above ground level. All of the removed broom having seed heads will either be disposed of properly off site, or piled and burned to minimized seed dispersal. Additionally a substantial layer of mulch material generated from mastication will reduce the ability of broom and other invasive plants to germinate in many areas. Subsequent efforts to control the spread of broom will be made prior to fuel break maintenance activities as well.

Project design components have been incorporated to avoid and lessen anticipated potential impacts. A number of treatment options exist, some of which were considered, to reduce the threat of catastrophic wildfire in the area, including wider fuel breaks, non shaded fuel breaks such as bull dozer lines, large acreage prescribed (broadcast) burning and large acreage understory fuel reduction. By choosing the proposed type of fuel reduction work and locating the fuel break in strategic areas, project acreage is minimized relative to alternatives; as a result, overall potential impacts are reduced proportionally, yet project objectives are still met. ~~The implementation of most~~ Restricting project activities ~~in the summer and early fall~~ during the spring months reduces potential impacts to wildlife, while potential impacts to soils and water quality are reduced by operating heavy equipment when soil conditions are dry, limiting or excluding

heavy equipment use on steep slopes and near watercourses, or in some cases by excluding such areas from the project altogether.

Environmental Setting of the Project Region

The proposed project is located along the central California coast, an area characterized by cool dry summers and mild wet winters. Average yearly precipitation is near 18 inches. Topography is gentle along the immediate coast. Coastal bluffs and terraces line the shore, vegetated with grasses and coastal sage. Further inland, foothills of the Coast Range are a mix of grasses, coastal sage, chaparral communities, and oak woodlands. The proposed project is located within the only stand of Monterey pine in the region.

Major drainages are absent in the region. Small to mid-sized watercourses tributary to the Pacific Ocean drain the foothills and Coast Range generally from east to west. San Simeon and Santa Rosa Creeks are two examples of such; located to the north and south of the proposed project area respectively.

The proposed project area is within the Coastal Zone (CZ) established by the California Coastal Act of 1976. Regulations known as the Coastal Zone Land Use Ordinance (CZLUO) of the county of San Luis Obispo, Title 23 of the San Luis Obispo County Code have been established and adopted to ensure protection of important coastal resources. SLO County is a certified Local Coastal Program (LCP) with the responsibility of enforcing the provisions of the California Coastal Act.

The following information was produced by the USFS as part of the federal ecoregion mapping program. This program provides a good general description of the ecosystem geography of the area and is available from http://www.fs.fed.us/r5/projects/ecoregions/261ak.htm.

SUBSECTION 261AK

SOUTH COASTAL SANTA LUCIA RANGE

This subsection is the southern part of the Santa Lucia Range that is near the coast, between the Nacimiento fault and the Pacific Ocean. The climate is hot and subhumid; it is modified greatly by marine influence. MLRAs 14c, 14d, and 15d.

Lithology and Stratigraphy. This subsection consists of mostly folded, faulted, and generally metamorphosed sedimentary and volcanic rocks of the Franciscan Complex and much less extensive Cretaceous sediments of the great valley sequence. Some ultramafic rock occurs in this subsection. Miocene marine sediments dominate the southeast end of the subsection, from San Luis Obispo to the Santa Maria or Sisquoc River. Late Quaternary alluvium occurs in Los Osos Valley and some Quaternary marine sediments are along the coast.

Geomorphology. This is a subsection of northwest trending mountains and hills with rounded ridges, steep sides, and mostly narrow canyons. Los Osos Valley is a broad one with substantial areas of floodplain, alluvial fans, and terraces. Remnants of marine terraces are present on narrow benches along the coast. Sand dunes are common along the coast, both adjacent to the beach and on marine terraces. The subsection elevation range is from sea-level up to 3408 feet on Pine Mountain and 3744 feet on Alder Peak at the northwest edge of the subsection. Mass wasting and fluvial erosion are the main geomorphic processes. Sedimentation is an important process in Los Osos Valley. Wind is an important geomorphic agent along the coast.

Soils. The soils are mostly Lithic Xerorthents, Lithic and Pachic Ultic Haploxerolls, serpentinitic Lithic Argixerolls, and Chromic Pelloxererts. Most of these soils are present on Miocene rocks, also, plus shallow Pachic Haploxerolls and Calcic Pachic Haploxerolls at the relatively dry southeast end of the subsection. Pachic Haploxerolls and Chromic Pelloxererts are common on alluvium and marine terraces. Typic and Alfic Xeropsamments prevail in eolian sand behind beaches and on some marine terraces. The soils are well drained, and most are leached free of carbonates, except those on Miocene rocks at the southwest end of the subsection. The soil temperature regimes are thermic. Soil moisture regimes are xeric.

Vegetation. The predominant natural plant communities are Coast live oak series, Chamise series, Manzanita shrublands, and Needlegrass grasslands. Some edaphic associations are Chamise series on shallow soils, Leather oak series on shallow serpentinitic soils, Needlegrass grasslands on Vertisols, and Manzanita shrublands on silicic sandstones. California sagebrush - black sage series is common near the coast and Coast live oak series and Valley oak series are common in Los Osos Valley. The dunes support a succession of plant communities, from bare dune through herbaceous communities and Coyote brush series to California sagebrush - black sage series on stabilized dunes.

Characteristic series by lifeform include:
Dune vegetation: Dune lupine-goldenbrush series, Sand-verbena - beach bursage series, Yellow bush lupine series.
Saltmarsh vegetation: Cordgrass series, Ditchgrass series, Pickleweed series, Saltgrass series, Sedge series.
Grasslands: California annual grassland series, Purple needlegrass series.
Shrublands: Black sage series, Blue blossom series, California encelia series, California sagebrush series, California sagebrush - black sage series, Chamise series, Chamise - bigberry manzanita series, Chamise - black sage series, Chamise - wedgeleaf ceanothus series, Coyote brush series, Deer brush series, Eastwood manzanita series, Leather oak series, Scrub oak series, Wedgeleaf ceanothus series, Woollyleaf manzanita series.
Forests and woodlands: Bishop pine series, California bay series, California sycamore series, Coast live oak series, Knobcone pine series, Mixed oak series, Sargent cypress series, Tanoak series, Valley oak series, White alder series.

Climate. The mean annual precipitation is about 20 to 40 inches. It is practically all rain, except for some snow on at higher elevations. Mean annual temperature is about 50° to 60° F. The mean freeze-free period is about 250 to 300 days.

Surface Water. Runoff is rapid and all but the larger streams are generally dry during the summer. Streams on the seaward side of the mountains in the northwestern part of the subsection may be perennial. There are no lakes, other than temporary ponding behind dunes.

Description of the Local Environment

The proposed project is located within one of only five native Monterey pine forests in the world (Jones & Stokes 1994). The stand is unevenaged, consisting of a mix of Monterey pine (*Pinus radiata*) and coast live oak (*Quercus agrifolia*) with an understory of pine and oak regeneration, and various shrub, grass and forb species. Common understory shrub species include poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), coffeeberry (*Rhamnus cailfornica*), blackberry (*Rubus spp*.) and monkey flower (*Mimulus aurantiacus*). Several photos depict the conditions commonly present in the proposed project area (Figures 2-5).

Shallow swales and the upper reaches of several small watercourses are present or adjacent to the proposed project area (Figure 1b). Each of these ephemeral watercourses is seasonal and typically flow water for short durations following large precipitation events. In most cases, actual channels are subtle and difficult to detect, especially when grasses and herbaceous vegetation are mature. Figures 6 and 7 are photos showing a small watercourse representative of those in the project area.

Slopes are gentle and generally range between 0-30 percent; with exceptions in the south portions of the project areas where pitches of 30-60 percent occur. Much of the project area can be described as flat, and where slopes do occur aspects are variable. The elevation is just over 200 feet throughout most of the proposed project area.

Current Land Use and Previous Impacts

Current Uses

Approximately 48 of the proposed project's 50 acres are on the Covell Ranch. A small portion of the ranch, outside of the proposed project area, is used to raise livestock. The majority (over 1,400 acres) of the ranch is managed by TNC through a conservation easement. The easement requires the ranch be managed and maintained in a manner that is, to the maximum extent possible, consistent with the preservation and

protection of the conservation values of the property and specifically, with regard to the protection and enhancement of native Monterey pine.

Although the Covell Ranch is private property and permission to pass is required, an extensive number of well travelled hiking trails are found throughout the project area. This increased level of human activity is further indication of the significant fire risk in the area which is the main focus of this project.

Coalinga-Huron Recreation & Parks District owns the other parcel within the project area. Approximately 2 acres of Camp Yeager, a camp operated by the Kern Environmental Education Program (KEEP), lies within the proposed project area. The camp is used for educational purposes for children from Kern County.

Previous Impacts

Past impacts that have influenced vegetation in the Cambria area include logging, grazing, pathogens (both native and introduced), fires and fire suppression. However, evidence of fires for agricultural clearance is not apparent within the project area. It is known that most of the Covell Ranch had been used for raising cattle grazing from the mid 1800s into the late 1990s. Fire suppression has occurred in the area since settlement began around the mid 1800s. Evidence of a low intensity surface fire is apparent in the project area north of the Cambria Cemetery, with charring present at the base of pines and fence posts. The date of this fire is not known at this time, nor have any of its effects been in vegetation been analyzed. Based on observation only, little long term effects on vegetation densities or fuel loading occurred as a result of this fire, suggesting it was a low intensity surface fire.

Within the project area, selective logging, grazing, and fire suppression have had an influence on vegetation (Staub 2011). These factors have lead to a generally overstocked, unhealthy understory with high fuel loading. Likely, these factors, combined with insect and pathogen effects (including the recently introduced pitch canker), and the relatively short lived nature of Monterey pine have created significant mortality of overstory pine in some areas in recent years.

No significant fuel reduction activities are known to have previously taken place within the proposed project area. Several home owners have thinned vegetation, removed or piled dead trees, or limbed trees within the project area adjacent to their property. The effects of these small projects are mostly consistent with the expected outcome of the proposed project and in these areas less work and in some cases, no additional work will occur.

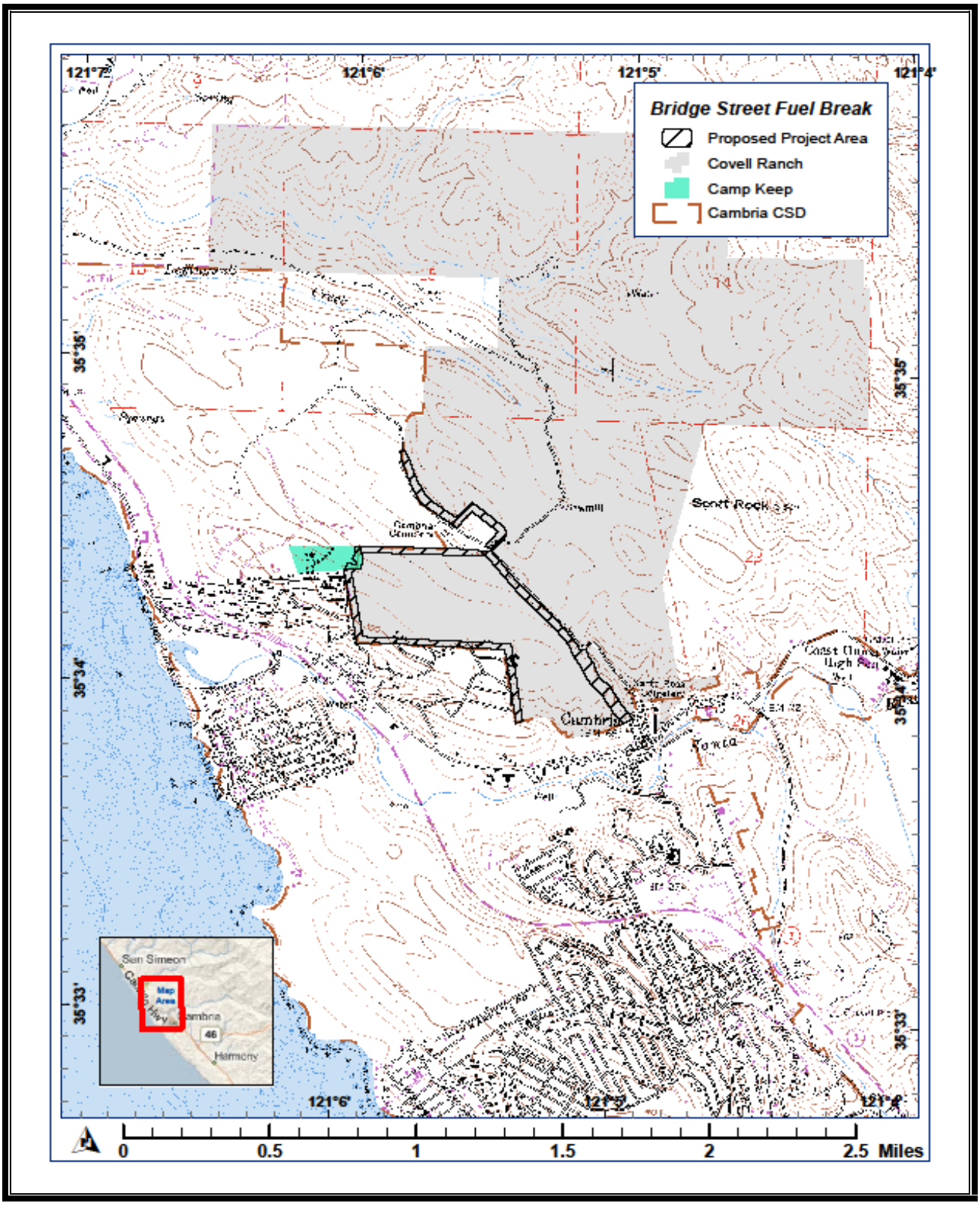

Figure 1. Project Vicinity and Location Map.

Figure 1a. Aerial photo illustrating the WUI and project location.

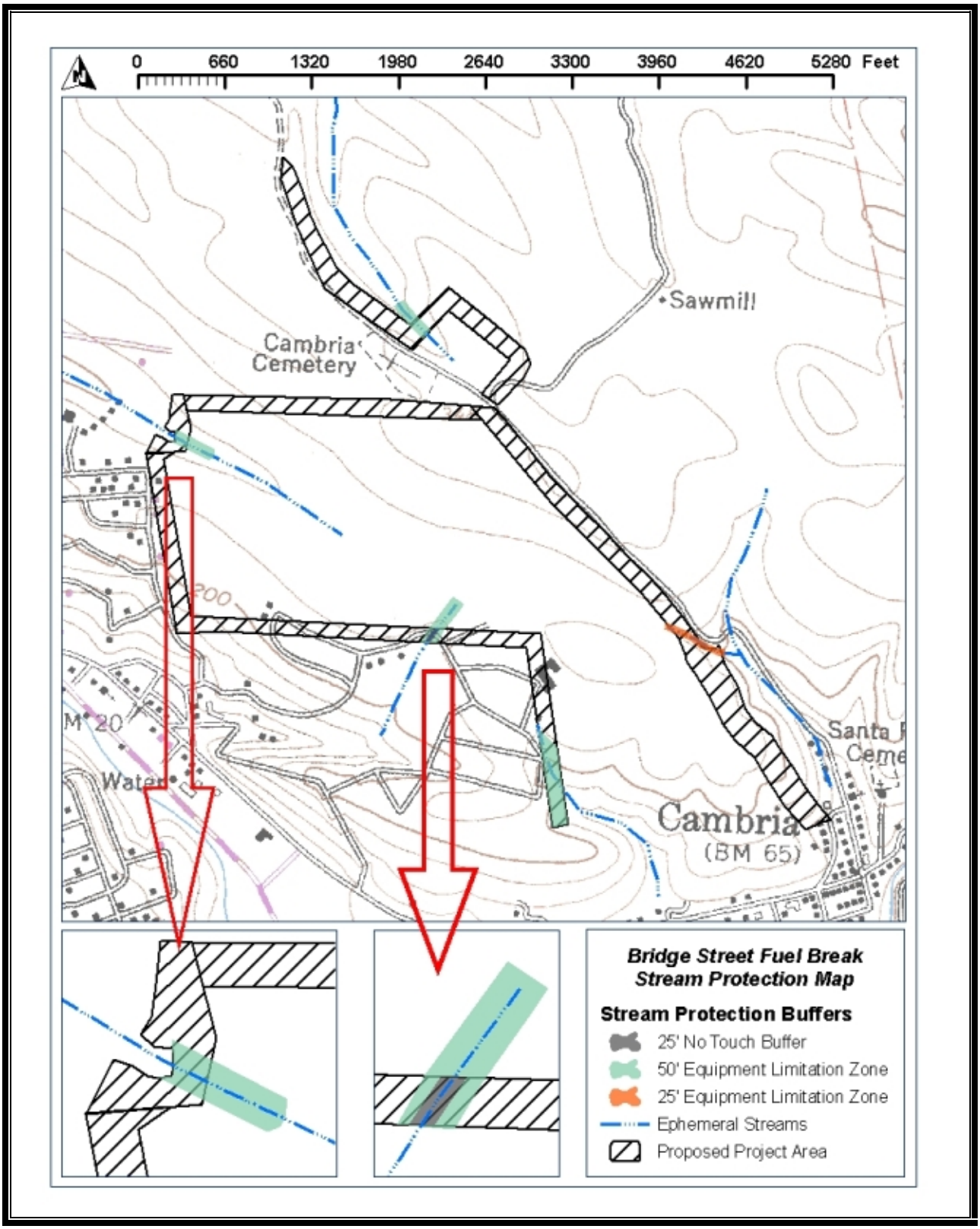

Figure 1b. Stream Protection Map of the project area.

Figure 2. Example of current stand conditions.

Figure 3. Example of current stand conditions.

Figure 4. Example of current stand conditions.

Figure 5. Example of current stand conditions.

Figure 6. Small stream typical of those found in the project area.

Figure 7. Small stream typical of those found in the project area.

Figure 8. Active headcut and a pool in one of the ephemeral streams in the project area.

Figure 9. Incised area downstream of the active headcut.

Figure 10. Seasonal pool below headcut in ephemeral stream.

Figure 11. Seasonal pool below headcut in ephemeral stream.

Figure 12. Photo of the Cambria morning glory.

Conclusion of the Mitigated Negative Declaration

Environmental Permits

The proposed project may require the following environmental permits and CAL FIRE may be required to comply with the following State regulations:

Coastal Development or Minor Use Permit – issued by the SLO County Coastal Planning Department.
Road Closure/Restriction of Use Permit – issued by SLO County Department of Public Works
Smoke Management Plan – approved by SLO County Air Pollution Control District

Measures

The following five (5) mitigation measures will be implemented by CAL FIRE to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

Mitigation Measure #1: Measures to Protect the Monterey dusky-footed woodrat Houses.
Prior to fuel reduction activities woodrat houses, including the feature(s) the house is constructed around (shrub, tree, stump, log, etc), within the project area will be located and flagged for avoidance prior to project activities.

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zone near the Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #4: Watercourse Protection Zone near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream (refer to Figure 1b).

Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CAL FIRE and/or the project contractor(s) shall immediately halt potentially damaging activities in the area of the burial and notify the SLO County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of SLO County and CAL FIRE to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

Summary of Findings

This IS/MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS/MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project will have no effect related to Agricultural and Forest Resources, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.

2. The proposed project will have a less than significant impact on Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, and Transportation and Traffic.

3. Mitigation is required to reduce potentially significant impacts related to Biological Resources, Cultural Resources, Geology and Soils, and Hydrology, Water Quality, and Mandatory Findings of Significance.

The Initial Study/Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses which were conducted by the Department. This Initial Study revealed that potentially significant environmental effects could result from the proposed project; however, CAL FIRE revised its project plans and has developed mitigation measures which will eliminate impact or reduce environmental impacts to a less than significant level. CAL FIRE has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS/MND is therefore the appropriate document for CEQA compliance.

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION	
1. Project Title:	Bridge Street Fuel Break Project
2. Lead Agency Name and Address:	California Department of Forestry and Fire Protection P.O. 944246 Sacramento, CA 94244-2460
3. Contact Person and Phone Number:	Dan Foster (916) 653-0839
4. Project Location:	Cambria, San Luis Obispo County
5. Project Sponsor's Name and Address:	CAL FIRE, 635 N. Santa Rosa, San Luis Obispo, CA 93405
6. General Plan Designation:	North Coast Planning Area
7. Zoning:	Rural, Recreation
8. Description of Project: See Pages 8-9 of this document	
9. Surrounding Land Uses and Setting:	Refer to pages 9-11 of this document
10: Other public agencies whose approval may be required:	See page 21 of this document

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below are the ones which would potentially be affected by this proposed project and were more rigorously analyzed than the factors which were not checked. The results of this analysis are presented in the detailed Environmental Checklist which follows.

☒	Aesthetics	☒	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Geology / Soils
☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials	☒	Hydrology / Water Quality
☒	Land Use / Planning	☐	Mineral Resources	☒	Noise
☐	Population / Housing	☐	Public Services	☐	Recreation
☐	Transportation / Traffic	☐	Utilities / Service Systems	☒	Mandatory Findings of Significance

DETERMINATION

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 (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) 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. ☐

Original signed by Daniel G. Foster — August 29, 2011

Dan Foster, Senior Environmental Planner
Environmental Protection Program, Room #1516-37
Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460
(916) 653-0839

Date Signed

ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Will the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Discussion

a) Will the project have a substantial adverse effect on a scenic vista?

No Impact: The project is located entirely on private property where public entry is not authorized. Portions of the project area are visible from public roadways and from adjacent private lands. Most of the project is visible only to neighboring residents; and the areas adjacent to Bridge Street are visible only to the relatively small number of people who travel the road to access the Cambria Cemetery. A small portion of the project area may also be visible from portions of Wall Street and the higher areas of Burton Drive. Where the project is visible, scenic vistas will not be adversely impacted due to the retention of overstory trees and scattered understory vegetation which will produce a managed forest condition. In most cases, views may improve as the visual results of this work are most commonly characterized as "looking park-like." The reduction in understory vegetation will allow for increased visibility into the forestland and will allow for the viewing of deer and other common wildlife.

The project area is not within view of the public travelling on Scenic Highway 1 or recreating along the coast near Cambria or at nearby San Simeon State Park. The project is visible from the air but the retention of the entire overstory will not noticeably alter this perspective.

b) Will the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact: No significant damage is anticipated to scenic resources. While all overstory trees will be retained, some minor damage to residual trees in the form of scuffs to trunks or broken limbs is expected following the reduction in understory vegetation. Damage to residual trees and vegetation will be minimized to the greatest extent feasible and will only be visible from neighboring residences or from Bridge Street and the Cambria Cemetery.

Highway 1 is classified by DOT as a State Scenic Highway. The coastline and nearby San Simeon State Park are heavily used by the recreating public. The project area is not within this viewshed due to the topography of the area. No rock outcroppings, historic buildings or other unique scenic resources are located within the project area.

c) Will the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact: Residual overstory trees, saplings and pole-sized trees and scattered understory vegetation will retain the existing visual character and quality of the site. Minor damage to residual vegetation that may result is not expected to be widespread or apparent and will not result in significant degradation to the existing visual character or quality of the site.

The current condition over most of the project area is a dense, overstocked, unhealthy pine forest with visibility in most areas of less than 100 feet. Trees, brush and downed logs form continuous horizontal and vertical fuel ladders. Pines have extensive insect and disease problems caused by pitch canker, dwarf mistletoe, western gall rust and various bark beetles and other insects. These forest health issues have created extensive amounts of dead, dying and deformed trees with poorly formed, off-colored (yellowing) crowns. The project objective is to thin the forest in such a manner that all overstory trees as well as many of the healthy, well-formed trees and shrubs in the understory will be retained. Unhealthy, deformed understory trees and excess trees and vegetation are targeted for removal. The end result visually will be a thinned pine forest with well-spaced (approximately 12-15 feet between trees) stand made up of the largest, healthiest, best formed trees and shrubs available.

The greatest risk to the visual character of this Monterey pine forest is from a catastrophic fire that would sweep through the area and kill all or most of the pines in the forest. The stated objective of this project is to treat the fire hazard in a way that will greatly reduce the likelihood of such a stand replacing event.

d) Will the project create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?

No Impact: The retention of overstory trees will preclude a substantial increase in light and glare. Views into the project area will be extended with the removal of understory vegetation; however, the orientation of the project area in relation to nearby residences will not make for increased visibility between homes. For example, a neighbor's nighttime flood light would not become visible as a result of this project. No negative impact to day or nighttime views in the area is anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) 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:				
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 non-agricultural use?	☐	☐	☐	☒

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a) Would the project 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 non-agricultural use?

No Impact: Maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency indicates the lands within the project area are classified as "Other Land." No change in land use is proposed.

b) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact: According to San Luis Obispo County records, none of the parcels within the proposed project area are zoned agricultural nor are under a Williamson Act contract. No change in land use is proposed. Project activities are consistent with the conservation easement for the Covell ranch held by The Nature Conservancy.

c) Would the project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))

No Impact: The proposed project is located on lands defined as forest land and timberland, however, no conflict nor rezoning will occur. Project parcels are not currently zoned as Timberland Production Zone (TPZ). At all times during and after project implementation and pursuant to PRC 4526, land within the project area will exceed 10-percent native tree cover and allow for management of forest resources; and will remain capable of and available for growing a crop of commercial trees. The number and composition of native overstory tree species will remain constant with pre-project conditions.

The Cambria Monterey Pines meet the definition of Coastal Commission Special Treatment Areas so all of 14 CCR § 961 does apply to timber operations in the area. However, this proposed project does not constitute commercial timber operations per 14 CCR 4527 as no commercialization of any forest products is proposed.

14 CCR 895.1 defines the Costal Commission Special Treatment Area for the Southern Forest District as:

Coastal Commission Special Treatment Area: (For the Southern Forest District:) An identifiable and geographically bounded forest area designated within the Coastal Zone that constitutes a significant wildlife and/or plant habitat area, area of special scenic significance, and any land where timber operations could adversely affect

public recreation areas or the biological productivity of any wetland, estuary, or stream especially valuable because of its role in the coastal ecosystem. Special treatment areas were adopted by the Coastal Commission on July 5, 1977. Maps or designations of "Coastal Commission Special Treatment Areas" are on file in the Department offices within the Southern Forest District. (Ref. Sec. 31118.5, PRC).

Coastal Commission Special Treatment Areas have been designated according to the following criteria:
A. Scenic View Corridors
B. Sites of Significant Scenic Value
C. Wetlands, Lagoons, Streams, Estuaries, and Marine Environments
D. Significant Animal and Plant Habitat Areas
E. Recreation Areas

The Coastal Commission has also set forth in its designations special management objectives considered essential by the Coastal Commission for the protection of public values within the Coastal Zone.

The following is a listing of the Coastal Commission Special Treatment Areas. In parentheses following the name of each area are capital letters indicating the specific criteria as listed above. The letters referencing the criteria are listed in order of priority of the significance of the various criteria applicable to the area.

(a) Monterey County. Del Monte Forest (A,B,D,E), Pt. Lobos Uplands (A,B,D), Malpaso Creek (B), Doud Creek (B), False Sur (B), Little Sur (A,B,C,E), Molera Uplands (A,B,C,E), Big Sur Valley (A,B,C,E), Sycamore Canyon (A), Post Creek (A,B,C,E), Grimes Canyon (A), Toree Canyon (B), Partington Canyon (B,E) McWay Canyon (B), Anderson Canyon (A,B), Burns Creek (A), Hot Springs Canyon (B,E), Lucia Area Canyonmouths (B,E), Mill Creek (B,E).

(b) San Luis Obispo County. Cambria Monterey Pines (A,B).

(c) Publicly Owned Preserves and Recreation Areas. Coastal Commission Special Treatment Areas include those forested areas within the Coastal Zone within 200 ft. (60.96 m) of an publicly owned preserved and recreation areas including national, state, regional, county, and municipal parks.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact: At all times during and after project implementation and pursuant to PRC 4526, land within the project area will exceed 10-percent native tree cover and allow for management of forest resources. No conversion of forest land to non-forest use will occur as a result of this project. The number and composition of native overstory tree species will remain constant with pre-project conditions.

Stand replacing wildfire poses a significant threat to this Monterey pine forest. Were such a fire to occur, at a high enough intensity, much of the area would be vulnerable to natural conversion to brush or grass covered vegetation types. Project is planned and designed to reduce this important threat which will help maintain and possibly increase the area occupied by pine forest.

e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact: The proposed project is not located on land classified as Farmland. No changes to the existing environment as a result of this project will convert forest land to non-forest use. The number and composition of native overstory tree species will remain constant with pre-project conditions.

According to numerous sources including the CFMP, the Cambria Monterey pine forest is one of the most threatened forests in the world (Jones and Stokes, 2002). This threat is primarily due to changes in the environment, lack of forest management, the significant risk of wildfire, and insect and disease problems. The project is planned and designed to both reduce the fire hazard and improve forest health and resiliency in the areas treated. The fire threat will be reduced by the creation of a shaded fuel break. The forest health will be improved through the use of sound forestry techniques including thinning to reduce competition for water and nutrients, and the retention of the largest healthiest, best formed trees.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Information about Air Quality

Discussion

Significant adverse impacts on many resources including air quality are common from catastrophic wildfire. These impacts occur annually in California. The risk of such an event in the Cambria area is considered high and has the potential to seriously degrade the air quality in large areas of the County as well as the Central Valley region as wildfire smoke is likely to travel inland. This project has been carefully planned to strategically reduce the threat of a large catastrophic wildfire and its associated impacts.

a) Will the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact: Pursuant to the 2001 Clean Air Plan San Luis Obispo County, a consistency analysis is generally required for a Program Level Environmental Impact Report (EIR), and may be necessary for a Project Level EIR. Because the CEQA analysis for this project is not being conducted through a Program or Project Level EIR, a consistency analysis was not performed; however it is presumed the proposed project is consistent with the County's Clean Air Plan (CAP) based on the following rationale:
1) The project will not cause an increase in population.
2) Because population will not increase as a result of this project, no increase to the rate of vehicle trips and mileage will occur as a result of population growth itself. Only a temporary insignificant increase to the rate of vehicle trips and mileage will occur while personnel and equipment are working on the project.
3) Because population will not increase as a result of this project, it is not applicable to include land use and transportation control measures from the CAP.

b) Will the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact: According to the San Luis Obispo County Air Pollution Control District (APCD) CEQA Air Quality Handbook, construction emissions must be calculated for all development projects likely to exceed the construction emissions threshold. The proposed project is a forest management project and is only considered "development" as defined by the by the Coastal Commission. No construction or demolition of structures or paved areas will occur; no landscaping, clearing or conversion of any forested areas will take place, nor will any population use be tied to the project. This project is not anticipated to

exceed the APCD's construction emissions threshold. San Luis Obispo County APCD daily construction emissions thresholds of significance are presented in the table below.

TABLE 1 - Thresholds of Significance for Construction Operations

Pollutant	Threshold[1]		
	Daily	Quarterly Tier 1	Quarterly Tier 2
ROG + NOx (combined)	137 lbs	2.5 tons	6.3 tons
Diesel Particulate Matter (DPM)	7 lbs	0.13 tons	0.32 tons
Fugitive Particulate Matter (PM_{10}),		2.5 tons	
Greenhouse Gases (CO_2, CH_4)	*Not Yet Established*		

1. Daily and quarterly emission thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.

Vehicular Emissions

San Luis Obispo County APCD CEQA Air Quality Handbook sites examples of large scale projects that would exceed ozone precursor (ROG + NOx) emissions standards. Such projects have population uses tied to them where people would travel in vehicles to and from the projects, creating emissions. The proposed project, as stated above, will not increase population nor would it create an entity that people would use. The proposed project is located on private property and the amount of people using or visiting the area would not increase. The only increase in vehicular emissions would be insignificant and temporary, occurring once to establish the fuel break, and possibly reoccurring every several years to maintain the fuel break.

As an example of vehicular emissions, hand crew work will require one or two crew carrying vehicles, while mastication work will consist of the machinery itself and one or two vehicles for equipment operators and a one time drop-off and pick-up of equipment. Emissions of Diesel Particulate Matter (DPM) will be insignificant, consisting of the crew carrying vehicles, the transport for the masticator and the mastication equipment itself, anticipated to be a rubber track loader with a mulching head (size comparable to a Bobcat).

Durations of these emissions would vary based on activity, with estimates ranging from as little as 20 working days with a single masticator to as many as 100 working days or more for a hand crew (if hand crews alone established the initial fuel break). Due to the relatively short duration of these activities, the slight increase in vehicular emissions, including DPM will not significantly impact air quality.

Fugitive Particulate Matter (dust)

As indicated in the table above, daily thresholds have not been established for fugitive particulate matter (PM_{10}). Dust generated from project activities, whether daily or for the total project duration, will be minimized due to the minor amount of soil disturbance and exposed soil anticipated during and following project activities. Through project design and/or treatment type, each of the possible fuel treatment methods (mastication and/or hand crew - chip, lop and scatter, and pile and burn) have a low potential for significant soil disturbance, and hence the creation of significant dust.

Mastication activities have the potential to generate dust. To limit this potential, project design has incorporated techniques to minimize soil disturbance that include: the use of low ground pressure rubber tracked equipment and instructing equipment operators to: keep the shredding head of mastication equipment at or above the duff layer, minimize sharp turns, and operate up and down slopes rather than on contour. Furthermore, this equipment advances on a path of mulched material, minimizing the amount of direct soil contact and disturbance. Where small areas of soil disturbances occur, a fairly uniform layer of this mulched material covers the ground following treatment, making the likelihood of exposed soil capable of generating dust low. Refer to Section VI (b) of this document for a more complete discussion on the use of mastication equipment as it pertains to soil disturbance. No significant soil disturbance is anticipated with

the use of mastication equipment on this project for the reasons discussed above, and as a result, the generation of significant dust is not likely.

Hand crew work has low potential to generate dust. Small areas of disturbed soil may result from crews dragging cut material to a chipper, or where piles were burned. Such areas are not sufficient in size to act as a source of significant dust generation.

During prevailing winds under normal weather conditions, the project area is located downwind of most of the populated areas of Cambria and the minor amounts of dust that may be generated will normally be carried away from residential areas. The coastal climate, particularly in summer when relative humidities are typically high, reduces the amount of airborne dust. The project area is densely forested which significantly reduces the local winds and reduces the amount of dust in the air compared to open areas along the coastal plain. For these reasons, in addition to the minimal soil disturbance expected and the short duration of mastication activities, it is anticipated the generation of fugitive particulate matter with the proposed project will not be enough to significantly impact air quality.

Burning Emissions

Pile burning will have the potential to impact air quality standards. Impacts from this activity would be addressed prior to burning through the development of Smoke Management Plan(s) approved by the San Luis Obispo County Air Pollution Control District. Smoke Management Plans are developed for burn projects to reduce smoke impacts on air quality and sensitive receptors to a level that is less than significant.

c) Will the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact: As of September 2010, SLO County is classified by CARB as nonattainment for two of the ten criteria pollutants, ozone (O_2) and suspended particulate matter (PM_{10}). As stated above, activities associated with the project will generate short-term emissions of burning vegetation, fugitive dust and mobile source emissions associated with the on-site equipment operation and off-site material and employee transport. This will only occur during relatively short periods when fuel reduction activities and equipment are in use. It is anticipated burning will occur 1 or 2 days every several years, and will adhere to a SLO County APCD Smoke Management Plan. The types of equipment used and duration of their use during the other activities would vary; mastication equipment will likely be used for most of the initial establishment of the fuel break with a duration of 20 or more working days, while hand crews will likely be used every several years for most of the subsequent maintenance work with a duration of 50 or more crew days (100 or more days if crews alone established the initial fuel break). As a result of these relatively short term emissions, it is anticipated the proposed project will have a less than significant cumulative net increase of any criteria pollutant.

d) Will the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact: The prevailing northwest winds during normal summer and fall weather will carry dust and exhaust fumes away from most populated areas. A temporary increase in pollutants would occur as a result of the proposed project (refer to discussion in III.(b)and (c). Smoke has the potential to affect sensitive receptors for possibly one or two days every several years and as previously discussed, impacts would be addressed through an APCD approved Smoke Management Plan. A small amount of emissions from mastication equipment (diesel and dust) as well as exhaust from chainsaws and or chippers could reach sensitive receptors, since residences are adjacent to approximately half of the proposed project.

Such emissions are anticipated to be minor and would be short lived as the project progressed and equipment or crews moved from treated to untreated areas; typically production rates would be ½ - 3 acres per day, depending on fuel levels and activity method, making air pollution concentrations in any one area temporary. This combined with fairly persistent coastal breezes which will provide good dispersion, will make significant impacts from air pollution concentrations on sensitive receptors unlikely.

e) Will the project create objectionable odors affecting a substantial number of people?

Less Than Significant Impact: Temporary low concentrations of objectionable odors could be noticeable to any down wind residences that border the project area. It is anticipated the impact will be less than significant for the reasons stated in III.(d) above, regarding exposure of sensitive receptors to pollution.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Will the project:				
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, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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, filling, hydrological interruption, or other means?	☐	☒	☐	☐
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Information about Biological Resources

Discussion

The intent of the proposed project is to reduce the risk of a catastrophic high intensity wildfire in the Cambria area. Such an event could have significant negative impacts to watersheds, wildlife, air quality, etc. Sensitive species and/or their habitats found in vicinity of the project area are discussed below, including the Monterey pine forest. Fuel loading in and around the proposed project area is high, creating conditions that put such species and/or their habitat at risk. Fuel reduction projects like this decrease the likelihood that wildfires may become catastrophic, which could potentially result in significant habitat degradation for these species.

In general, the size, location, timing and methods used will minimize the potential for significant adverse impacts to biological resources. The size of the proposed treatment area is the smallest that will yield an effective fuel break for needed fire defense. The location is adjacent to a community on mostly level topography. The project will be conducted ~~during summer or fall after~~ outside of the spring nesting/blooming season for the majority of species ~~when soils are dry~~ and when most trees and plants are ~~entering dormancy~~ dormant. Equipment operations will not occur on saturated soils. The methods proposed for the establishment of the fuel break, mainly mechanical mastication, accomplish the work in the shortest time possible with the least amount of overall site disturbance.

It is anticipated the proposed project will not eliminate the available habitat for any wildlife species. Unlike other development projects which in many cases convert natural areas to structures, paved areas and/or unnatural landscaping, the proposed project will keep the Monterey pine and coast live oak habitat in place. Alterations to the understory will occur by removing many of the shrubs, small trees and downed wood, but a certain amount of these understory components will remain. Such attributes are important for wildlife species and can provide for needs such as forage and cover. It is also not unreasonable to expect an increase in the quality of browse following project activities. Understory flora could become more diverse as disturbance dependant plants currently not common could increase in number. After being cut, understory shrub species with sprouting capability will likely produce tender, young growth often more palatable for browsing species. An overall increase in biodiversity is expected within treated areas as a result of disturbance.

As explained previously, the present condition of the undeveloped portion of the Cambria Monterey pine forest is densely overstocked, with extensive ~~disease~~ pathogens and insect problems. The main reason for this unnatural condition is the disruption of the natural fire regime and /or the absence of active forest management through techniques such as thinning and broadcast burning. Most forest types, including Monterey pines, are considered healthy if net wood growth is positive and if pest and pathogen levels are at or near endemic levels. These forests often become unhealthy when tree densities exceed the carrying capacity of the site and net wood growth is negative and they become vulnerable to significant increases in insect attacks, disease infections, and wildfire danger. This project proposes to thin the forest to improve forest health by removing excess small diameter trees and brush and focusing the carrying capacity of the site on a more natural number of trees. Thinning will be accomplished according to the guiding forestry principle of keeping the “best” trees, meaning the healthiest, largest, best formed trees that appear to be vigorous and have full crowns. In this case, thinning will accomplish both a reduction in the overall fire hazard and an improvement within the treated area of forest health and vigor.

However, the two limiting factors that may somewhat diminish the positive effects of this project upon the pine forest are (1) no trees 10” DBH and over will be removed; and (2) only approximately 50 acres (~~.02%~~2%) will be treated of the approximately 2,300 acres of undeveloped pine forest in the Cambria area. Ideally, future conditions will allow for the feasible removal of certain overstory trees and for the thinning of much large portions of the pine forest. Due to the small number of acres proposed for treatment, the overall effect of forest health of the entire Cambria pine forest is expected to be minimal. The most important benefit of this relatively small, strategically placed project is the overall reduction of the risk of catastrophic fire for the entire Cambria pine forest and the community of Cambria as well.

Pitch Canker

The proposed project is within the designated Pitch Canker Zone of Infestation established by the Board of Forestry. Guidelines that have been developed to control the spread of pitch canker have been incorporated into the project. Sanitation of host plant debris will occur to personnel and equipment prior to project commencement and upon leaving the project site. All green pine material will be left on site and treated in a

way that discourages colonization of bark beetles. The pruning of green limbs is not anticipated on pines, but sanitation of saws will occur if pruning is deemed necessary.

a) Would the project 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, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Less than Significant with Mitigation:

Special Status Plants: Survey Results

Pre-project consultation occurred with Brandon Sanderson, Environmental Scientist with the California Department of Fish & Game (DFG), requesting information on potential impacts or ways to avoid impacts to sensitive species. Mr. Sanderson suggested surveying for species (refer to correspondence in Appendix B). Additional pre-project biological consultation occurred with Bob Motroni, Senior Wildlife Biologist with CAL FIRE, and Michael Walgren, Environmental Scientist, California State Parks (CSP).

On 3/5/2011 and 6/3/2011, Mr. Walgren assisted CAL FIRE resource management staff with an informal botanical survey of the project area. To date, two special status plant species are known to occur within the project area: Cambria morning-glory (*Calystegia subacaulis ssp. episcopalis*) (Figure 12) and Monterey pine (*Pinus radiata*).

- Occurrences of Cambria morning–glory were observed in several locations in north and east portions of the project area. This plant is typically described as occurring in grasslands and open scrub or woodlands; however observations of the plant in the project area were in areas ranging from partly to mostly shaded conditions. Despite its Rare Plant Rank (RPR) status of 1B.2, botanical experts typically agree that the plant is not very rare in the area and is currently under review by CNPS for potential down-listing (Walgren, personal communication). Mr. Walgren indicated no significant adverse impacts to this species are anticipated as a result of the project; project activities will occur during the plant's dormant period and after it has set seed. Additionally, the more open understory conditions following the project are expected to create more favorable conditions for this plant.

- Monterey pine (RPR 1B.1) occurs in great abundance throughout the proposed project area. Due to the overstocked nature in much of the assessed area's understory, small diameter Monterey pine would be one of the target species for reduction under the proposed project. The overstocked understory has created competition resulting in a generally poor condition for much of the pine regeneration. In many areas this has or will lead to trees with poor form (unable to remain upright), increased susceptibility to insect and disease attacks and/or mortality. These conditions have been documented and are described in the Forest Management Plan for Covell Ranch (Staub 2011).

  Forests in this condition are particularly vulnerable to stand replacing wildfire. It is anticipated a reduction of small diameter Monterey pine in overstocked areas, as proposed with this project, will lead to improved tree vigor and forest health, and provide a better opportunity for fire officials to protect the Monterey pine habitat from catastrophic wildfire. Thinning small diameter pine in dense understory areas and removing small pines that act as ladder fuel are also described in Staub's plan. Furthermore, the increased sunlight reaching the forest floor and the minor soil disturbance that could result from the reduction in understory fuels and vegetation would improve germination rates for many species, including pine; therefore no significant adverse effect to Monterey pine will occur as a result of this project and no protection measures are proposed for this species.

Special Status Plants: CNDDB Results

Results from a five mile radius query of the California Natural Diversity Database (CNDDB) on 12/17/10 are presented in Appendix C. Also included in the appendix is a table summarizing the results, listing the general habitat requirements of the sensitive-status species from the query and whether habitat may be present within the project area for those species.

Based on the above mentioned CNDDB results and a subsequent habitat assessment, the following special status plants may have habitat requirements similar to those found in the proposed project area:

Table 2. Special status plants that may have habitat in the project area, but not located during surveys.

Common Name	Scientific Name	Status (RPR=Rare Plant Rank) (FE=Federally Endangered) (SE=State Endangered)
Arroyo de la Cruz manzanita	*Arctostaphylos cruzensis*	RPR 1B.2
Carmel Valley bush-mallow	*Malacothamnus palmeri var. involucratus*	RPR 1B.2
Chorro Creek bog thistle	*Cirsium fontinale var. obispoense*	FE SE RPR 1B.2
Cone Peak bedstraw	*Galium californicum ssp. luciense*	RPR 1B.3
Hardham's bedstraw	*Galium hardhamiae*	RPR 1B.3
Hoover's button-celery	*Eryngium aristulatum var. hooveri*	RPR 1B.1
Kellogg's horkelia	*Horkelia cuneata ssp. sericea*	RPR 1B.1
La Panza mariposa-lily	*Calochortus obispoensis*	RPR 1B.2
most beautiful jewel-flower	*Streptanthus albidus ssp. peramoenus*	RPR 1B.2
San Luis Obispo sedge	*Carex obispoensis*	RPR 1B.2
San Simeon baccharis	*Baccharis plummerae ssp. glabrata*	RPR 1B.2
Santa Lucia bush-mallow	*Malacothamnus palmeri var. palmeri*	RPR 1B.2

The State and Federally Endangered Chorro Creek bog thistle and the RPR 1B.1 Hoover's button-celery occur in wet areas. Several seasonal wet areas and/or ephemeral streams have been located in the project area, but more intensive surveys conducted in these areas indicate these plants do not occur in the project area, and therefore no impacts are anticipated to these species.

Although not observed during surveys or project planning activities, the remaining special status plants listed in Table 2 could occur in the project area based on their habitat requirements. With assistance from Michael Walgren, Environmental Scientist (CSP), an analysis of potential significant negative impacts to these species as a result of project activities was conducted. It is anticipated the proposed project will not decrease the habitat availability or significantly decrease the population of any rare plant species. Individual rare plant specimens could be impacted by being cut crushed or in some areas, burned during project activities; however overall populations of such plants are not expected to be significantly impacted. Despite a more open understory following project activities, the amount of available forested habitat will not change. Populations of special status plant species will still have the same opportunity for site occupancy after the treatment(s) occur. CAL FIRE is not aware of any evidence that disturbances created as a result of this project would pose a significant negative impact to any of these species.

Special Status Wildlife Species

Based on the above mentioned CNDDB results, the following special status wildlife species may utilize habitat similar to those found in the proposed project area. A table in Appendix C (*General Habitat Requirements - Bridge Street CNDDB Query*) lists the general habitat requirements of the sensitive-status

species from the query and whether habitat may be present within the project area for those species. Less than significant adverse effects are anticipated for these species as a result of this project:

- The Coast Range newt (*Taricha torosa torosa*) is a California Special Concern species. Terrestrial habitat during the non-breeding season (breeding season follows fall rains in aquatic habitat) includes upland areas of grass, shrub and forested vegetation types with newts taking cover beneath surface objects or underground (DFG California Wildlife Habitat Relationships System). The proposed project will likely occur during the summer or early fall months when adult newts are aestivating in subterranean refuges (DFG California Wildlife Habitat Relationships System). Any projects activities conducted outside this period will warrant consultation with a biologist or wildlife professional to determine an appropriate course of action. The project area following the proposed activities will still be forested, but with reduced live understory vegetation and large down woody debris. Scattered woody debris would remain for cover following project activities, especially pieces too large for equipment and hand crews to process. It is anticipated subterranean aestivation, in addition to the residual tree and woody debris cover following project activities, will result in a less than significant impact to the Coast Range newt.

- The fringed myotis (*Myotis thysanodes*) is a California Special Concern species. This bat is found in a wide range of habitats (but typically in woodlands) where it forages for food in open areas, early successional stage areas and over bodies of water. Roosting areas include caves, mines, buildings, and crevices (DFG California Wildlife Habitat Relationships System). The proposed project will not degrade any foraging areas that may be used by this species since vegetation, at least in the understory, would be more open and possibly more suited for foraging following project activities. Approximately ~~.02%~~2% of the overall undeveloped Cambria pine forest is proposed for treatment. All overstory trees and snags, many of which contain cavities, will be retained. There are no known caves, mines, buildings, or rock crevices within the proposed project area. No significant adverse impacts are expected as a result of project implementation.

- The monarch butterfly (*Danaus plexippus*) is designated as a NatureServe Conservation Status Subnational Rank 3, or vulnerable. This species is migratory and the western US population overwinters in clusters in trees along some portions of coastal central and southern California (http://www.fs.fed.us/monarchbutterfly/index.shtml). Proposed project activities will likely not take place during the winter period when monarchs may be present. Any projects activities conducted during this period will warrant consultation with a biologist or wildlife professional to determine an appropriate course of action. ~~and the~~ The larger trees more suited for monarch congregation will not be removed. Also, removing dense understory vegetation and fuels will increase the amount of sunlight reaching the forest floor. This will likely result in a greater diversity of understory plant species, such as those that tend to be less tolerant of fully shaded conditions, including ones monarchs may use as a winter nectar source. Approximately ~~.02%~~2% of the overall undeveloped Cambria pine forest is proposed for treatment. For these reasons, no significant adverse impacts are anticipated to monarch butterflies as a result of this project.

Monterey dusky-footed woodrat

As a result of pre-project consultation, DFG recommended addressing impacts to the Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*), a California Special Concern species. Though this species is not included as an occurrence on the CNDDB query for the project, several woodrat houses were observed during project planning activities. The proposed project will reduce fuel loading; including sticks which woodrats may utilize for housing material, and shrubs potentially used for food, cover and nesting material.

Understory vegetative cover will be reduced, but not eliminated; and the availability of sticks for housing material will remain in the form of remnant branches and partially shredded woody material. Approximately ~~.02%~~2% of the overall undeveloped Cambria pine forest is proposed for treatment. Because complete removal of housing materials would not occur over most of the proposed project, these actions are not anticipated to adversely impact the species. To help avoid a potentially more significant impact to the species with regard to the destruction of housing, existing woodrat houses will be retained in the project area.

Measure #1: Measures to Protect the Monterey dusky-footed woodrat Houses.
Prior to fuel reduction activities woodrat houses, including the feature(s) the house is constructed around (shrub, tree, stump, log, etc), within the project area will be located and flagged for avoidance prior to project activities.

Western pond turtle
No aquatic habitat (perennial water) exists in the project area, but based on DFG pre-project consultation with Mr. Sanderson on 1/31/2011, recommendations were made to address potential project impacts to the western pond turtle (*Actinemys marmorata*), a California Special Concern species. Because the nearest aquatic habitat is more than 600' from the closest point of the project and these species are associated with permanent or nearly permanent water, it is anticipated the turtle would only utilize the project area during what is described as occasional long distance movements (DFG California Wildlife Habitat Relationships System).

If the proposed project is utilized by the western pond turtle for these short periods, it will retain suitable habitat characteristics following project activities such as overstory trees and scattered understory vegetation as well as large woody debris. The proposed project will not present a barrier to the movement of turtles; and furthermore, most activities (except possibly pile burning) would likely be conducted during the summer and fall, prior to seasonal rains while conditions are dry and the upland areas less likely to be hospitable for the turtle. Any projects activities conducted outside this period will warrant consultation with a biologist or wildlife professional to determine an appropriate course of action. Approximately ~~.02%~~2% of the overall undeveloped Cambria pine forest is proposed for treatment. Because of these reasons, no significant adverse impacts are anticipated to the Western pond turtle as a result of the proposed project.

California red-legged frog (CRLF)
The federally threatened California red-legged frog (*Rana draytonii*) is found in riparian areas of Santa Rosa and Leffingwell Creeks, to the south and north of the proposed project area respectively; and DFG recommended addressing impacts to this species during pre-project consultation. The US Fish and Wildlife Service (USFWS) has designated certain areas of the state as critical habitat for the CRLF, which includes the proposed project area. If a species is listed or critical habitat is designated, Section 7(a)(2) of the Endangered Species Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with USFWS. The proposed project is a State project funded primarily through a US Forest Service grant to reduce hazardous fuels and as a result, CAL FIRE requested to initiate consultation with USFWS (refer to correspondence in Appendix B). However to date, no reply has been received from the USFWS regarding consultation or technical assistance for this project.

This project is not being conducted under a Timber Harvest Plan (THP), however its design is consistent with the *California Red-legged Frog Take Avoidance Scenarios* (*March 25, 2008)* developed by USFWS for

use in THPs. Specifically, Take Avoidance Scenario II of this document would be applicable to the project area:

II. Scenario II: Suitable habitat within 2 miles of harvest units or in units, but no harvest activities within 300 feet of suitable habitat

Suitable habitat in this context is defined as:

C. Suitable California Red-legged Frog (CRF) Habitat:

1) Permanent water (Class I or II watercourses or ponds/wetlands) that is more than 12 inches deep;
OR
2) Permanent water (Class I or II watercourses or ponds/wetlands) that is less than 12 inches deep if suitable shelter/cover habitat is available, e.g. over-hanging vegetation, emergent vegetation, over-hung banks, root wads, rock piles, log debris, etc.;
OR
3) Permanent wet ground (e.g. seep) with vegetative or other cover.
OR
4) Intermittent water that persists through late July

Scenario II would be applicable to this project if it were conducted under a THP since no suitable habitat is within 300' of the project area. This document references the USFWS developed take avoidance scenarios in absence of USFWS consultation. It is reasoned that no take of this species will occur as a result of this project. The take avoidance scenario developed by the USFWS for timber harvest activities supports this line reasoning.

Ephemeral streams and areas with seasonally wet soils exist in the project area. One such stream, for its small size, has a considerable pool located downstream of a headcut (Figure 10 and 11). It is reasoned that these features, including the sizable pool, are not suitable habitat for breeding due to the short duration that water is present. The persistence of water in this pool and each of the streams in the project area is dependent on seasonal precipitation and does not significantly extend beyond the rainy season. No evidence of adult or juvenile frogs was observed during any of the site visits to the pool or any other portion of the project area. Suitable breeding habitat must have water that persists through July (see critical habitat reference below and avoidance take scenario definition above). As a result, breeding habitat is not likely to occur within the project area; however based on USFWS criteria used to determine critical habitat, the project area would be considered terrestrial upland and/or dispersal habitat for the species. According to habitat descriptions in USFWS's *Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog* (available at: http://www.gpo.gov/fdsys/pkg/FR-2010-03-17/pdf/2010-4656.pdf#page=1), the species is known to inhabit upland areas for 50 days at a distance of 302 ft from aquatic habitat. If the species does utilize the proposed project area as upland terrestrial habitat, it seems reasonable to assume it would be infrequent and for short durations during moist conditions primarily because of the distance to the nearest permanent water (more than 600 ft) and its separation from it by the historic downtown area of Cambria. It would seem more likely the proposed project would be utilized for short durations when the species is dispersing, during which time they are known to travel 2 miles or more from aquatic habitat in search of other suitable habitats (referenced from the above mentioned USFWS document).

The proposed project will retain suitable habitat characteristics following project activities such as overstory trees and scattered understory vegetation as well as large woody debris. The proposed project will not present a barrier to dispersing frogs; and furthermore, most activities (except possibly pile burning) will likely be conducted during the summer and fall, prior to seasonal rains while conditions are dry and the upland areas less likely to be hospitable for the frog. Any projects activities conducted outside this period will warrant consultation with a biologist or wildlife professional to determine an appropriate course of action. Because of these reasons, no significant adverse impacts are anticipated to the CRLF or its designated critical habitat as a result of the proposed project.

Note: Prior to any future maintenance activities (beyond the initial establishment of the fuel break), a CNDDB query and DFG consultation will reoccur to address potential changes to any sensitive species occurrence and status. Furthermore additional CEQA documentation will occur for any maintenance activity conducted beyond a five year period from the filing date of the ~~NOI~~ NOD associated with this document.

b) Would the project 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 Game or the U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation: The proposed project would not adversely affect any riparian habitat. Typical riparian habitat does not occur within the project area, but several ephemeral streams and/or areas with seasonally wet soil do occur. These mesic areas, moister than surrounding sites, have a mix of riparian type plant species such as sedges growing alongside upland plant species. The wettest of these areas near the ballfield on the KEEP parcel could be considered riparian-like or possibly a seasonal wet meadow. To avoid potentially impacting this area and two other areas with ephemeral streams/seasonal wet areas the following mitigations have been developed.

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zones near Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #4: Watercourse Protection Zones near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream (See Figure 1b).

The proposed project is within the Coastal Zone and is a part of the San Luis Obispo County Combing Designation Sensitive Resource Area – Terrestrial Habitat (SRA - TH), specifically the Monterey Pine Forest Environmentally Sensitive Habitat Area (ESHA) of the North Coast Planning Area. The County defines ESHA as areas where plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could easily be disturbed or degraded by human activities and development. They include wetlands, coastal streams and riparian vegetation, terrestrial and marine habitats and are mapped as Land Use Element combining designations.

The proposed project is also within an area the Department of Fish and Game identifies as the Monterey Pine Forest Special Status Natural Community, Rank G1 and S1 (Critically Imperiled Global and Subnational Conservation Status Ranks). The table below defines the Conservation Status Ranks:

G1	**Critically Imperiled**—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
N1 **S1**	**Critically Imperiled**—Critically imperiled in the jurisdiction because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the jurisdiction.

The proposed project will have a less than significant adverse effect on the sensitive habitat and natural community identified by the County Combing Designations and State Special Status Natural Community designation for the following reasons:

- The amount of land occupied by Monterey pine and associated species will not decrease as a result of this project. No areas would be converted to a non-forest state nor will any loss of pine habitat occur, as overstory trees (greater than 10" dbh) will not be removed and understory trees (less than 10" dbh) and shrubs will be retained in areas lacking overstory trees.
- The proposed project will not degrade the productivity of the land or prohibit the ability of Monterey pine and associated species to regenerate. Increased sunlight reaching the forest floor and the minor soil disturbance that could result from the reduction in understory fuels and vegetation could improve germination rates for many species, including pine.
- The reduction in understory vegetation will create conditions resulting in less competition among residual vegetation for improved health and vigor. Overall forest health in the treated areas is expected to improve as a result of this project.

c) Would the project 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, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation: U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) define wetlands as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Ephemeral streams and/or areas with seasonally wet soils do occur within the project area. These areas would be better defined as having mesic habitat, rather than riparian or wetlands as defined by Section 404 of the Clean Water Act, since saturated soil conditions occur for only a period of time following significant precipitation during the wetter months. However, two such ephemeral streams have associated areas that could be described as a seasonal wet area and/or a seasonal wet meadow; one near the cemetery and another near the ballfield on the KEEP parcel. No hydrological interruption or filling of these areas will occur. The following mitigations have been developed to prevent potential impacts from equipment:

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zones near Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

d) Would the project 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?

Less Than Significant Impact: Fish habitat does not exist within the project area. The nearest fish habitat is south of Main Street in Santa Rosa Creek; more than 600 feet from the closest point of the proposed project area. No impacts would occur as a result of this project to the movement of native resident or migratory fish.

CNDDB query results indicate occurrences of monarch butterflies (*Danaus plexippus*) within the vicinity of the project area. Monarchs are migratory, and western US populations are known to overwinter in trees in certain areas of coastal central and southern California. During cooler periods they typically congregate in tree canopies, and during warmer periods may forage for nectar (http://www.fs.fed.us/monarchbutterfly/index.shtml). The proposed project will likely not take place during the winter period when monarchs may be present. Any projects activities conducted during this period will warrant consultation with a biologist or wildlife professional to determine an appropriate course of action. The ~~and the~~ larger trees more suited for monarch use will not be removed. Also, removal of dense understory vegetation and fuels could increase understory plant diversity in the treated areas. Typically, an increase in sunlight reaching the forest floor will create conditions more suitable for the recruitment of understory plant species that are not tolerant of fully shaded conditions, which may include some that monarchs could use as an overwinter nectar source. For these reasons, no significant adverse impacts are anticipated for monarch butterflies as a result of this project.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact: A local vegetation/tree preservation policy would apply to the proposed project by means of an approved Development Plan from San Luis Obispo County. A Development Plan in the Monterey Pine Forest SRA of the North Coast Planning Area of the Coastal Zone in San Luis Obispo County (of which this project is a part of) requires native vegetation to be retained as much as possible. Furthermore, it requires the replanting of native stock when Monterey pines, and in some areas oaks, larger than 6 inches dbh are removed. This project will be carried out in accordance with a coastal development permit or minor use permit issued by the SLO County Coastal Planning office.

This project was designed to remove the least amount of vegetation feasible to accomplish the objectives of fuel reduction. Pines 10 inches dbh and greater will not be removed, unless posing a safety hazard. Only understory material less than 10 inches dbh will be treated, with small trees and shrubs retained to achieve spacing that is not conducive to the spread of high intensity fire and spacing that improves forest health and vigor.

As stated above, the replacement of trees larger than 6 inches dbh is required for development projects in this planning area of the Coastal Zone. Projects that remove major vegetation, such as this, are defined as "development" by the County's Coastal Land Use Ordinance. This project is also considered a forest management project intended to reduce fire hazard. The removal and planting of trees is often necessary with forest management activities. In this case the need for small diameter tree removal has been clearly identified by Registered Professional Foresters (RPFs), including Steven Staub and RPFs from CAL FIRE,

while the need to plant more trees has not. Pockets of overstory pine mortality have occurred in portions of the project; such areas are naturally regenerating, and neither these areas nor any other locations have been identified as areas in need of planting. The Forest Management Plan for Covell Ranch indicates both coast live oak and Monterey pine natural regeneration is active and maintaining forest cover (Staub 2011).

Most portions of the undeveloped Cambria pine forest are significantly overstocked with excess trees of at least several hundred to, in some cases, one thousand or more trees per acre. The intent of the proposed project is to lessen the amount of fuel, including trees in the overstocked stand. Overstocked stands are more easily stressed as trees and other vegetation species compete for limited resources such as soil nutrients, light and water. The stressed conditions cause the vegetation to be more susceptible to insect and disease outbreaks and the buildup of fuel increase vulnerability to wildfire. Replacing trees is contrary to the project's intent because it would add to the fuel loading and increase competition among residual vegetation, thereby causing a decrease in forest health and an increase in fire hazard. Because of these reasons, a less than significant impact would occur as it relates to a conflict with the County Planning requirements of vegetation retention and tree preservation.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact: The proposed project is not known to be within or near the boundaries of a Habitat Conservation Plan, Natural Community Conservation Plan, or other habitat conservation plan. The Covell Ranch is under a conservation easement held by TNC that excludes development. The proposed project is consistent with the management policies outlined in the conservation easement. Therefore, it is anticipated the project would not conflict with implementation of this or any such plan.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Will the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Information about Cultural Resources

Discussion

An archaeological survey of the project area was conducted by CAL FIRE Associate State Archaeologist Stephanie Velasquez with assistance from Forester Andrew Hubbs. No sites were found during the survey. A pre-survey records search conducted by the Central Coast Information Center indicated the presence of two historical sites adjacent to the project area. Per CAL FIRE's Archaeological Program policy, Native American contact was made notifying cultural groups of the project and requesting information about known sites. Survey results, records search results, Native American contact results and any needed protection measures are discussed apart from this document, in a confidential archaeological survey report.

Note: The records search conducted for this project is valid for a period of five years. Any future project maintenance activities after five years will require another records search. Native American contact would likely be made at that time as well.

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact: ***The known historical sites are outside of the project area and will not be impacted by project activities.b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

No Impact: No other archaeological resources are known to be within the project area and as a result no changes are anticipated in the significance of any such resources.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact: There are neither known unique paleontological resources nor geologic features within or adjacent to the assessment area and as a result, no impacts are anticipated to occur to such resources as a result of project activities.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation: Human remains are not known to be within the proposed project area. The project boundary runs adjacent to the Cambria Cemetery. No disturbance to any known human remains will occur as a result of the proposed project and the minimal depth of soil disturbance anticipated with the project will make disturbance of unknown human remains unlikely. No human remains or associated grave goods were encountered during the archaeological surveys completed during this Initial Study and none are expected to be encountered during project activities. Nonetheless, because of the project's location near a year-round stream, the possibility exists for human remains to occur within the project area. If human remains were unearthed and not protected in accordance with procedures in State Law (see below), this could be a potentially significant impact. To prevent this impact, the following mitigation measure shall be implemented.

Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CAL FIRE and/or the project contractor(s) shall immediately halt potentially damaging activities in the area of the burial and notify the SLO County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of SLO County and CAL FIRE to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

				Incorporated
VI. Geology and Soils. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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 California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) 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 California Geological Survey Special Publication 42.)

No Impact: The proposed project will not increase the risk to people or structures as a result of a fault rupture. Human use will not increase and no structures will be constructed within the assessment area as a result of this project.

ii) Strong seismic ground shaking?

No Impact: The proposed project will not increase the risk to people or structures as a result of strong seismic ground shaking. Human use will not increase and no structures will be constructed within the assessment area as a result of this project.

iii) Seismic-related ground failure, including liquefaction?

No Impact: The proposed project will not increase the risk to people or structures as a result of seismic-related ground failures. Human use will not increase and no structures will be constructed within the assessment area as a result of this project.

iv) Landslides?

No Impact: No evidence of unstable areas, including previous slope failures, has been observed in the project area. Much of the project area has gentle slopes and it is anticipated the retention of overstory trees, shredded (masticated) material and residual understory vegetation would maintain soil and slope stability.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant with Mitigation:
A soils report for the proposed project was generated and is included in Appendix E (*Custom Soil Resource Report for San Luis Obispo County, California, Coastal Part, Bridge Street Fuel Break*). The report describes soil types and properties; and analyzes erosion potential based on factor K ratings (indicates the susceptibility of a soil to sheet and rill erosion by water), slope and surface soil exposure. More than 98% of the project area is classified in the 200, 201 and 202 series known as San Simeon sandy loam. The anticipated effects of project activities on this soil type are discussed below.

Reduced Surface Cover
The sandy loam soils present throughout most of the project area are considered to be moderately well drained and have a low to moderate erosion potential, based on factor K ratings (pg 24 of Appendix E). However, this erosion potential is largely influenced by surface soil cover and slope. The attached soils report also displays the erosion hazard (pg. 18 of Appendix E) assuming a soil surface exposure of 50-75% (fixed amount, can not be adjusted in the report). It is anticipated surface soil exposure over most of the area following project activities would be far less than 50-75%, so even though the erosion hazard analysis is not representative of post project conditions, it exemplifies the effect of reduced soil surface cover. The areas with the highest hazard ratings coincide with the steepest slopes.

Most of the fuel reduction activities associated with the proposed project such as shredding (mastication), chipping or the lopping and scattering of treated material, would reduce vegetative cover, but leave a substantial layer of mulch material on or near the soil surface. This material would act as both as an energy dissipater to limit soil detachment from rain drop impact and limit sheet erosion. Erosion potential is further reduced by residual vegetation providing additional surface cover following project activities in the form of overstory trees, scattered shrubs and small trees, and herbaceous vegetation. Despite some areas with steep pitches, it is not likely significant surface soil erosion would occur as a result of project activities, based on factor K ratings and anticipated post project surface soil cover.

Heavy Equipment Use
Soil disturbance, including soil compaction can increase erosion potential and a minor amount of disturbance will occur as a result of heavy equipment use. The level of disturbance is largely dependant on the type of equipment used, where it is used and how moist the soil is. Unlike rubber tired equipment, tracked equipment is generally considered to exert relatively light ground pressures, leading to minimal soil compaction and rutting when conditions are dry. PSI for tracked equipment varies, but a common range for mastication equipment is 2-10 psi (Vitorelo et al. 2009). More so than compaction, mastication equipment has the potential to cause soil disturbances from actions that include the shredding action of the masticating head making contact with the ground, tracked equipment making sharp turns or equipment operating along the contour of steep slopes. Project design incorporates methods intended to reduce the potential of soil erosion caused by mastication equipment, including:

- Heavy equipment will be rubber or steel tracked.
- Heavy equipment use will not occur on ~~wet~~ saturated soils.
- Heavy equipment use will not occur on slopes exceeding 50%.*
- Heavy equipment will operate perpendicular to (up and down) the slope where feasible.

- Heavy equipment operators would be instructed to keep the cutting and mulching head above the mineral soil layer.

*Figure 1b displays several equipment limitation zones (ELZs). The ELZ indicated in the southwest portion of the project area has slopes that exceed 50% in some areas and as a result no heavy equipment use will occur in this area.

The erosion potential from mastication activities will further be minimized with the proposed project for the following reasons:

- Mastication equipment generally operates over a mat of treated material. Shredded material is deposited ahead of the advancing equipment which helps to limit soil disturbance and compaction.
- Slopes in the project area are gentle (less than 30% in most areas). Water velocity of overland flow in areas of disturbed soils is slowed on gentle slopes, resulting in less rill and gully formation. Also, gentle slopes increase time for greater water infiltration to occur, resulting in less run off and erosion potential.
- Soils in the project area are classified in the low to moderate range (factor K) for erosion potential.
- The complete removal of surface cover would not occur with the proposed project (refer to surface cover discussion above).
- The root system of treated material will remain intact, aiding in soil stability.

The following links are examples of articles that discuss erosion potential and soil compaction related to mastication equipment:
http://www.forestry.vt.edu/cofe/documents/COFE_2009_Vitorelo_et_al.pdf
http://ucce.ucdavis.edu/files/repositoryfiles/ca6002p77-69243.pdf
http://nature.berkeley.edu/stephens-lab/Publications/Moghaddas%20Stephens%20Soil%20Mech%20FFS%20FEM%204-08.pdf

Anticipated soil erosion potential from project activities will be low for the above stated reasons including: soil properties, residual materials covering the soil surface, residual vegetation, intact root systems of treated material, limited soil disturbance, minimal soil compaction, heavy equipment restrictions, and fairly gentle slopes over most of the project area. To prevent potential impacts from soil movement, the following mitigation measures shall be implemented.

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zones near the Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #4: Watercourse Protection Zones near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut area delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream. (See Figure 1b)

c) Would the project 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?

No Impact: No evidence of unstable areas, including previous slope failures, has been observed in the project area. Much of the project area has gentle slopes and it is anticipated the retention of overstory trees, residual understory vegetation and intact root systems of treated material will maintain soil and slope stability. This project is designed to reduce the risk of catastrophic wildfire which often results in slope failures, mass wasting and other significant geological impacts.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

No Impact: No building construction or other activities will occur as a result of this project that would be affected by expansive soil.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact: No septic tanks or alternative waste water disposal systems would be used as a result of this project.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Information about Greenhouse Gas Emissions (GHG)

Greenhouse gases defined by State law include: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and three groups of synthetic, fluorinated gases including hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexaflouride (SF_6). The US EPA also recognizes these same six GHGs that were also the subject of the Kyoto Protocol. Additional GHGs recognized scientifically are water vapor (H_2O) and ozone (O_3). GHGs in order of abundance are water vapor, carbon dioxide, methane, and ozone. Water vapor (H_2O) is the dominant GHG comprising approximately 95% of the earth's atmosphere and two-thirds of the "greenhouse effect". H_2O, CO_2, CH_4, and O_3 occur both from natural and manmade sources, whereas the fluorinated gases are primarily produced by industrial processes.

The "greenhouse effect" refers to the atmospheric process by which heat radiated from the earth is absorbed by GHG and trapped or re-radiated in all directions. The atmosphere (including the greenhouse effect) moderates and protects the earth by warming and cooling the surface to create survivable conditions. "Global warming" is a recent phenomenon where some evidence indicates that the earth's average temperature is increasing at a rapid rate since the industrial revolution due to anthropogenic GHG emissions. There is considerable study and debate around the world to determine how human activities are influencing climate change and how to address the issue.

Many governmental bodies around the world, including California and the US EPA, have adopted polices that are intended to reduce human-caused GHG emissions. Current policy in California (AB32) is focused

on reducing man-made GHGs, primarily CO_2. The SLO County APCD has not yet established significance thresholds for GHG emissions from project operations. Nonetheless, GHGs (CO_2 and CH_4) from all projects subject to CEQA must still be quantified and mitigated to the extent feasible. The California Office of Planning and Research (OPR) has provided the following direction for the assessment and mitigation of GHG emissions:

- Lead agencies should make a good-faith effort (see Tables 3, 4 & Appendix D), based on available information, to calculate, model, or estimate the amount of CO_2 and other GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities;

- The potential effects of a project may be individually limited but cumulatively considerable. Lead agencies should not dismiss a proposed project's direct and/or indirect climate change impacts without careful evaluation. All available information and analysis should be provided for any project that may significantly contribute new GHG emissions, either individually or cumulatively, directly or indirectly (e.g., transportation impacts); and,
- The lead agency must impose all mitigation measures that are necessary to reduce GHG emissions to a less than significant level. CEQA does not require mitigation measures that are infeasible for specific legal, economic, technological or other reasons. A lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is "less than significant."

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact: Through project design, GHG emissions have been minimized by treating the smallest area feasible, while still accomplishing the objectives of the fuel break. However, GHG emissions can not be eliminated from the proposed project. Emissions would result from mechanized equipment, pile burning and the decomposition of treated (shredded, chipped or cut) vegetative material. Because the decomposition of treated material would occur over a number of years, the release of GHG emissions would be metered. Such a low-level long-term release of emissions is anticipated to be insignificant and no further analysis was conducted.

Because the treatment method and amount of material to treat would likely vary between the establishment and future maintenance of the fuel break, the estimation of GHG emissions from each of these phases has been conducted separately. The variables that contributed to the separation of these phases are the amount and type of equipment and primarily, the level of burning activity in each phase. A relatively small amount of pile burning may occur during the establishment phase, but more wide spread pile burning could occur every several years during the maintenance phase. Described below are the anticipated activities that would generate GHG emissions from each of the phases. Scenarios were developed to portray the anticipated sources of GHG emissions, though minor variability of these sources could occur (for example, if a higher percentage of the establishment phase was completed with hand crews rather than mastication or vice versa).

Fuel Break Establishment:

It is anticipated the fuel break establishment would require use of a masticator and a handcrew, each for approximately 30 working days. GHG emissions would occur as a result of equipment operation and through pile burning. Table 3 illustrates the estimated CO2 emissions from the equipment associated with conducting these activities.

Table 3. Estimated CO2 Emission from Equipment Associated with Fuel Break Establishment

Equipment type	Equipment amount	Gasoline consumption (gal/day)	Diesel consumption (gal/day)	Number of days	Total gallons	Metric tons of CO2e*
masticator	1	n/a	40	30	1200	12.18
transport	1	n/a	10	2	20	0.20
CCV (crew bus)	1	n/a	6	30	180	1.83
chipper	1	n/a	10	15	150	1.52
utility truck	1	3	n/a	15	45	0.40
passenger vehicle	2	3	n/a	30	180	1.59
chainsaw	4	0.5	n/a	30	60	0.53
					total	**18.25**

**The conversion factor of gallons to metric tons of CO2e was obtained from the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009).*

Fuel usage estimated for masticator and chainsaws; assumed 6 mpg for transport, 10 mpg for CCV, and 20 mpg for utility and passenger vehicles (60 miles round-trip).

In addition to the 18 metric tons of carbon dioxide generated from equipment emissions, pile burning will add an additional 10 metric tons of GHG emissions for a total of **28 metric tons** during the fuel break establishment phase (pile burning assumes 50 piles at 3'high x6' wide, using the Fire and Environmental Research Applications (FERA) model developed by Pacific Wildland Fire Sciences Laboratory, USDA Forest Service Pacific Northwest Research Station). Appendix D displays the results of the FERA run.

Fuel Break Maintenance

It is anticipated the fuel break could be maintained every several years (perhaps 5-10 years); and such activity would likely involve the use of hand crews over most of the project area. Chippers would be used in accessible areas, while piling and burning or looping and scattering of material would be conducted in the remaining areas. Table 4 illustrates the estimated CO2 emissions from the equipment associated with conducting these activities.

Table 4. Estimated CO2 Emission from Equipment Associated with Fuel Break Maintenance

Equipment type	Equipment amount	Gasoline consumption (gal/day)	Diesel consumption (gal/day)	Number of days	Total gallons	Metric tons of CO2e*
CCV (crew bus)	1	n/a	6	70	420	4.26
chipper	1	n/a	10	35	350	3.55
utility truck	1	3	n/a	35	105	0.93
chainsaw	4	0.5	n/a	70	140	1.23
					total	**9.91**

**The conversion factor of gallons to metric tons of CO2e was obtained from the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009).*

Fuel usage estimated for chipper and chainsaws; assumed 10 mpg for CCV, and 20 mpg for passenger vehicles (60 miles round-trip).

GHG emissions from pile burning were calculated using FERA (referenced above). Pile burning (assuming 100, 3'high x6'wide piles) would generate an estimated 20 metric tons of GHG emissions. Appendix D displays the results of pile burning GHG emissions calculations. Total GHG emission during the maintenance periods is estimated at **30 metric tons**.

Summary

It is reasonable to assume that short term equipment use at this project will not produce a net increase in emissions due to the fact that such equipment would likely be in operation elsewhere during this same period if this project was not proposed. It is common for contractors who perform mastication work to fully utilize their equipment and move from job to job to maintain full capacity utilization. It is also common for CAL FIRE hand crews to work "sponsor" projects each day. If a crew was not used for this project, it is assumed they would be assigned somewhere else since the demand for crews far exceeds their availability. A net increase in vehicular emissions is only possible if equipment used for this project would otherwise not be in use which is considered not likely. It is not likely that this equipment will be brand new and placed into service only for this project.

It is also reasonable to assume that a certain amount of greenhouse gasses emitted as a result of burning activities would be sequestered by the increased growth rate of residual vegetation. The treatment is anticipated to improve the health and vigor of residual vegetation. An individual tree or shrub with less competition from surrounding vegetation has the capability to grow faster and larger than those competing for limited resources. A portion of the emissions created from burning activities can be sequestered by the capture and storage of carbon from the increased growth of residual vegetation.

Ultimately, regardless of project implementation, the vegetation in this area will burn and greenhouse gasses will be released. Through fuel reduction designed to minimize the chance of large wildland fires, land managers can have a say in the timing and quantity of some of those releases. The primary intent of this project is to reduce the threat of a large, catastrophic wildfire. If a wildfire does happen to enter an area that was treated, the wildfire may be contained sooner with reduced area burned and consequently reduced carbon emissions. For these reasons a less than significant impact on the environment is anticipated as a result of the GHG emissions generated from the proposed project.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. SLO County APCD has not presently established a significance threshold limit for GHG emissions. The Legislature passed and the Governor signed AB32, The Global Warming Solutions Act of 2006. This law requires the Air Resources Board (ARB) to adopt strategies to reduce GHG emissions to baseline 1990 levels by 2020, and by 2050 to reduce emissions to 80% of 1990 levels. In December 2007, the Board approved the 2020 emission limit of 427 million metric tons of carbon dioxide equivalent (MMTCO2E) of greenhouse gases.

This proposed project is not considered likely to conflict with AB32 and the goals stated above due to the following reasons:

- Short term equipment emissions as discussed above are not likely to cause a net increase in GHG emissions. These emissions (see Tables 3 and 4) are expected to last approximately 1 to 3 months (depending on type of activity) every several years and the proposed project is relatively small (+/- 50 acres) that will not require a large workforce with numerous vehicles.
- Short term emissions associated with pile burning are not likely to cause a significant net increase in GHG emissions, as discussed above. Again these emissions will occur from a limited number of piles and be short term, expected to last one or two days every several years.

- The fuel break will be established prior to the 2020 deadline and it is reasonable to assume that this relatively small project will not be "cumulatively considerable" by ARB at that time. Future maintenance activities could be reexamined to evaluate any actions that are contrary to reaching the 2020 levels.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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, Would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, Would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Discussion

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact: No hazardous materials will be transported, used, or disposed of as a result of this project, with the exception of substances used to maintain and operate equipment (such as fuel and lubricants). Accidental spills of these substances will be cleaned up immediately and will not be in quantities large enough to pose a significant hazard to the public or environment, with the possible exception of accidental discharge into watercourses; however the small seasonal watercourses that are present would not be areas where equipment or fueling would occur. Such activities occur where service vehicles can access equipment, such as close proximities to roadways; therefore any small quantity of spillage during these activities will pose a less than significant impact to the environment.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact: Refer to VIII. (a).

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact: Cambria Elementary School is within ¼ mile of the proposed project area, however refer to VIII. (a) for a discussion on hazardous materials and substances and III. (d) for a discussion on hazardous emissions near sensitive receptors.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact: The proposed project site is not included on any list of hazardous materials sites.

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, would the project result in a safety hazard for people residing or working in the project area?

No Impact: The proposed project is not located within an airport use plan nor is it within two miles of a public airport.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Less than Significant Impact: The proposed project is within the vicinity of three private airports or airstrips: Hearst Airport, Rancho San Simeon, and Poteete Airstrip. Burning activities associated with the proposed project would be performed in accordance with County APCD regulations, including the issuance of a Smoke Management Plan, and as a result smoke would present a less than significant risk to airports and airstrips. No other aspect of the proposed project, with respect to airstrip vicinity, would result in a safety hazard for people residing or working in or near the project area.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact: The Cambria Area Pre-Attack Plan and Cambria Evacuation Plan are within the vicinity of the proposed project area. Both plans are available for viewing at the following website:

http://www.calfireslo.org/PreAttack.html#Evacuation_Planning

Portions of the proposed project are identified as a "proposed fuel break" in the Cambria Area Pre-Attack Plan and will add to the effectiveness of emergency response during a wildland fire. The proposed project is not part of the Cambria Evacuation Plan and will not interfere with any evacuations. Portions of the proposed project along Bridge Street, following project implementation, will allow for safer egress and ingress for residents and emergency responders during wildfires through a decrease in fire intensity in this area.

h) Would the project 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?

Less than Significant Impact: The intent of the proposed project is to reduce exposure of people and structures to a significant risk of loss, injury and death involving wildland fires. Residences are adjacent to the wildland within the proposed project area. Project operations will not occur during times of elevated fire danger including red-flag warnings as determined by the ECC. Mastication operations will only occur

during Level I conditions defined by the Industrial Fire Precaution Level system (IFPL). The proposed project will reduce fuel loads in these areas to provide a better opportunity for fire officials to suppress wildland fire and provide safer egress and ingress for residents and emergency responders during wildfires by decreasing fire intensity along Bridge Street.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
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 will result in substantial on- or off-site erosion or siltation?	☐	☐	☐	☒
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 runoff in a manner which would result in on- or off-site flooding?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a) Would the project violate any water quality standards or waste discharge requirements?

Less than Significant with Mitigation: Fuel reduction activities associated with the proposed project such as shredding (mastication), chipping or lopping treated material, will leave a substantial layer of mulch material on or near the soil surface following such activities, and thereby limit the potential for significant erosion or sediment delivery. The gentle slopes over most of the project area will further reduce this potential.

Soil compaction can increase erosion potential. Reduced infiltration rates can increase surface runoff and erosion. Heavy equipment (masticators) used in the project area will have little impact on soil compaction. Mastication equipment is generally considered to exert relatively light ground pressures leading to minimal soil compaction when conditions are dry. PSI for tracked equipment varies, but a common range for

mastication equipment is 2-10 psi (Vitorelo et al. 2009). Ground pressure ratings for most mastication equipment are often less than that of an average human.

The following links are examples of articles that discuss erosion potential and soil compaction related to the use of mastication equipment:
http://www.forestry.vt.edu/cofe/documents/COFE_2009_Vitorelo_et_al.pdf
http://ucce.ucdavis.edu/files/repositoryfiles/ca6002p77-69243.pdf
http://nature.berkeley.edu/stephens-lab/Publications/Moghaddas%20Stephens%20Soil%20Mech%20FFS%20FEM%204-08.pdf

Reducing understory vegetation could slightly increase surface runoff, but not to the point of significant sediment delivery or increased turbidity to watercourses. As stated above, erosion potential from project activities will be low due to residual materials providing soil coverage and minimal soils compaction. Furthermore, slopes are gentle throughout the project area, rarely exceeding 30%. Ground based equipment (masticators) will not be operated during wet soil conditions or on slopes that exceed 50%. Refer to VI. (b) for addition discussion regarding soil erosion potential.

The headwaters of a few small seasonal watercourses are located within the proposed project; each of them appears to only flow water during the wettest months and following significant precipitation events. Evidence of these watercourses is difficult to detect in most cases due to the shallow, barely definable channels and herbaceous vegetation covering them. Figures 6 and 7 are photos depicting the typical small watercourses in the project area. Again in these areas, residual vegetation and mulch material would limit the potential for significant erosion and sediment delivery. To further limit erosion potential near these watercourses, soil disturbance will be minimized by limiting or restricting equipment use through the establishment of equipment limitation zones (ELZs).

The 25' ELZ as depicted in Figure 1b is intended to limit equipment use during wet conditions near a small watercourse. Water collects on a road/trail just upstream of the small watercourse, and to prevent impacts to water quality, no equipment use will occur in this area when the soil is wet.

ELZs within 50 feet of watercourses as depicted in Figure 1b, have been established to limit equipment use. In these areas, equipment use is only allowed for the purposes of crossing the watercourse during dry conditions in a designated area where no disturbance to channels and banks can occur. If necessary, although not anticipated, devices or methods to limit disturbance would be utilized, such as crossing over materials or objects that would protect banks and channels, and then removing them once the crossing was made. Vegetation removal in the 50 foot ELZs will be limited to hand crew work (refer to Mitigations 2-4). For these reasons it is anticipated, erosion as a result of surface runoff, and any other activity associated with the proposed project, will not have a significant adverse effect on water quality or significantly increase turbidity in any watercourse.

One of the ephemeral streams, though not visibly moving a significantly larger amount of water than the others, is incised and actively headcutting (Figures 8 and 9). The banks along the incised area downstream of the headcut appear to be stabile, with evidence of established vegetation apparent. A 50 foot ELZ has been established in this area, and within 25' of the stream, no equipment use or vegetation removal shall occur. Mitigation #2, #3 and #4, discussed below discusses protection measures in this and other stream areas.

To prevent potential impacts to ephemeral watercourses and wet areas, the following mitigation measures shall be implemented.

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zones near the Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #4: Watercourse Protection Zones near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut area delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream (See Figure 1b).

b) Would the project 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., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

No Impact: The proposed project will not use or deplete groundwater supplies nor interfere with ground water recharge. Substantial vegetation removal over large areas can lead to an increase in groundwater recharge by decreasing transpiration amounts. Because overstory trees will be retained, combined with the relatively small area involved with the proposed project, no impact to groundwater recharge is expected following project activities.

c) Would the project 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 substantial on- or off-site erosion or siltation?

No Impact: As stated in IX. (a), erosion and surface runoff is not expected to significantly increase as a result of the proposed project. No alterations to drainage patterns will occur within the project area, including those of any watercourse.

d) Would the project 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 runoff in a manner which would result in on- or off-site flooding?

No Impact: As stated in IX. (a), surface runoff is not expected to significantly increase as a result of the proposed project. No flooding will occur as a result of this project.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact: As stated in IX. (a), surface runoff is not expected to significantly increase as a result of the proposed project. No impact to stormwater drainage will occur and no substantial additional sources of polluted runoff would occur.

f) Would the project otherwise substantially degrade water quality?

Less than Significant with Mitigation: As stated in IX. (a), erosion as a result of surface runoff, and any other activity associated with the proposed project, will not have a significant adverse effect on water quality or significantly increase turbidity in any watercourse.

To prevent potential impacts to ephemeral watercourses and seasonal wet areas, the following mitigation measure shall be implemented.

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #3: Watercourse Protection Zones near the Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Mitigation Measure #4: Watercourse Protection Zones near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut area delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream (See Figure 1b).

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact: No structures or housing will be placed within a 100-year flood hazard area and no such areas will be altered as a result of the proposed project.

h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

No Impact: Refer to IX. (g).

i) Would the project 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?

No Impact: No flooding would occur as a result of the proposed project and no levees or dams are within the vicinity of the project.

j) Would the project result in inundation by seiche, tsunami, or mudflow?

No Impact: No inundation by seiche, tsunami, or mudflow would occur as a result of the proposed project.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

a) Would the project physically divide an established community?

No Impact: No barriers will be constructed and no access or routes will be affected that would physically divide any community.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact: Refer to the discussion on IV. (b). All project activities will be performed in accordance with provisions set forth in a Coastal Development Permit or Minor Use Permit issued by the SLO County Coastal Planning office.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact: Refer to the discussion on IV. (f). All project activities are in accordance with a conservation easement for the Covell ranch held by TNC.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: The availability of mineral resources will not be affected by the proposed project.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact: The site is not designated in the general plan as having locally-important mineral resources, nor will the availability of any such resources be affected by the proposed project.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Noise. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) Would the project create exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact: Fuel reduction activities, especially mastication equipment, chainsaws and chippers would cause a short-term increase in noise levels. These levels are not expected to be significant because they will be confined to regular weekday business hours (8am – 5pm), and they will only be for short periods that potentially would only reoccur every several years. Duration of the short periods of project noise will vary based on project activity, but typically excessive noise levels may be heard in any one area for at most several days until fuel treatment activities progress and move further away. Work will progress at an average rate of ½-3 acres per day, meaning most residents adjacent to the project area should expect to have activity directly adjacent to their property for less than one day, or up to two days if preparatory hand work is required. All nearby residents will be notified of the project and timing of project operations, such as where people normally sleep during the day, will be adjusted where necessary. This short term project activity noise is expected to be in conformance with the County noise ordinance. Because the noise created during the treatment process is not stationary, and mechanical equipment will only be used during the hours of 8am and 5pm noise impacts are considered less than significant.

b) Would the project create exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

No Impact: Project activities will not involve the use of explosives, pile driving or other intensive techniques that could generate groundborne vibration or noise. All nearby residents will be notified of the project and timing of project operations, such as where people normally sleep during the day, will be adjusted where necessary.

c) Would the project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact: No permanent noise will be created as a result of the proposed project. Project operations are expected to last 1 to 2 months initially and maintenance may occur every several years as necessary. Nearby residents will be informed of the project and timing of operations will be adjusted when necessary.

d) Would the project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact: All mechanized activities associated with the project will be limited to daytime hours of operation (8am to 5pm). No work activities will occur at night or on weekends. Fuel reduction activities at the actual project site will temporarily increase noise levels in the area, most noticeably to the residents that border the west side of the project area, but the dampening effect of vegetation between equipment and homes in addition to the normal coastal breezes will minimize these impacts. Noise levels could reach 109 dBA within the project site for short periods with the use of chainsaws and 80-90dba with use of mastication equipment. These noise levels will be lower away from equipment use, as distance and vegetation screening increase. Any substantial noise will be short lived as the project progresses and equipment or crews moved from treated to untreated areas; typically production rates would be ½ - 3 acres per day, depending on fuel levels and activity method. Residents near the project area should expect to have equipment directly adjacent to their property for 1 – 2 days or less every several years, making noise concerns in any one area temporary.

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, would the project expose people residing or working in the project area to excessive noise levels?

No Impact: The project would not be located within an airport land use plan and is not within two miles of a public airport.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact: The proposed project would not impact noise generated from any private airstrips in the vicinity.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Population and Housing. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact: No new homes or infrastructure would be created as a result of the proposed project.

b) Would the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

No Impact: No displacement of existing homes would occur as a result of the proposed project.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact: No displacement of people would occur as a result of the proposed project.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Discussion

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public services:

Fire protection?

No Impact: The proposed project will create more favorable conditions for fire protection and suppression during a wildfire. The proposed project will not necessitate a change in fire protection services or create new fire stations or facilities.

Police protection?

No Impact: The proposed project will have no impact on police protection services nor create a need for additional police facilities.

Schools?

No Impact: The proposed project will have no impact on the number of children attending schools nor create a need for additional school services or facilities.

Parks?

No Impact: Parks or other recreational facilities will not be displaced by the proposed project since the project is located on private property that is not intended for such uses. In addition, the project will not add residences that could result in increase demand for parks or other recreational opportunities.

Other public facilities?

No Impact: The proposed project will have no impact on other public services nor create the need for additional public facilities.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Recreation. Would the project:				
a) 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?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

Approximately 1-2 acres of the project is located on land owned by Coalinga-Huron Recreation & Parks District, with a County Land Use designation as Recreation. The land is leased to Camp KEEP, also known as Camp Yeager, a camp used for educational purposes for children from Kern County. Of the 13 plus acres of this parcel, the project will treat only 1-2 acres of a wooded, undeveloped area surrounding the ballfield in the southeast portion of the property. No impacts to the recreational aspect of the camp will occur as a result of this project.

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?

No Impact: The proposed project will not alter or prohibit recreational opportunities such that additional use would occur to neighborhood and regional parks or recreational facilities. The proposed project will not result in an increase in population or visitors who use neighborhood and regional parks or recreational facilities.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact: No recreational facilities will be included and no construction or expansion of such facilities will be required as a result of the proposed project for the reasons described in XV. (a).

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Transportation/Traffic. Would the project:				
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion

a) Would the project 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?

Less than Significant Impact: The proposed project will not cause an increase in bicycle or pedestrian traffic or congestion, or an increase in the use or need of mass transit. The proposed project will have no effect on population or number of visitors in the area and following project activities will not alter any transportation or travel routes.

An insignificant short term increase to vehicular traffic in the area can be expected during the establishment of the fuel break, and may reoccur every several years during fuel break maintenance. For example hand crew work will require one or two crew carrying vehicles, and mastication work will require one or two vehicles for equipment operators and a one time drop-off and pick-up of equipment. The slight increase in vehicular traffic from each of these activities will be short lived and should not significantly impact the circulation system in the area.

A portion of the project area is located adjacent to Bridge Street. This is a dead-end street with relatively light traffic, used to access Cambria Cemetery and the Covell Ranch. During project activities activities, portions of Bridge Street may be subject to traffic control or temporary road closures when there is a danger of debris reaching the roadway. Likewise, the same could happen during burning activities due to decreased visibility with smoke and/or to allow operational access for fire suppression personnel. During these occurrences, access to the Cambria Cemetery and the Covell Ranch at the end of Bridge Street, would be impacted. Any traffic control or road closures would be short term and lifted once conditions became safe. Advanced notice of any closures will be given as a requirement in obtaining a permit with San Luis Obispo County Public Works Department.

b) Would the project 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?

Less than Significant Impact: Refer to the discussion in XVI. (a). The project area is located adjacent to Bridge Street, a quiet dead-end street; and not immediately adjacent to any other roadway.

c) Would the project 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?

No Impact. The project will not increase the population in the area, nor will it involve any changes in air traffic operation.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact: No road design would result of the proposed project; however, hazards could exist from mastication and burning. Refer to the discussion in XVI. (a) for a discussion of these potential hazards.

e) Would the project result in inadequate emergency access?

No Impact: Emergency response personnel will have full access to any needed route. Any road closures that do occur will not physically block routes and emergency response personnel will have full access at all times. Project is designed to improve safety and increase the effectiveness of emergency response resources, particularly during wildfire incidents.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less than Significant Impact. The project will not result in any permanent features that could affect regional transportation and will not result in alteration of any existing facilities nor interfere with construction of any future planning facilities that are intended to serve alternative modes of transportation (i.e., bus turnouts, bicycle lanes, etc.). A temporary decrease in the performance of existing facilities could occur if a road closure were to take place. Such an effect would be temporary; refer to XVI. (a) for the discussion. No conflict with adopted alternative transportation plans for policies will occur as a result of the project.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Utilities and Service Systems. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact: Wastewater will not be generated and wastewater treatment will not occur as a result of the proposed project.

b) Would the project 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?

No Impact: Water facilities and wastewater facilities will not be expanded nor constructed as a result of the proposed project.

c) Would the project 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?

No Impact: The construction and expansion of storm water drainage facilities will not occur as a result of the proposed project.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact: Any water use that will occur (such as water for project personnel) as a result of the project would be an insignificant amount easily served by existing entitlements.

e) Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

No Impact: Wastewater will not be generated and wastewater treatment will not occur as a result of the proposed project.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact: The small amount of trash generated by project personnel while conducting project activities will easily be accommodated by local landfills.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact: The small amount of trash generated by project personnel while conducting project activities will be disposed of in a proper manner.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially 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, 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?	☐	☒	☐	☐
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.)	☐	☐	☒	☐
c) Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Authority: Public Resources Code Sections 21083 and 21083.05.
Reference: Government Code Section 65088.4, Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083.05, 21083.3, 21093, 21094, 21095, and 21151; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors (1990)*, 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San* Francisco (2002) 102 Cal.App.4th 656.

Discussion

a) Would the project have the potential to substantially 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, 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?

Less than Significant Impact with Mitigation: The intent of the proposed project is to help protect people, property, wildlife habitat and the environment by reducing the threat of a catastrophic wildfire in the Cambria area. The proposed project will not substantially 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, or threaten to eliminate a plant or animal community. The project will, however reduce the number of Monterey pines, and potentially several other sensitive RPR species in the project area. Refer to the discussion in IV. (a). No impact will occur to cultural resources related or unrelated to important examples of the major periods of California history or prehistory. Refer to the discussion in V. (a) and (b). Project design, timing, technique and placement are intended to avoid or minimize impacts as much as possible. Mitigations have been incorporated into the project that lessens potential impacts to Biological Resources, Cultural Resources, Geology and Soils, and Hydrology and Water Quality to a level that is less than significant (Mitigation #s 1 - 5).

b) Would 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.)

Less than Significant Impact: No significant fuel reduction activities are known to have previously taken place within the proposed project area. Several home owners have thinned vegetation, removed or piled dead trees, or limbed trees within the project area adjacent to their property. The effects of these small projects are mostly consistent with the expected outcome of the proposed project and in these areas less work and in some cases, no additional work would occur. Future activities associated with the maintenance of the proposed fuel break have been addressed in this document and are not anticipated to have impacts that are cumulatively considerable.

Several areas outside the proposed project, but in the Monterey pine forest of the Cambria area have undergone fuel reduction activities that include tree thinning, brush clearing and prescribed burning. San Simeon State Park and the Fiscalini Ranch are two examples of such areas that have conducted some or all of these activities. San Simeon State Park continues fuel reduction work using hand crews. As expected, numerous property owners have also conducted various fuel reduction activities adjacent to their homes to provide defensible space. The projects conducted on lands in the vicinity of the proposed project are considered to be small in scope and magnitude, and minor (if any) in terms of adverse impacts to people, wildlife or the environment. The effects of these projects in conjunction with the proposed project are not anticipated to have any significant adverse impacts.

c) Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact: No project-related environmental effects were identified that will cause substantial adverse effects on human beings. As discussed herein, the proposed project has the potential to create impacts related to Biological Resources, Cultural Resources, Geology and Soils, and Hydrology and Water Quality. However, with implementation of the aforementioned mitigation measures, these potential impacts will be reduced to a less than significant level. The project will not have substantial adverse effect on humans. The project will, by contrast, provide better protection to the community and adjacent wildlands by decreasing the threat of catastrophic wildfire.

Appendix A
Mitigation Monitoring and Reporting Plan (MMRP)
for the
Bridge Street Fuel Break Project
Initial Study/Mitigated Negative Declaration
San Luis Obispo County, California

In accordance with CEQA Guidelines Section 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a Mitigation Monitoring and Reporting Plan (MMRP) that ensures compliance with mitigation measures required for project approval. The California Department of Forestry and Fire Protection (CAL FIRE) is the lead agency for the above-listed project and has developed this MMRP as a part of the final Initial Study/Mitigated Negative Declaration (IS/MND) supporting the project. This MMRP lists the mitigation measures developed in the IS/MND which were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the mitigation measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

Potentially Significant Effects and Mitigation Measures
The following is a list of the resources that will be potentially affected by the project and the mitigation measures made part of the Initial Study/Mitigated Negative Declaration.

Mitigation Measure #1: Measures to Protect the Monterey dusky-footed woodrat Houses.
Prior to fuel reduction activities woodrat houses, including the feature(s) the house is constructed around (shrub, tree, stump, log, etc), within the project area will be located and flagged for avoidance prior to project activities.

Schedule: Houses shall be located and marked with flagging prior to operations and this protection measure shall apply for the duration of the project.
Responsible Party: CAL FIRE shall be responsible for carrying out this mitigation measure.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #2: Watercourse Protection Zone near the Cemetery Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the cemetery, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Schedule: Areas shall be marked with flagging prior to operations and this protection measure shall apply for the duration of the project.
Responsible Party: CAL FIRE shall be responsible for carrying out this mitigation measure.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #3: Watercourse Protection Zones near the Ballfield Area
No equipment use will be allowed within 50 feet of the ephemeral stream and associated seasonal wet area near the ballfield, except to facilitate crossing in a designated area when conditions are dry (See Figure 1b).

Schedule: Areas shall be marked with flagging prior to operations and this protection measure shall apply for the duration of the project.
Responsible Party: CAL FIRE shall be responsible for carrying out this mitigation measure.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #4: Watercourse Protection Zones near the Headcut Area
No equipment use will be allowed within 50 feet of the ephemeral stream near the headcut area delineated by blue flagging and no vegetation removal will be allowed within 25 feet of the banks above this stream (see Figure 1b).

Schedule: Areas shall be marked with flagging prior to operations and this protection measure shall apply for the duration of the project.
Responsible Party: CAL FIRE shall be responsible for carrying out this mitigation measure.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CAL FIRE and/or the project contractor(s) shall immediately halt potentially damaging activities in the area of the burial and notify the SLO County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of SLO County and CAL FIRE to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

Schedule: Immediately if human remains are discovered.

Responsible Party: CAL FIRE shall be responsible for carrying out this mitigation measure.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

LIST AND DEFINITION OF ACRONYMS AND SYMBOLS USED IN THIS DOCUMENT

Acronyms

ARB	Air Resources Board
APCD	Air Pollution Control District
CA	California
CAL FIRE	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CO_2	Carbon Dioxide
CSP	California State Parks
CZ	Coastal Zone
CZLUO	Coastal Zone Land Use Ordinance
dBA	decibel
DBH	Diameter at Breast Height
DFG	Department of Fish and Game
ELZ	Equipment Limitation Zone
EPA	Environmental Protection Agency
et al.	*et alii* (Latin) (it means "and others")
FERA	Fire and Environmental Research Applications
GHG	Greenhouse Gas
HWY	Highway
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
MDBM	Mount Diablo Base Meridian
MND	Mitigated Negative Declaration
MMRP	Mitigation, Monitoring, and Reporting Plan
N/A	Not Applicable
NDDB	Natural Diversity Data Base
NOI	Notice of Intent (to adopt a negative declaration or mitigated negative declaration)
PRC	Public Resources Code
RPF	Registered Professional Forester
RPR	Rare Plant Rank (used by DFG and CNDDB, formerly referred to as CNPS listed)
RWQCG	Regional Water Quality Control Board
SCH	State Clearinghouse
SLO	San Luis Obispo
THP	Timber Harvest Plan
TNC	The Nature Conservancy
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Symbols

§	Section
#	Number
%	Percent

LIST OF PREPARERS OF THIS DOCUMENT

Daniel G. Foster Senior Environmental Planner
CAL FIRE's Sacramento Headquarters, (916) 653-0839

Andrew Hubbs Forester I, RPF #2897, Unit Environmental Coordinator
CAL FIRE's San Luis Obispo Unit, (805) 543-4244

Alan Peters Forester II, RPF #2633, Unit Environmental Coordinator
CAL FIRE's San Luis Obispo Unit, (805) 543-4244

LIST OF EXPERTS CONSULTED

Biological Issues
Brandon Sanderson, Environmental Scientist
Department of Fish & Game
3196 Higuera St., Suite A
San Luis Obispo, CA 93401
805-594-6141

Michael Walgren, Environmental Scientist
California State Parks
San Luis Obispo Coast District
805-776-2387

Bob Motroni, Senior Wildlife Biologist (RA)
Department of Forestry & Fire Protection
1416 9th Street
Sacramento, CA 94244
916-653-9420

Della Synder-Velto
United States Fish and Wildlife Service
Della_Snyder-Velto@fws.gov

Cultural Resource Issues
Stephanie Velasquez, Associate State Archaeologist
Department of Forestry and Fire Protection
2524 Mulberry Street
Riverside, California 92501

Forest Management Issues
Stephen Staub, Registered Professional Forester #1911
Staub Forestry and Environmental Consulting
6010 Highway 9, Suite 6
Felton, CA 95018
831-335-1452

Kim Camilli, Forest Pest Specialist, RPF #2916
Department of Forestry & Fire Protection/Cal Poly
635 N. Santa Rosa Street
San Luis Obispo, CA 93405
805-543-4244

San Luis Obispo County Contact
Ryan Hostetter, Coastal Planning & Permitting
San Luis Obispo County Planning & Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408
(805) 788-2351

Water Quality Issues
Mike Higgins
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
(805) 542-4649

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