**Response to Comment**
Bridge Street Fuel Reduction Project
San Luis Obispo County, California
State Clearinghouse Number 2011081093

Prepared by:
The California Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460

December 8, 2011

The California Department of Forestry and Fire Protection (CAL FIRE) is serving as Lead Agency for California Environmental Quality Act (CEQA) compliance for the above-listed proposed project. An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared, filed at the State Clearinghouse on August 29, 2011, and distributed or made available for a 30-day public and agency review period in conformance with CEQA Guidelines 14 CCR §15101(b) and §15072(b). The 30-day agency and public review period began on August 29, 2011 and ended on October 10, 2011. A total of 210 comment letters containing 170 written comments were submitted to the Department. These included 1 letter containing 3 comments from 1 public agency and 209 letters containing 167 comments from 209 members of the general public. Of the 209 letters received from the general public, 178 of them were identical, sent as notification that an on-line petition had been signed. All 167 comments were given full consideration by the Department. The acronym of the agency (for public agency comments) or the initials of the submitter's first and last name (for public comments) are used to identify each individual comment on the list of comments, and the Department's response to them, which follows.

The three written comments from one public agency came from:

- (APCD) Mr. Gary Arcemont, Air Quality Specialist, San Luis Obispo County Air Pollution Control District, 3433 Roberto Court, San Luis Obispo, CA 93401.

The 167 comments from members of the general public came from:

- (VB) Valerie Bentz, 1855 Cardiff Drive, Cambria, CA 93428 vbentz@fielding.edu
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- (JMW) Jim and Mary Webb, 1186 Hartford, Cambria, CA 93428, maryewebb@charter.net
- (EB) Elizabeth Bettenhausen, 345 Plymouth Street, Cambria, CA 93428 elizabethbettenhausen@gmail.com
- (MB) Mahala Burton, 6425 Cambria Pines Road, Cambria, CA 93428
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- (178 petitioners) 178 on-line petitioners with identical comments:

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This document contains CAL FIRE's responses to all substantive comments received during the public review period. A complete copy of each comment letter submitted to the Department is also included. A copy of this document will be mailed to each individual comment submitter, is included as part of the Final CEQA Document, and has become part of the CEQA Administrative Record supporting this project.

## Comments from Public Agencies (3)

Comment #1 (APCD):

Page 30 of the Initial Study (IS)/Mitigated Negative Declaration (MND) indicates that there will be vehicular emissions, diesel particulate emissions and emissions from mastication equipment; however, there is no quantification of these emissions other than stating that the emissions will occur over a 20 to 100 day period. **Please quantify these emissions and compare the estimated emissions with thresholds listed in Table 1 on page 30. If the daily or quarterly emissions exceed the APCD significance thresholds, mitigation measures will be necessary to bring the air quality impacts below APCD thresholds.**

Response to Comment #1:

Page 2-1 of the SLO County APCD CEQA Air Quality Handbook states "*Construction emissions must be calculated for all development projects likely to exceed the construction emissions threshold, or if the project is subject to the special conditions defined in Section 2.1.1*." These emissions were not calculated because the proposed project is forestry operations which are not listed as subject to the special conditions defined in Section 2.1.1and because these emissions are not anticipated to exceed the thresholds. Based on the scope and magnitude of the project, emissions are likely to be well below construction thresholds. Pages 30-31 of the CEQA document discuss the type and duration of activities and equipment expected to be associated with the project. Use of a single 98 hp tractor and associated worker trips for 2 vehicles will not produce emissions approaching APCD thresholds and mitigation is not necessary. Although not required, the following Urbemis outputs were produced:

Page: 1
**11/10/2011 12:27:06 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Winter Construction Mitigated Emissions (Pounds/Day)

Project Name: **Bridge Street Fuelbreak**
Project Location: San Luis Obispo County APCD
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007
CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Mitigated)

| | ROG | NOx | PM10 | PM10 | PM10 |
|---|---|---|---|---|---|

| | | | | Exhaust | |
|---|---|---|---|---|---|
| Time Slice 12/19/2011-12/28/2011 Active Days: 6 | 2.88 | 23.55 | 8.22 | 1.18 | 9.40 |
| Mass Grading 12/19/2011-01/31/2012 | 2.88 | 23.55 | 8.22 | 1.18 | 9.40 |
| Mass Grading Dust | 0.00 | 0.00 | 8.22 | 0.00 | 8.22 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 0.00 | 1.17 | 1.17 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.06 | 0.11 | 0.01 | 0.00 | 0.01 |
| Time Slice 1/2/2012-1/31/2012 Active Days: 14 | 2.74 | 22.05 | 8.22 | 1.08 | 9.30 |
| Mass Grading 12/19/2011-01/31/2012 | 2.74 | 22.05 | 8.22 | 1.08 | 9.30 |
| Mass Grading Dust | 0.00 | 0.00 | 8.22 | 0.00 | 8.22 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 0.00 | 1.07 | 1.07 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.05 | 0.10 | 0.01 | 0.00 | 0.01 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 12/19/2011 - 1/31/2012 - Default Fine Site Grading Description
For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by: PM10: 5% PM25: 5%
For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by: PM10: 55% PM25: 55%

Phase Assumptions

Phase: Mass Grading 12/19/2011 - 1/31/2012 - Default Fine Site Grading Description
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 0.75
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
NOTE: *Default description overestimates emissions as actual equipment consists of 1 tractor (98 hp mechanical mulcher)*
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Comment #2 (APCD):

The IS/MND does not clearly state whether pile burning will be part of this project, or the extent of the emissions if pile burning does occur. Page 31 of the IS/MND indicates that pile burning will have the potential to impact air quality standards. Therefore, if pile burning is part of this project, it is extremely important that CALFIRE work with the APCD to select burn conditions that will minimize impacts to local air quality. **The CALFIRE burn boss should be in frequent contact with APCD staff prior to the burn to select a burn window that meets burn prescription and has meteorological conditions that minimizes smoke impacts to nearby residents (sensitive receptors).**

Response to Comment #2:

As stated in on page 31 of the CEQA document, "*Impacts from this activity (*pile burning*) 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*." Pile burning is planned and will be conducted in accordance with a burn permit issued by APCD.

Comment #3 (APCD):

The project indicates that the proposed fuel reduction activities will include mechanically shredding or masticating trees and brush, which will result in particulate emissions. As defined in APCD's Rule 402, a person shall not discharge, from any source whatsoever, such quantities of air contaminant or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safely of any such persons or public, or which cause or have a natural tendency to cause, injury or damage to business or property. **The project must comply with APCD's Rule 402.**

Response to Comment #3:

Considerable numbers of persons are not adjacent to project operations during any given day. Emissions from project activities will affect a maximum of 1 to 3 homes at any given time. All adjacent residents will be notified prior to working near their homes. The Department anticipates emissions associated with the project will fully comply with APCD's Rule 402. Use of mechanical equipment as proposed will greatly reduce the amount of pile burning that would otherwise be necessary for slash treatment. During prevailing onshore weather patterns that dominate this area, the project area is downwind of Cambria and emissions are expected to disperse east of town.

## Comments from Members of the General Public (167)

Comment #4 (VB)
The current plan calls for use of a Giant Masticator machine to cut a swath 100 ft wide covering over 50 acres of our forest.

Response to Comment #4
A swath of cut forest is not proposed, but rather understory thinning resulting in a shaded fuel break, as indicated in the project description on page 8 of the CEQA document. The initial width of the fuelbreak was 300'. The reduced width of 100' was derived from a fire behavior analysis performed by the Nature Conservancy for their forest management plan combined with input from fire behavior experts familiar with fire behavior in this environment and with the needs of fire suppression resources in the event of a fire. 100' is also consistent with the current legal standard for defensible space per PRC §4291. The project is intended to augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established. The size of the masticator planned for this project is about the size of a Bobcat tractor. Of the feasible alternatives considered including hand crews, logging, bulldozer piling, and prescribed burning, mastication was chosen because it is the method considered to cause the least overall amount of environmental disturbance.

Comment #5 (VB)
Everything but the top of the largest trees would be shredded.

Response to Comment #5
As indicated in the project description on page 8 of the CEQA document, all trees 10" DBH and over (except for hazard trees) will be retained. 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 12-15 feet. Pruning of retained trees will occur by hand, if needed, to discourage surface fire from moving into tree canopies. 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.

Comment #6 (VB)
This (everything shredded) includes animals who may not be able to run away from it in time, such as newborn fawns, baby owls, and thousands of other creatures who help sustain our lovely forest environment!

Response to Comment #6
The project, as proposed, has been reviewed by environmental scientists from State Parks and the Department of Fish & Game. Some animals may be harmed, as with all human activities, but project is planned for summer, fall or winter months when most plants have completed their annual growth cycles and after the spring nesting and fawning season. No newborn fawns or baby owls are expected to be present during operations.

Comment #7 (VB)
All of the material is pulverized, which given our normal winds, would wind up in our lungs, including molds, pollens, dust and ground up animal matter.

Response to Comment #7
As indicated in the Air Quality section of the CEQA document (page 29), the project is in accordance with APCD rules and regulations. During normal winds, which are onshore typically from the northwest, dust, smoke and particulate matter generated will generally be carried directly away from populated areas. In addition to prevailing winds, generation of particulate matter is not anticipated to significantly impact air quality due to project design components intended to minimize particulates and the relatively short duration of project activities. Use of the mechanical mulcher minimizes the amount of pile burning that would otherwise be necessary.

Comment #8 (VB)
The argument that this is needed to stop a possible forest fire from spreading is spurious. Such masticator-made breaks at Yellowstone Park did not impede the progress of their gigantic fires. In fact, due to the rapid growth of grasses and other invasive species in the newly cleared land, the fires spread more rapidly.

Response to Comment #8
Fuelbreaks such as this are not intended to stop the spread of fires, but rather lessen fire intensity. In the absence of fire suppression activities only non-combustible areas such as large water bodies, fuels with sufficient moisture, rock outcrops, beaches and roads or large precipitation events will stop fires. Fuelbreaks are intended to alter the fuel bed which in turn alters fire behavior in a manner that will allow fire suppression resources to take effective action to stop fire spread. Shaded fuelbreaks such as this allow suppression resources to employ far less intrusive tactics than could otherwise be used which often results in significantly less ground disturbance during firefighting activities and reduces the area burned.

Comment #9 (VB)

Fire Science Research found that mastication, or mechanical thinning increased fire mortality. Even more so, they found that "live, dense green shrubs resisted fire significantly better than areas that had been mechanically masticated. . . in a number of cases, the persistence of dry surface fuels in the masticated units appears to have abetted rather than resisted fire. Such surface fuels can persist in the Sierra Nevada's dry forests for decades."

http://www.sierraforestlegacy.org/FC_FireForestEcology/FFE_FireScience.php The same could happen in Cambria.

Response to Comment #9

This is an excellent website that strongly supports the need for prudent fuel reduction treatments such as the proposed project. The results quoted are to be expected and are likely a function of the amount of surface fuels present. This particular study refers to plantations where concentrations of surface fuels from mastication likely resulted in concentrated heat around the root collars of the trees killed. Nearby trees where fire burned through the dense shrub understory, but without the heavy surface fuels, were likely scorched but were able to survive. Young thrifty plantations are often able to survive significant crown scorch as long as the terminal buds are not killed. Locally however, experimental underburning in the Cambria Forest by State Parks has shown that mortality is high even from low intensity fires. Thus, it is expected that most areas of the Cambria Forest, in the event of a wildfire, would experience very high levels of mortality regardless of fire intensity. Compared to most Sierran forest types, high mortality in the Cambria Forest is much more likely due to the age of the trees, the density of the forest, and the fire dependent nature of Monterey pines. Monterey pines produce serotinous cones, are shallow rooted and are particularly vulnerable to wildfire. Following mortality and full exposure of the ground to sunlight, extensive germination of a new stand of seedlings typically occurs. While stand-replacing fire is a natural component of the Monterey pine forest, and was the likely origin of the present Cambria Forest, the objective of the project is to reduce the threat of stand-replacing wildfire in order to reduce the mortality of the trees currently present and protect the citizens of Cambria. The fuelbreak is expected to help reduce areas potentially burned which will yield a corresponding reduction in the amount of tree mortality. Additionally, mastication was chosen as it is the only method available that reduces the fire hazard while also retaining the existing vegetation uniformly on site in the form of shredded material which replenishes soil organic matter and yields a number of biological benefits. In the moist environment of Cambria, this material is expected to decompose much quicker than in drier areas of the State such as the Sierras.

Comment #10 (VB)

A project in Santa Barbara County replaced masticators with hand cutting, http://lpfw.org/news/0611figmtn.htm, after objections from Los Padres ForestWatch.

Response to Comment #10

Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. In addition to crew availability and cost, mastication is expected to have the least amount of overall environmental impacts. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom.

Comment #11 (VB)

Our community could provide a fire barrier using less violent and indiscriminately destructive means.

Response to Comment #11

Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost, the desire to retain the treated material on-site as mulch and the limited access for chippers. All work will be under the direction of Registered Professional Foresters and no violent, indiscriminate activities are proposed. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #12 (VB)

A crew of workers would not only employ people (who hopefully would be locals) but would allow for preservation of some of the important forest floor and habitat. Sure it would cost more. But maybe we could not do so much at one time and spread out the cost.

Response to Comment #12

Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. In addition to crew availability and cost, mastication is expected to have the least amount of environmental impacts. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. Additionally, in order to utilize available grant funding, we do not have the opportunity to spread the work out over time. It is also considered important to complete the project quickly during appropriate conditions to minimize disturbance during the wetter winter months and during the spring nesting/flowering/fawning period.

Comment #13 (VB)
A one hundred foot wide fire break is wider than needed and would allow, if not encourage, the building of roads and more forest destruction in the future.

Response to Comment #13
In the professional opinions of fire behavior experts, environmental scientists, ecologists, and Registered Professional Foresters who participated in the planning and analysis for this proposed project, 100-150' is considered the minimal width necessary to provide a functional shaded fuel break in these conditions. Aside from fuels management and forest health improvement, no other reasonably foreseeable future activities were identified or considered as part of this analysis.

Comment #14 (VB) What we do need is implementation of the Forest Management Plan with a professional arborist working with Cambria citizens and the fire department to manage and maintain our rare and lovely forest.

Response to Comment #14
The Cambria Forest Management Plan (CFMP) was authorized by SB 1712 in 1998 and was prepared by the Cambria CSD with grant funding ($110,000) from CAL FIRE (then CDF). CAL FIRE would strongly support implementation of the CFMP. Although the CFMP has not yet been implemented and a Registered Professional Forester (RPF) has not been hired as planned, this document provides useful guidance for this project and CAL FIRE has a vested interested in carrying out work as prescribed by the CFMP. All planned project activities are fully in conformance with the CFMP and all activities will be conducted under the direction of CAL FIRE RPF's in accordance with the CFMP and all other applicable regulations and policies. As required by law (PRC CODE § 750-783), all forestry activities must be performed under the direction of a Registered Professional Forester.

Comment #15 (JJ)
I would like to think that a machine could make a great fire break for our town and forest; but, after interviews with people who have deeply researched this matter, I am objecting to this means of "fire protection". First, I'd rather spend Stimulus Money on human labor, than a machine. I would not like that corps of workers to do a prevention burn, or clearing with fire, though---as they are typically not well trained and our forest is endangered.

Response to Comment #15
The assumption for this response is that "Stimulus Money" refers to the American Recovery & Reinvestment Act (ARRA). No ARRA funds will be used for this project. A portion of the project is funded by the USFS under a Hazardous Fuels Treatment grant. Unauthorized burning of private property by untrained workers without the owner's permission is a violation of the law. CAL FIRE would investigate any such burning and enforce all applicable laws.

Comment #16 (JJ)
Also, I think that 100 feet in width is awfully wide, for this purpose, but I'm no expert on fire.

Response to Comment #16
In the professional opinions of fire behavior experts, environmental scientists, ecologists, and Registered Professional Foresters who participated in the planning and analysis for this proposed project, 100' is considered the minimal width necessary to provide a functional shaded fuel break in these conditions. The initial proposed width of the fuelbreak was 300'. The reduced width of 100' was derived from a fire behavior analysis performed by the Nature Conservancy for their conservation easement combined with input from fire behavior experts familiar with fire behavior in this environment and with the needs of fire suppression resources in the event of a fire. 100' is also consistent with the current legal standard for

defensible space. The project is intended to augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established.

Comment #17 (JJ)
Second, the chips will encourage fire spreading, as has been experience (even from one cigarette).

Response to Comment #17
Combustible material of any kind can promote fire spread. Fuelbreaks such as this are not intended to stop the spread of fires, but rather reduce fire intensity. The proposed project is intended to alter the fuel bed by reducing targeted aerial fuels to ground fuels. This should keep fire on the ground by eliminating fuel ladders, and reduce the speed and intensity of horizontal fire movement. The expected fire behavior is altered in a manner that will allow fire suppression resources to take effective action to stop fire spread. Simply put, it is easier to put fires out that are confined to the ground with low flame lengths versus a fire consuming shrubs and trees with high flame lengths.

Comment #18 (JJ)
The chipping will also spread a fungus or seeds from invasive plants.

Response to Comment #18
As discussed on pages 9 and 33 (respectively) of the CEQA document, prevention measures are in place for minimizing the further spread of French broom (an exotic invasive weed)and pine pitch canker (an exotic invasive fungus):

"*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. Subsequent efforts to control the spread of broom will be made prior to fuel break maintenance activities as well.* "

"*The proposed project is within the designated Pitch Canker Zone of Infection 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*." Standard precautions for minimizing spread of pitch canker require that no firewood or forest products be removed out of the Zone of Infection. No material will be removed from the site.

Comment #19 (JJ)
Third, the weight of the machine will trample the soil, destroying the porosity of layers of loam, sand, and dirt that aerate the topsoil.

Response to Comment #19
This type of rubber-tracked equipment is not expected to produce significant soil disturbance. The ground pressure ratings (3.5 psi) are less than that of the average human footstep. Use of this type of equipment is considered a Best Management Practice (BMP) for forestry activities. Project work will not occur during the wettest months of the year. None of the soil complex types present are considered fragile or vulnerable to compaction or other significant impacts from the proposed activities. The shredded material that will be produced through mastication is expected to enrich the soil organic matter and temporarily improve the soil productivity and stability during the period of decomposition. Exposed areas of mineral soil will be limited to the areas where French broom has been piled and burned. The forest floor here has moderately deep litter/duff layers and most of the mechanical mulching activity occurs within these two layers which acts as a cushion to minimize soil disturbance.

Comment #20 (JJ)
Fourth, the trees could be felled, and the owner could sell them for timber or for firewood. This would be substantial and sustainable (as in a use of resources). Why doesn't the Forest Service provide such a service, and gain back through the sale of the wood.

Response to Comment #20
This environmental review addresses only the fuel reduction project as proposed by CAL FIRE. No commercial products will be produced by the project. The landowner's activities beyond the scope of this project have not been considered. The USDA Forest Service offers firewood permits for sale in designated areas. The nearest USFS land is approximately 16 miles southeast of the project area and for information on their firewood policies, please contact the Los Padres National Forest.

Comment #21 (JJ)
Management is all about Sustainability and "do no harm".

Response to Comment #21
The Department agrees and feels that the project as proposed will improve the sustainability and resiliency of the Cambria

Forest by reducing the threat of a catastrophic stand-replacing wildfire.

Comment #22 (JMW)

The conservation easement for the property requires that it be managed and maintained in a manner that is, to the maximum extent possible, consistent with the preservation and protection of the significant conservation values of the property. Along with protection and restoration of riparian habitat associated with Cambria Meadows Creek and the extensive grasslands in the northern part of the property, a primary value and function of the easement is protection, management, and enhancement of the rare and indigenous Monterey pine forest.

Response to Comment #22

The following information is found on page 7 of the CEQA document (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*."

Currently, the only management technique being used in the project area is fire exclusion. It is doubtful that this level of management alone will achieve the underlined goals. The proposed project *protects* the Monterey pine forest from one of its largest threats, catastrophic wildfire, and it *enhances* the forest by improving health and vigor through *management.* Given that management and maintenance to preserve and protect the property is a requirement of the conservation easement, the proposed project is consistent. Both Grantor and Grantee of the easement have been actively involved with the planning for this project and consider it consistent with the conservation easement.

Comment #23 (JMW)

Almost $5 million in public monies were used to protect this 1500 Acre property (900 acres of it in Monterey Pines). According to the Staub 2002 report, this is the largest contiguous area of native Monterey pine forest in the Region! Cal Fire project would affect 50 Acres of this forest, nearly 6% of the conserved Forest, not 2% as erroneously reported.

Response to Comment #23

The CEQA document states several times, "*approximately 50 acres (.02%) will be treated of the approximately 2,300 acres of undeveloped pine forest in the Cambria area*." This acreage (2,300) was derived from the Cambria Forest Management Plan (Jones and Stokes 2002) describing the undeveloped portion of the forest and does not reference only the forested land held in conservation easements. CAL FIRE, however did make a decimal point error; it was intended to state 2% (50/2300), not .02%. This error has been corrected.

Comment #24 (JMW)

Consistent with the conservation easement regarding "enhancement", this Monterey Pine Forest should and could be expanded, rather than reduced. From Staub's report "As noted in the report by Langford (2000) and confirmed by our fieldwork, the forested area of the property appears to be stable, and in some areas is expanding into associated grasslands on the favorable sandy loam soils of the San Simeon series as grazing and fire activity has declined or been eliminated. In the absence of significant clearing and management for grazing or fairly regular ground fires, potential habitat for Monterey pine is probably close to the 1036 acres mapped as a Sensitive Resource Area (SRA) in the County's Local Coastal Plan (LCP)."

Response to Comment #24

The Department does not dispute to findings of Staub's report. Tree encroachment into previously non-forested area is common, particularly with certain pine species. The proposed project is located entirely within the existing undeveloped portion of the Monterey pine forest and in no way reduces the amount of forested area or non-forested habitat suitable for afforestation. The decision to expand Monterey pine forest into areas with potentially suitable habitat is a land management consideration beyond the scope of this project.

Comment #25 (JMW)

Instead this project proposed cattle grazing (a proposal that is now missing from documents)…

Response to Comment #25

CAL FIRE has not proposed cattle grazing, but rather grazing is one management option offered in *Forest Management Plan for the Covell Ranch* (Staub 2011).

Comment #26 (JMW)

(Instead this project proposed) …tree removal that more closely resembles the Collins Pine Logging operation in Northern California than lands being managed under a conservation agreement…

Response to Comment #26

This comment references photos, included with the comment, of a forest stand owned by Collins Pine and a photo from a slide show presented by CAL FIRE to the Cambria Forest Committee of a young pine stand that had recently been mechanically mulched. The Collins Pine photo clearly depicts a recent prescribed burn as indicated by scorched understory trees; no logging is apparent due to the absence of stumps. The other photo used at the CFC meeting is of a ponderosa

pine plantation established after the 186,000-acre Stanislaus Complex fire in 1988. Trees were pruned, all understory brush (manzanita, Ceanothus) was masticated, but no trees were removed whatsoever. While all three activities are common fuel treatment options, the project differs from these photos in that tree thinning is proposed.

Comment #27 (JMW)

(Instead this project proposed) …100 foot wide clearance areas encircling the forest area and masticating 50 acres of forest …

Response to Comment #27

Clearance as used to describe the project is a nebulous term as no vegetation or ground cover will be removed from the site except for French broom and incidental vegetation that will be piled and burned. Clearance of 100 feet is not proposed, but rather understory thinning resulting in a shaded fuel break, as indicated in the project description on page 8 of the CEQA document. The initial width of the fuelbreak was 300'. The reduced width of 100' was derived from a fire behavior analysis performed by the Nature Conservancy for their conservation easement combined with input from fire behavior experts familiar with fire behavior in this environment and with the needs of fire suppression resources in the event of a fire. 100' is also consistent with the current legal standard for defensible space within State Responsibility Areas (§ 4291). The project is intended to augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established. Of the feasible alternatives considered, mastication was chosen because it is the method considered to cause the least amount of overall environmental disturbance.

Comment #28 (JMW)

(Instead this project proposed)… activities that would negatively affect and reduce the forest and wildlife rather than enhance it.

Response to Comment #28

The understory thinning proposed with the project will reduce competition among residual trees and shrubs, improve forest health in the treated areas and help protect the forest from stand replacing fire by creating conditions more conducive to suppression efforts. It is expect to positively affect the forest, and no reduction in forested areas will occur. Environmental Scientists who have reviewed the project have not expressed concerns regarding potential impacts to wildlife and no adverse effects are expected. In general, scientists agree that prevention of catastrophic fire is beneficial to forests and wildlife.

Comment #29 (JMW)

Because of the limited funds being sought for this project ($50,000) a machine called a masticator is being considered to remove trees, shrubs, bushes and vegetation. A masticator is a piece of heavy machinery consisting of a backhoe-type vehicle with an articulating arm. On the end of the arm is a device that chops or flails woody vegetation. The machines come in various sizes for different needs and land characteristics. Several attachments can be used i.e. masticator, mower, bucket, and thumb. This piece of equipment is designed to mow and shred brush, such as blackberries, Manzanita, scrub trees and Toyon, as well as tall grasses. It is a cost-effective way to process large expanses of land and is suited to flat and gently sloping conditions. It cannot operate in steeper conditions or rocky soil.

Response to Comment #29

Cost is an important consideration included in the decision to use mastication equipment and is often cost-effective as indicated by the comment. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost, the desire to retain the treated material on-site as mulch, the limited access for chippers, and potential impacts associated with burning. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. The equipment currently planned for use is a low ground pressure machine (ASV-RC100 equipped with a Fecon mulching head). This particular machine is not considered heavy equipment by industry standards and does not have a backhoe-type articulating arm. CAL FIRE usually uses hand crew for similar projects in steep, rocky areas unsuitable for equipment.

Comment #30 (JMW)

The processed material left by the masticator is larger and shredded in appearance versus a finer-chipped mulch product. A concern of leaving this material behind is that it could dry and become more fuel for a fire than the existing material, which is basically rotting.

Response to Comment #30

Combustible material of any kind can promote fire spread. Fuelbreaks such as this are not intended to stop the spread of fires, but rather reduce fire intensity. The proposed project is intended to alter the fuel bed by reducing targeted aerial fuels to ground fuels. This will keep fire on the ground by eliminating fuel ladders, and reduce the speed and intensity of horizontal fire movement. The expected fire behavior is altered in a manner that will allow fire suppression resources to take effective action to stop fire spread. The mulched vegetation will be incorporated into the existing litter and duff layers of surface fuels. While the total fuel load will be increased, the expected fire behavior is greatly diminished due to the removal of the aerial (ladder) fuels and the change in fuel orientation from vertical to horizontal.

Comment #31 (JMW)

In addition, the masticator leaves more of a footprint on the soil than hand methods.

Response to Comment #31

Both methods are proposed for use. Prior to mastication, CAL FIRE hand crews will cut, pile and burn French broom and conduct thinning directly adjacent to roads, fences and other areas not suitable for a machine. The masticator will conduct the remainder of the work and complete the majority of the vegetation treatment. Projects of this nature using primarily mechanical means are usually supported by hand crew work for related tasks. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost, the desire to retain the treated material on-site as mulch, and the limited access for chippers. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results. Both mastication equipment and use of hand crews are well suited to this project and neither will likely produce a footprint that is likely to cause significant adverse impacts.

Comment #32 (JMW)

It can induce a source of erosion of soils into the riparian habitat.

Response to Comment #32

The following information is found on page 53 of the CEQA document: "*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*." Refer to a complete discussion of sediment delivery to streams in the Hydrology and Water Quality section of the CEQA document (page 53); including mitigations that have been develop to reduce potential impacts. No sediment delivery to any streams is expected. Stream buffers have been established to prevent disturbance to near-water habitat. In addition to the stream buffers, gentle topography, and lack of exposed mineral soil, the depth of the litter/duff layers and the resulting filter strip properties near streams will eliminate the risk of substantial erosion.

Comment #33 (JMW)

It can unintentionally scar and cut healthy trees and brush thereby providing an opening for beetle and fungus infection on otherwise healthy trees. In the hands of a careless operator, or one who is more concerned about Fire Abatement as opposed to Resource Conservation, the damage could be significant.

Response to Comment #33

The Department agrees with these statements. Regardless of the operator or type of equipment used, a small amount of residual tree and shrub damage can always be expected. Project activities will be closely supervised to ensure compliance with terms of the CAL FIRE contract which prohibits unnecessary damage to residual vegetation.

Comment #34 (JMW)

Be clear about what you want left in place; once it's gone it's too late.

Response to Comment #34

As indicated in the project description on page 8 of the CEQA document, all trees 10" DBH and over (except for hazard trees) will be retained. 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 12-15 feet. Pruning of retained trees will occur by hand, if needed, to discourage surface fire from moving into tree canopies. 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.

Comment #35 (JMW)

**Fire Risk?**

**Quotes** from the recent study of Potential Wildfire Behavior for the Covell Ranch by David Schmidt (May, 2010) include:

1. There have been no recorded wildland fires for the last 100 years.
2. No detailed data or fire history information for the ranch has been found
3. Lack of significant fire history on the property can probably be attributed to the generally cool, moist, climate of the area and good ignition management over the years.
4. Results of the study showed relatively low rates of spread and flame length for the vast majority of the forested area.
5. These are relatively moderate conditions for fire behavior when coupled with the low average slopes on the property.
6. The study also predicted no crown fire behavior.
7. Schmidt points out that forested areas were originally mapped as model TU1 and were later changed to model TU5 based on field observation of fuel loading and model TU1 may be a better match for the lighter fuel component within the Monterey pine fuel types and has significantly less heavy fuels.

8. Spread rates and flame lengths are relatively moderate for the vast majority of the forested area
9. There is no predicted transition to crown fire for the weather scenarios used for the forested area.
10. Ignition probability for firebrands resulting from torching is relatively low over most of the area.

Response to Comment #35

1. Lack of fire history or departure from the normal fire return interval is one of the most important indicators of increased fire hazard. Lack of fire history in productive forests, such as in Cambria, further increases the level of risk due to the buildup of excess vegetation. Many of the largest, most damaging fires in California have occurred in areas with no previous fire history.
2. Same as #1.
3. The coastal climate and marine influence is certainly the most likely reason for the lack of fire history. There are far fewer "fire days" in Cambria conducive to large fire spread than in most inland areas. However, many of California's most significant fires have occurred in similar coastal areas including the recent Jesusita, Gap and Tea fires in Santa Barbara County and the Morse fire in Pebble Beach where hundreds of homes were destroyed resulting in hundreds of millions in property damage. Several ignitions have occurred in Cambia and most did not occur on a "fire day" and were extinguished.
4. The fuelbreak is expected to be most effective during these types of low and moderate fire behavior conditions. During extreme fire behavior conditions, such as during high wind "sundowner" events, fuelbreaks can be less effective due to long-range spotting.
5. Same as #4. In addition, the nearly level topography further increases the potential effectiveness of the fuelbreak. The proposed width of 100' is largely a function of the expected fire behavior due in part to the low average slopes.
6. It is important to remember that fire modeling performed by Schmidt applies only to a portion of the Covell Ranch. The fuelbreak is considered an important fire defense strategy for the developed urban portion of the forest as well. However, no models exist for urban fuels, and fire behavior predictions for the town of Cambria are varied and based mostly on individual experience and local knowledge and by comparisons with past fires in similar environments. The fire modeling performed by Schmidt may not be applicable to other undeveloped areas, such as the Fiscallini Ranch.
7. Fire modeling is an imprecise science and use of various fuel models is common to try and reach what is considered the most likely conclusion. Models are not yet capable of accounting for all of the variables present within complex ecosystems and scientists typically use multiple fuel models and other variables for their analysis.
8. Item #4 states "low" and item #8 states "moderate" and it is assumed that both comments agree with the conclusion of the fire modeling report. A portion of Schmidt's summary on page 20 characterizes the need for this project: "*It should be emphasized that the results of this project should be used in a qualitative manner for relative comparison, rather than the absolute rate of spread, flame length, and fire type values. Given that most of the timbered portion of the property is expected to torch even under the more moderate summer weather conditions, fire hazard mitigation is highly recommended. Predicted high flame lengths along Bridge Street and near the Cambria urban interface also serve to emphasize the need for fuel treatment*."
9. CAL FIRE reviewed the Schmidt report and generally agrees with the conclusions. However, the weather scenarios did not include analysis of offshore or "sundowner" conditions when fire danger is considered highest. In typical years, these conditions occur most often during the fall months and produce significant fire weather conducive to large fires. As stated in the response to #6, the conclusion of the Schmidt report is not applicable to the town of Cambria and may not be useful for other areas of undeveloped forest.
10. CAL FIRE reviewed the Schmidt report and generally agrees with the conclusions. As stated above, the Schmidt report is not applicable to the urbanized areas of the Cambria Forest. Although modeling is not available for this environment, there is extensive documentation of the often significant increase in fire behavior resulting from individual tree torching and house-to-house fire spread in urban areas similar to Cambria. Probability of ignition from firebrands in many weather conditions can be much higher for the urban forest than in the undeveloped forest.

Comment #36 (JMW)

Again, from Schmidt's report "However, in areas of increased slope and lower canopy base height, these (fire) factors are expected to increase dramatically. Difficulty of control, as reflected by flame length and intensity, would be expected to increase drastically in areas where canopy is reduced and grass/fuel ladder & shrub/deadwood jackpots are the primary fire carriers (particularly in the vicinity of lower Bridge Street and the upper ranchland area)." The lower Bridge Street area is where the most French Broom (highly flammable) is located. The few areas where fire is of most concern focus on steep slopes of 30-50%, and those should be hand cleared. The mechanical masticator is not supposed to operate on steep slopes due to erosion and danger of operating a machine on a steep hillside. Industry experts explain "there are a variety of tasks which should be done by hand because larger equipment is not an appropriate match, is not agile enough to work around specific conditions or is simply "overkill." Hand-held equipment, like chainsaws and weed-eaters, allows us the precision and control we need to address these types of tasks, which include eliminating tall weeds on a hillside, falling trees, trimming tree branches, removing vegetation around the base of trees and among boulders and removing brush overgrown in wet areas."

Response to Comment #36

CAL FIRE agrees with this comment. Equipment use is not proposed for steep hillsides and crews will be used in any areas not suitable for equipment such as adjacent to fences. A portion of the project area will treat fuels near lower Bridge Street

where Schmidt's report indicates slope and fuel load/continuity increase. The location of the fuel break in this area is suitable for mastication, although pretreatment of French broom will occur by hand crews. Slopes were not observed exceeding 30% along the proposed fuel break near lower Bridge Street.

Comment #37 (JMW)

The Schmidt report states that there is a need to "provide safe entry and containment points for fire control operations." Creating a 100 foot wide fuel break in the Forest Area of Covell Ranch does not take into account the current residential roads which currently surround the Ranch. By reviewing the Cambria Street map one can see that Covell Ranch is already accessible to Fire Equipment thru Hillcrest Road, Pinewood, Manor Way, Greystone Way, Iva Court, Northampton, Sunbury, Ashby, Warwick, Weymouth, Dover, Buckley, Cambria Pines Road, Charing Lane, Tamson, Grove, Wall Street, Bridge Street, and Cemetery Road. In addition, according to the Conservation agreement, many ranch roads exist inside the Covell Ranch and are accessible to Fire personnel and equipment.

Response to Comment #37

The segment of the fuelbreak along Bridge Street and Cambria Pines Drive will improve safe ingress/egress into the general area. The fuelbreak segment immediately adjacent to homes located off the roads listed will provide additional access to the wildland/urban interface area. This access is vital and will allow fire suppression resources to be more effective using a variety of tactics that would not otherwise be available. The roads listed may be accessible during many conditions; however, during high and extreme fire conditions, urban areas such as this are commonly inaccessible to fire suppression resources due to blockage by local traffic.

Comment #38 (JMW)

According to CalFire's 5 year average fire cause statistics, "a further risk for fire is the increased level of human activity in the forest" and "the vast majority of fires are human caused. This may be associated with vehicle or equipment use, campfire, playing with fire, arson, or other activities. Managing access is therefore an important means of controlling potential unwanted fires. This includes installation of fences, gates and signage as appropriate. Attention should also be given to controlling the use of vehicles and fire on the property in the course of management. Care should be given to establish designated smoking areas for employees, limiting off road vehicle use and equipment use during high fire danger periods, and following all open burning requirements carefully." Common sense would suggest that creating a 100 foot wide expansion of the forest edge, with newly created open areas next to already existing residential roads, will only expand human activity in the forest, not reduce it. This plan encourages more human access, including vehicle access, to the Ranch thereby increasing the fire danger rather than reducing it.

Response to Comment #38

Access management is entirely within the landowner's control and is not within the scope of this project. Landowners have granted CAL FIRE, in writing, temporary access for the purpose of this project. The project area, except for Camp KEEP, is private land and permission to pass is required. CAL FIRE assumes no control over authorized access beyond the scope of this project. No improper vehicle use, smoking or negligent use of fire will be permitted during the course of project activities. Any unauthorized burning will be investigated by CAL FIRE law enforcement.

Comment #39 (JMW)

Additional major impacts with no mitigation include: Air quality hazards from the masticator grinding up resinous plants including Poison Oak.

Response to Comment #39

As indicated in the Air Quality section of the CEQA document (page 29), the project is in accordance with APCD rules and regulations. During normal winds, which are onshore typically from the northwest, dust, smoke and particulate matter generated will generally be carried directly away from populated areas. In addition to prevailing winds, generation of particulate matter is not anticipated to significantly impact air quality due to project design components intended to minimize particulates and the relatively short duration of project activities. During times when humidity is high and when ground fuels are damp, dust and other emissions will be further minimized.

Comment #40 (JMW)

Additional major impacts with no mitigation include: Noise from Masticator on wildlife and residents.

Response to Comment #40

Noise considerations are one of the principal advantages of using mastication equipment and why impacts are expected to be less than if hand crews were used as the primary method of treatment. The masticator should progress at a rate of 2-3 acres per day whereas a hand crew of 16 workers with 4 or more chainsaws would progress at a rate of 2-3 *days per acre*. Fuel reduction activities, especially mastication equipment, chainsaws and chippers will 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. All nearby residents will be notified of the project and timing of project operations, such as when 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.

In order to minimize overall disturbance, our objective is to complete the project as quickly as possible by using masticators as the primary means of treatment supported by CAL FIRE hand crews. Because the noise created during the treatment process is not stationary or concentrated, and mechanical equipment will only be used during the hours of 8am and 5pm noise impacts are considered less than significant.

Comment #41 (JMW)

Additional major impacts with no mitigation include: Lack of detailed archeological investigation. Significant archeological sites (and human remains) could be pulverized beyond all recognition using the masticator. This is completely unacceptable.

Response to Comment #41

CAL FIRE policy and CEQA require protection of archaeological resources. The following information is found on page 42 of the CEQA document "*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*." Additionally, refer to page 43 of the CEQA for information regarding a mitigation developed for archaeological resources that could be located during the course project activities.

Comment #42 (JMW)

Removing trees that capture water from the fog can further dry out the edge of the forest making it more susceptible to fire.

Response to Comment #42

Trees with the largest crowns will typically be retained, including all of the overstory trees. Larger trees are able to capture more fog than those with smaller crowns. Additionally, during both fog drip and precipitation events less canopy interception will occur as a result of reducing understory vegetation, meaning more moisture is likely to reach the ground. Removing excess live vegetation also reduces competition, making more soil moisture available to residual plants and trees improving growth and photosynthetic capability.

Comment #43 (JMW)

Clearing and creating a new open area 100 feet wide allows more sunlight and encourages non natives such as pampas grass and French broom – a highly flammable invasive. According to Staub's report "Occurrence of invasive plants, particularly French broom (*Genista monspessulana*), is not widespread but can be locally dense. Examples include the area and trails nearest homes toward the upper end of Sunbury and west of the Cemetery and portions of the steep slopes east of the southernmost portion of Bridge Street." And "Since broom is principally associated with areas of disturbance near homes and along roads and trails, access to most of the worst areas for control treatments is not difficult." We should not be creating new areas for broom to grow.

Response to Comment #43

No clearings or openings 100' wide are proposed; but rather understory thinning resulting in a shaded fuel break, as indicated in the project description on page 8 of the CEQA document. All trees 10" DBH and over (except for hazard trees) will be retained. 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 12-15 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. Openings will be created between retained shrubs and trees, and these are places where French broom could become established if a nearby seed source is present. To minimize French broom establishment, pretreatment work with hand crews will be completed to cut/pull and pile broom for burning in order to minimize seed spread. The mulch layer created as a result of mastication will discourage the germination of seed already in the soil. Maintaining this duff/litter layer of ground cover is an important advantage of using mastication equipment. Additionally, planned maintenance activities will remove broom that does become established.

Comment #44 (JMW)

Machine Masticating could spread Pitch Canker and Sudden Oak Death Fungus.

Response to Comment #44

Most of the pine material treated with mastication will be shredded into sizes too small to be utilized as brood material for *Ips* bark beetles, the primary vector of pitch canker. Project design has incorporated methods to discourage colonization of *Ips* into pine material too large to be shredded with the masticator, such as debarking and cutting into smaller sizes to expedite the drying of green material. No pruning is proposed with the masticator. Any pruning will be conducted by hand crews, and sanitation of equipment will occur prior to cutting green pine limbs. Sudden Oak Death has not yet been documented south of Monterey County. Preventative measures are in place through a contract that requires contractors to sanitize equipment and gear of host material prior to leaving the Pitch Canker zone of infection. The proposed project has been reviewed by,

and incorporated the recommendations of, the CAL FIRE Forest Pest Specialist. In addition to Pitch Canker, numerous other pests and pathogens are present at epidemic levels including dwarf mistletoe and western gall rust. Propagation of these species has severely impacted the health of the Monterey pine forest and is largely a function of the overcrowded forest conditions. Within the project area, a significant improvement in forest health is expected through removal of unhealthy, diseased trees and in the improvement in growing conditions. Healthy, vigorous forest conditions are one of the best defenses against disease and insect attacks.

Comment #45 (JMW)

Erosion could be significant due to brush and tree removal, and machine mastication rather than hand removal. Small stream headcuts are a result of soil compaction and mostly occur on people pathways. Using motorized equipment on 50 acres of sensitive forest land could compact the soil and increase stream headcuts.

Response to Comment #45

The following information is found on pages 45 and 46 of the CEQA document and addresses the concerns stated in Comment #45: "*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 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."*

*"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."*

No soil compaction is anticipated with the masticator that will be used with this project. Ground pressure ratings of 3.5 psi are expected, less than that of the average human foot step. Stream protection measures have been established to prevent any soil disturbance near the seasonal streams that are present in the area.

Comment #46 (JMW)

Project is less than one mile from Leffingwell Creek and Santa Rosa Creeks. If erosion and water is increased into these flatter drainage areas there could be impacts on species in the creeks.

Response to Comment #46

The concerns stated in Comment #46 have been addressed on page 54 of the CEQA document: "*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* (some of which are tributary to Leffingwell and Santa Rosa Creeks) *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 ELZs referenced above are incorporated into Mitigations #2-4 (discussed on page 55 of the CEQA document) and have been established to avoid significant impacts to watercourses.

Comment #47 (JMW)
On the ground surveys were not performed therefore impacts to wildlife and species may not be mitigated.

Response to Comment #47
From page 33 of the CEQA document, "*In general, the size, location, timing and methods used will minimize the potential for significant adverse impacts to biological resources… 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."*

Project has been reviewed by several agencies include the Department of Fish & Game. Informal surveys were conducted with assistance from a local agency biologist. Project review by this and other biologists led to the development of mitigation for woodrats (page 37 of the CEQA document). Based on these surveys, mitigation, and project review/input from wildlife professionals, the Department determined significant impacts to wildlife species are not likely, and as a result additional formal surveys were not warranted.

Comment #48 (JMW)
Referring to the Cambria Forest Management Plan as if it is in place and being enforced is misleading. The Cambria Forest Management Plan has not been funded therefore has not been enacted or enforced. The Cambria Forest Management Plan (2002) provides an extensive list of management alternatives designed to address specific overstory and understory conditions in Monterey pine forest in order to enhance forest health and public safety.

Response to Comment #48
The Cambria Forest Management Plan (CFMP) was authorized by SB 1712 in 1998, funded by a $110,00 grant from CAL FIRE (then CDF) and prepared by the Cambria CSD in 2002. Although the CFMP is not officially implemented by paid staff to actively administer the plan, the CFMP remains in place as a useful tool for guidance of forest management activities in Cambria. CAL FIRE has a vested interest in helping implement the CFMP and this project is one of many that have been carried out in accordance with the CFMP. If the CFMP were to be fully funded and implemented by CCSD, their jurisdiction would not include the Covell Ranch and most of the undeveloped forest. Therefore, CAL FIRE is in the best position to implement the CFMP in areas outside CCSD district boundaries and the proposed project is fully in compliance with the plan. Additional implementation will occur in the future based on funding and available resources.

Comment #49 (JMW)
Of potential botanical interest is the fact that mature Douglas fir trees (*Psuedotsuga menziesii*) occur in a small patch within the Monterey pine stand immediately west of the Leffingwell Creek channel in the west central part of the property. These trees are actively reproducing and appear as if they could be naturally occurring. If so, this would be noteworthy because this location is not recorded in the definitive work The Distribution of Forest Trees in California (Griffin and Critchfield, 1972) and would be the second southernmost known natural occurrence of the species. I wondered what was being done to protect and enhance these Douglas firs?

Response to Comment #49
The Department agrees a natural occurrence of these trees would be noteworthy, as Registered Professional Forester Steven Staub points out in *Forest Management Plan for Covell Ranch.* Unique resources such as this further emphasize the need for the project. Although this stand of trees is not close to the proposed treatment area and will not be directly affected by the project, the fuelbreak will help prevent a large fire that could eliminate this unique stand. Douglas fir is less fire dependent than Monterey pine, and this disjunct population could be easily eradicated by fire. Future projects may be planned to reduce the fire hazard in the immediate vicinity of these trees in order to further increase protection.

Comment #50 (JMW) Development of water supply raises concerns about possible impacts to future growth and development. Assurances need to be made that an additional water supply is not growth inducing.

Response to Comment #50 A goal listed in Staub's management plan for the ranch lists water storage for firefighting as a

priority. No proposals or plans have been made with the proposed project to develop additional water supplies. This fuelbreak will help protect existing water supplies and other infrastructure.

Comment #51 (JMW)
View shed affects from nearby hillsides could be significant. This property and its tall Monterey Pines is a main feature on the Eastern side of Highway One in Cambria and is part of the viewshed from areas of Highway One. The area is in view from Burton Drive as it descends into Main Street, can be seen from the upper levels of businesses in downtown West Village (I watched a Mountain Lion roaming around on Covell Ranch from Seekers Gallery while working one evening), it can be seen from a distance from homes on Park Hill, from across the ravines on Bridge Street, Sunbury, and Hillcrest Streets, and from neighborhood areas of Lodge Hill.

Response to Comment #51
The concerns stated in Comment #51 have been addressed in the CEQA document on page 25: "*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."*

Although much of the project is not visible to large numbers of people, the area adjacent to Bridge Street and Cambria Pines Drive will provide an opportunity for the public to view the results of this work.

Comment #52 (JMW)
Use hand crews instead of mechanical shredding, which has the added benefit of employing people and reduces and lessens all other impacts to the forest caused by mastication and vehicle use.

Response to Comment #52
Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. In addition to crew availability and cost, mastication is expected to have the least overall amount of environmental impacts. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations.

Comment #53 (JMW)
Detailed Archeological Investigation should be performed if mastication is used.

Response to Comment #53
A detailed archaeological investigation was performed by a professional archaeologist, as required by CEQA and CAL FIRE policy. A Confidential Archaeological Addendum (CAA) has been prepared that contains provisions for protection of cultural resources.

Comment #54 (JMW)
Complete on the ground surveys to identify wildlife and sensitive species before mastication is used.

Response to Comment #54
Project has been reviewed by other agencies, including the Department of Fish & Game. Informal surveys were conducted with assistance from a local agency biologist. Project review by this and other biologists led to the development of mitigation for woodrats (page 37 of the CEQA document). Based on these surveys, mitigation, and project review/input from wildlife professionals, the Department determined significant impacts to wildlife species were not likely, and as a result additional surveys were not warranted.

Comment #55 (JMW)
Join with Cambrians to fully fund the Cambria Forest Management Plan in order to protect, preserve and actively manage what is left of

our rare Monterey Pine forest. The "treatments may be costly due to various combinations of the expertise, equipment, labor, and/or materials involved" but I think Cambrians and tourists would agree - it is well worth it. As holders of the Conservation Easement one expects The Nature Conservancy to be optimistic rather than pessimistic in this regard.

Response to Comment #55

The Cambria Forest Management Plan (CFMP) was authorized by SB 1712 in 1998, funded by a $110,00 grant from CAL FIRE (then CDF) and prepared by the Cambria CSD in 2002. Although the CFMP is not officially implemented by paid staff to actively administer the plan, the CFMP remains in place as a useful tool for guidance of forest management activities in Cambria. CAL FIRE has a vested interest in helping implement the CFMP and this project is one of many that have been carried out in accordance with the CFMP. If the CFMP were to be fully funded and implemented by CCSD, their jurisdiction would not include the Covell Ranch and most of the undeveloped forest. Therefore, CAL FIRE is in the best position to implement the CFMP in areas outside CCSD district boundaries and the proposed project is fully in compliance with the plan. Additional implementation will occur in the future based on funding and available resources.

Comment #56 (JMW)

Reduce the size of the project in scope to 20-50 foot selective fuel clearance in the most dangerous areas, using the work of hand crews rather than machine mastication.

Response to Comment #56

In the professional opinions of fire behavior experts, environmental scientists, ecologists, and Registered Professional Foresters who participated in the planning and analysis for this proposed project, 100-150' is considered the minimal width necessary to provide a functional shaded fuel break in these conditions.

Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. In addition to crew availability and cost, mastication is expected to cause the least overall amount of disturbance. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations.

Comment #57 (JMW)

Control of the currently relatively limited infestations of French broom should be a priority. Help establish a landscape ordinance for Cambria that prevents and eliminates the use of Pampas Grass and French Broom in town!

Response to Comment #57

Within the project area, to minimize French broom establishment, pretreatment work with hand crews that cut/pull and pile broom for burning will minimize seed spread. The mulch layer created as a result of mastication will discourage the germination of seed already in the soil. Additionally, planned maintenance activities will remove broom that does become established. The Department generally supports methods that attempt to reduce invasive weeds, however development of local ordinances is beyond the scope of this project.

Comment #58 (JMW)

I am attaching several pages from the Cambria Coast Ranch Conservation agreement as I believe some of Cal Fire proposal is in violation of that conservation document. The entire 81 page Cambria Coast Ranch conservation agreement should be consulted before proceeding with any fuel break on the property.

Response to Comment #58

The Department has reviewed the agreement and believes the proposed project is consistent with the intent and meaning of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both the Grantor and Grantee carefully considered the project within the context of the CE and have determined that the project is consistent with the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is fully consistent with each of these purposes. An aspect of the project perceived inconsistent by some with the CE, use of motorized vehicles off of existing roadways, the Department feels is

without merit. This prohibition is intended to restrict recreational use of cars, trucks, motorcycles or other all terrain vehicles from inflicting resource damage to soils, creeks, vegetation and wildlife. It is the Department's position that prohibiting equipment needed for the management of resources within the ranch is beyond the intent of the vehicular restrictions discussed in the Conservation Agreement.

Comment #59 (JMW)

**Possible conflicts with the Cambria Coast Ranch conservation easement and the Coastal Commission designation of a Special Treatment Area 14 CCR 895.1 which reads:**

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.

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.

(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.

Response to Comment #59

The definition listed in Comment #59 is an excerpt of the definition of Coastal Commission Special Treatment Area in 14 CCR 895.1, which defines what areas are considered Special Treatment Areas in the Coastal Zone under the Forest Practice Rules. The Cambria Monterey pine forest is one of these Special Treatment Areas. Within these areas, 14 CCR 961 applies and sets forth additional regulations, beyond those statutes and other regulations governing timber harvesting. As stated in the CEQA document, the project does not currently constitute "timber operations" meaning the requirements set forth in 14 CCR 961 are not applicable. If however, the project is later determined to constitute "timber operations" there would be no conflict with the regulations set forth in 14 CCR 961 or any of the other Forest Practice Rules.

Comment #60 (JMW)

**Excerpts from Cambria Coast Ranch Conservation Easement:**

The document is too large to include but I think all 81 pages should be checked for inconsistencies. These are just a few excerpts from the larger document: (not included due to size)

Response to Comment #60

The Department has reviewed the agreement believes the proposed project is consistent with the intent and spirit of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both the Grantor and Grantee carefully considered the project within the context of the CE and have determined that the project is consistent with the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is intended to preserve, protect, enhance and restore habitat and is therefore fully consistent with these purposes. An aspect of the project perceived by some as inconsistent with the CE, use of motorized vehicles off of existing roadways, the Department feels is without merit. This prohibition is intended to restrict recreational use of cars, trucks, motorcycles or other all terrain vehicles from inflicting resource damage to soils, creeks, vegetation and wildlife. It is the Department's position that prohibiting equipment needed for the management of resources within the ranch is beyond the intent of the vehicular restrictions discussed in the Conservation Agreement.

Comment #61 (EB)

Thank you for the opportunity to make comments on the —Initial Study/Mitigated Negative Declaration for the proposed Bridge Street Fuel Break Project, San Luis Obispo County, California (State Clearinghouse Number 2011081093).

I agree that establishing fire breaks and fuel reduction zones could be protective of the future of the forest and community well-being. However, I am concerned about the ambiguity of the Project description. Were I to make a dress, the means to the end would affect the process and outcome in significantly different ways. Whether to use a high speed electric sewing machine or needle and thread would be a major decision.

In the Project description two significant means are referenced without any clarity on the criteria that will actually be used to choose between them: masticator or hand crews for establishing the initial primary shaded fuel break and defensible space fuel reduction zones.

An additional variable—pile burning—also has unspecified criteria for when it would be used.
On p. 8 it reads, "It is anticipated a majority of the initial treatment will be conducted with mastication equipment." But the reasons or criteria for the choice are not given.

Response to Comment #61

Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results. This combination of methods has been designed to complete the project as quickly and efficiently as possible in order to minimize disturbance. Use of hand crews alone would take approximately 3-4 months compared to 1 month as planned.

Comment #62 (EB)

The questionability entailed in the choice (the use of a masticator) is addressed in "Masticators for fuel reduction treatment: equipment options, effectiveness, costs, and environmental impact" by Brian Vitorelo, *et al*. In the Introduction they say, "Negative impacts on soils and residual trees may occur and vary based on equipment choices, intensity, and introduction of fire (Windell and Bradshaw 2000). It is difficult to predict burn intensities in masticated areas using fire modeling programs such as Behave Plus and FOFEM (Glitzenstein et al. 2006, Knapp et al. 2006, Kreye 2008)." The Bridge Street Project is to address "the need for fuel reduction treatments in order to reduce the fire hazard and improve the fire resiliency of the forest" (p. 6). But since "[i]t is difficult to predict burn intensities in masticated areas using fire modeling programs," how have you judged the reasonableness of the choosing the masticator?

Response to Comment #62

Equipment options, effectiveness, cost considerations and expected environmental impacts were all evaluated in determining the best methods to use. For this project in these conditions, mastication equipment supported by hand crews was determined to be the most efficient, cost-effective method for establishing this shaded fuelbreak while minimizing disturbance and preventing significant adverse impacts to the environment.

Fire modeling was performed by the Nature Conservancy during the planning for this project. The resulting predictions helped determine that 100' would be the optimal width needed for an effective fuelbreak in these conditions. Fire behavior predictions did not influence the choice of methodology as many different techniques could be used to create an equally functional shaded fuelbreak. Modeling the narrow 100' wide treatment area would have little value. Following a wildfire, extensive Monterey pine mortality is expected in both treated and untreated areas of the forest, regardless of treatment type. Experimental underburning in the Cambria Forest by State Parks has shown that mortality is high even from low intensity fires. Thus, it is expected that most areas of the Cambria Forest, in the event of a wildfire, would experience very high levels of mortality regardless of fire intensity. Monterey pines produce serotinous cones, are shallow rooted and are particularly vulnerable to wildfire. Following mortality and full exposure of the ground to sunlight, extensive germination of a new stand of seedlings typically occurs. While stand-replacing fire is a natural component of the Monterey pine forest, and was the likely origin of the present Cambria Forest, the objective of the project is to reduce the threat of stand-replacing wildfire in order to reduce the mortality of the trees currently present and protect the citizens of Cambria. The fuelbreak is expected to help reduce areas potentially burned which will yield a corresponding reduction in the amount of tree mortality, thereby improving forest resiliency. Additionally, mastication was chosen as it is the only method available that reduces the fire hazard while also retaining the existing vegetation uniformly on site in the form of shredded material which replenishes soil organic matter and yields a number of biological benefits. In the moist environment of Cambria, this material is expected to decompose much quicker than in drier areas of the State such as the Sierras.

Comment #63 (EB)

Wide dispersal of seeds and fungi through masticator clearing might make the ecological condition of the cleared area even worse than

before. The Project description states, "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" (p.40). But if seed dispersal does create new hazards, and no funding is available for subsequent cleaning and maintenance, the initial establishment of the fuel breaks would be a mistake indeed.

Response to Comment #63

As discussed on pages 9 and 33 (respectively) of the CEQA document, prevention measures are in place for minimizing the further spread of French broom (an exotic invasive weed)and pine pitch canker (an exotic invasive fungus):

"*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. Subsequent efforts to control the spread of broom will be made prior to fuel break maintenance activities as well.* "

"*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*."

Proper fuelbreak maintenance will be a priority, and lack of future maintenance would not negate the short term benefits of the project. The Department, the landowner, and the Nature Conservancy plan to address this need based on conditions.

Comment #64 (EB)

Since we are moving into the rain season and well into autumn, the work would have to be done in 2012, not this year. Then 100 days needed for hand crews to do the establishing work would be available in the appropriate season.

Response to Comment #64

Equipment will not operate during wet conditions when soils are near field capacity. The mastication equipment planned for use is considered a low ground pressure vehicle with a rating of 3.5 psi. The project site has a relatively deep litter/duff layer that helps prevent soil disturbance. Work can occur during the rainy season during dry periods when soil moisture is low. Damp or moderately wet conditions help minimize or eliminate dust. The contract for this project expires in May 2012 and 100 days of crew time are not available. The mastication portion of the project is expected to take approximately 1 month to complete.

Comment #65 (EB)

I have every confidence that the California Conservation Corps, under the leadership of Cal Fire and forest ecologists, would welcome the experience of maintaining the Monterey pine Forest in a healthier state. They have done excellent work here in Cambria on several projects.

Response to Comment #65

CCC's complete a significant amount of similar project work in the County under the direction of CAL FIRE, in conjunction with the SLO County Fire Safe Council. There is currently no mechanism available for CAL FIRE to hire CCC's for this project and adequate funding is not available. CAL FIRE hand crews will support the project for ancillary tasks and will pre-treat the area by cutting/pulling and piling French broom for later burning. CAL FIRE hand crews do not have adequate days available to complete the entire project. While both methods are suitable for completing this project, in the conditions present, mastication equipment results in less overall disturbance than hand crews alone.

Comment #66 (EB)

New research into the ecology of forests and the effects of human actions on it has begun a healthy exercise in humility and caution. That gives me hope. I volunteer with the 1st graders in the Cambria Grammar School and work to inspire them to think deeply and carefully about Monterey pine, phytoplankton, oxygen, and carbon dioxide. Telling about ecological connections among the forest, the sea, and all plants and animals—including us humans—is a privilege.

Thank you for your work with the amazing array of forests in California.

Response to Comment #66

Human action has had a profound effect on the Cambria forests. Past management and land uses over the last 100 or more years including logging, grazing and fire suppression, along with the introduction of exotic species, have all influenced the current forest ecology. More than a 1/3 of the original forest has been developed. Many undeveloped areas, as a result of past human actions are in a state of poor health and are susceptible to stand replacing fire. While stand-replacing fire is a natural component of the Monterey pine forest ecology, and was the likely origin of the present Cambria Forest; it is no longer a management option. The objective of the project is to reduce the threat of stand-replacing wildfire in order to reduce

the mortality of the trees currently present and protect the citizens of Cambria.

Comment #67 (MB)

The following comments are submitted in response to the California Department of Forestry and Fire Protection proposal to adopt a Mitigated Negative Declaration for the project titled
Bridge Street Fuel Break Project SCH# 2011081093.
As a concerned resident, I am writing in order to promote the quality of life for all residents of Cambria and for environmental protection of the Cambria Monterey Pine forest habitat and species.
After a careful review and analysis of the MND I conclude that the proposed project raises substantial issues, as to its conformance with the California Environmental Quality Act and the applicable policies of the San Luis Obispo Local Coastal Program, and to California Coastal Act provisions. Even after mitigation measures described in the MND are implemented the proposed project MAY have significant effects and impacts on the environment that will require additional mitigation.

Response to Comment #67

The project is in full compliance with the California Environmental Quality Act (CEQA). The project is currently moving through the CEQA process; the Department recently closed the public comment phase of the project and will consider each comment prior to making a determination whether the project has the potential for significant environmental impacts, as required under CEQA. The Department is aware of the ordinances pertaining to the Local Coastal Program and Coastal Act, as discussed on page 41 of the CEQA document and is discussing the terms of any needed permits with San Luis Obispo County Planning Department, who are responsible for the Local Coastal Program.

Comment #68 (MB)

Please enter the following comments into the formal record of this proposed action.
The fire plan goal of providing fire protection to the town and residents of Cambria must not be in conflict with the existing Conservation Easement held by The Nature Conservancy (TNC) in order to uphold the conservation values enumerated in the easement.
This writer does not argue with the necessity for fuel load reduction and for providing a 100 ft. defensible space for residents –only with the means of achieving this goal and the lack of mitigation measures.
In December of 2000 The Nature Conservancy acquired a Conversation Easement on approx. 1450 acres of the Covell Ranch also known as the Cambria Coast Ranch formerly named CT Ranch, paid for with TEA-21 Funds $4,000,000 (in two grants). Matching Funds: $500,000 in EEMP funds by the California Resources Agency.

**In part the Conservation Easement agreement states:**
*This Grant Deed of Conservation Easement (this "Deed"), dated for reference purposes as of December JT, 2000, is entered into by and between A.L. Central Coast Estates,Inc., a California Corporation, as the grantor ("Grantor") and The Nature Conservancy, a District of Columbia non-profit corporation ("Grantee"), on the basis of the following facts and circumstances:*

*A. Grantor owns that certain real property, consisting of approximately 1,454 acres of land in San Luis Obispo County, California, commonly known as the "Cambria Coast Ranch." This Deed covers all of the Cambria Coast Ranch except up to five and one-half (5 1/2) acres in the aggregate (the land covered by this Deed is hereinafter referred to as the "Land" and the portion of the Cambria Coast Ranch excluded from this Deed is hereinafter collectively referred to as the "Excluded Land"). The property description of the Land is attached hereto as Exhibit A. The Land, together with all rights, title, and interests appurtenant to the Land, is sometimes hereinafter referred to as the "Property".*

*B. The Property possesses significant natural, ecological, aesthetic and scenic values for conservation purposes (collectively, the "Conservation Values") which are of great importance to Grantor and Grantee, to the people of San Luis Obispo County, and to the people of the State of California, and which include, but are not necessarily limited to natural resources, ecological, and scientific values, including the Monterey pine forest and riparian habitat referred to in Recital C below, as well as scenic, open space and recreational values.*

*C. In particular, the Property contains one of only three remaining indigenous stands of Monterey Pine forest, as well as a creek ecosystem and its riparian corridors, providing significant habitat for a variety of important wildlife, and plants.*

***Inconsistent Uses of the Property**.*
*Any activity on or use of the Property which is inconsistent with the Conservation Purposes of the Easement is prohibited. Grantor and Grantee acknowledge and agree that the uses of the Property which are described in Exhibit E which is attached hereto, though not an exhaustive recital of inconsistent uses and practices, are inconsistent with the Conservation Purposes of the Easement and shall be prohibited at the Property, except to the limited extent (if any) permitted pursuant to the terms of that exhibit.*

Before implementation of the fire plan a careful reading of the Conservation Easement is crucial. Is the fire plan consistent with the Conservation Easement? Is the use of a masticator— the primary means of carrying out the fire plan an allowable use on the ranch? Is a masticator a motor vehicle and prohibited under the easement?

Response to Comment #68

The Department has reviewed the agreement and believes the proposed project is consistent with the intent and meaning of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both the Grantor and Grantee carefully considered the project within the context of the CE and have determined that the project is consistent with the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is intended to preserve, protect, enhance and restore habitat and is therefore fully consistent with these purposes. An aspect of the project perceived inconsistent by some with the CE, use of motorized vehicles off of existing roadways, the Department feels is without merit. This prohibition is intended to restrict recreational use of cars, trucks, motorcycles or other all terrain vehicles from inflicting resource damage to soils, creeks, vegetation and wildlife. It is the Department's position that prohibiting equipment needed for the management of resources within the ranch is beyond the intent of the vehicular restrictions discussed in the Conservation Agreement.

In response to lack of mitigation, the Department, after environmental review and receiving consultation and assistance with knowledgeable professionals has presented several mitigations intended to reduce the potential of significant impacts. If after considering all of the comments received, the Department anticipates significant impacts, additional environmental studies will be undertaken or the project will be abandoned.

Comment #69 (MB)

Would the use of hand crews only acting with precision to implement the fire plan be a more effective means of protecting the forest flora and fauna and not degrade the wildlife habitat including the forest understory necessary for the survival of the many creatures that inhabit the forest. The use of a masticator rather than manual hand crews can greatly enhance forest vulnerability. The environmental impacts that are potentially resulting from mastication treatments have been placed into three categories: sedimentation, soil damage and stand damage. Add to this the potential to severely degrade bird and mammal habitats due to the masticator's lack of precision targeting and deficiency of operator skills.

Response to Comment #69

Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. In addition to crew availability and cost, mastication is expected to have the least amount of environmental impacts. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations.

The type of equipment planned for this project is not expected to produce significant soil disturbance. The ground pressure ratings (3.5 psi) are less than that of the average human footstep. Use of this type of equipment is considered a Best Management Practice (BMP) for forestry activities. Mechanical work will not be conducted during periods of wet soil conditions when impacts are likely. None of the soil complex types present are considered fragile or vulnerable to significant impacts from the proposed activities. The shredded material that will be produced through mastication is expected to enrich the soil organic matter and temporarily improve the soil productivity and stability during the period of decomposition.

Sedimentation and 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%. Masticators will not be operated during wet soil conditions or on slopes that exceed 50%. The headwaters of a few small seasonal watercourses are located within the proposed project. 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 ELZs are incorporated into Mitigations #2-4 (discussed on page 55 of the CEQA document) and have been established to avoid significant impacts, including sediment delivery, to watercourses.

Damage to the residual stand is not anticipated to be significant and will be minimized to the greatest extent feasible through proper planning and oversight and through conscientious actions of an experienced operator. Mastication equipment is capable of precise work and no deficiency of operator skills is acceptable.

Comment #70 (MB)
A list of species dependent on the forest within the fire plan includes but is not limited to: Hawks, owls, bats, quail, wild turkeys, deer, foxes, bob cats, mountain lions, possums, raccoons, rats of all types, salamanders, red legged frogs' pond turtles, garter snakes, rattle snakes, gopher snakes, and numerous birds. Is the fire plan taking into consideration the wildlife that may not have a government designation as protected but are still a part of the inter-related eco system?

Response to Comment #70
From page 33 of the CEQA document, "*In general, the size, location, timing and methods used will minimize the potential for significant adverse impacts to biological resources… It is anticipated the proposed project will not eliminate the available habitat for any wildlife species."*

Project has been reviewed by several agencies, including the Department of Fish & Game. Informal surveys were conducted with assistance from a local agency biologist. Project review by this and other biologists led to the development of mitigation for woodrats (page 37 of the CEQA document). Based on these surveys, mitigation, and project review/input from wildlife professionals, the Department determined no significant impacts to any wildlife species were likely. Many of the species mentioned are disturbance-dependent and will likely benefit from the project

Comment #71 (MB)
**Conservation Easement Exhibit E**
#5 Vehicles
*There shall be no use of any motorized vehicles off of existing roadways in the Forest Area as shown on the Map. There shall be no use of any motorized vehicles in the Riparian Area, except to cross at the crossing sites referred to and subject to compliance with provisions set forth in Paragraph 8(d) of Exhibit P.*
*MOTOR VEHICLE 18 USC*
Includes an automobile, automobile truck, automobile wagon, motorcycle, or any other self-propelled vehicle designed for running on land but not on rails.

Response to Comment #71
This prohibition is intended to restrict recreational use of cars, trucks, motorcycles or other all-terrain vehicles that could inflict resource damage to soils, creeks, vegetation and wildlife. It is the Department's position that prohibiting equipment needed for the management of resources within the ranch is beyond the intent of the vehicular restrictions discussed in the Conservation Agreement. Grantor and Grantee have determined that the project is consistent with the terms of the CE.

Comment #72 (MB)
#7 Vegetation (also from Conservation Easement Exhibit E)
*There shall be no removal, cutting or destruction of native vegetation (unless harmful to horses or humans) or introduction of exotic plant or animal species which may in Grantee's determination threaten the Conservation Values of the Property. Grantor shall give Grantor a Proposed Activity Notice pursuant to paragraph 7 of this Easement prior to removing, cutting or destroying native vegetation deemed by Grantor to be harmful to horses or humans and prior to introducing any exotic or animal species Without placing any limitation on the foregoing provisions, none of the plant species which are listed in Exhibit E-l which is attached to this Deed shall be planted anywhere at the Property.*

Response to Comment #72
The proposed project is intended to reduce the threat of a large, damaging wildfire which could be harmful to humans and threaten the conservation values of the property. Grantor and Grantee have determined that vegetation treatment necessary to accomplish this goal is consistent with the intent of the CE and does not threaten the conservation values of the property. The CE also states "There shall be no taking or harvesting of timber…except… pursuant to the Forest Management Plan." The project is consistent with the objectives of the *Forest Management Plan for Covell Ranch* (Staub 2010).

Comment #73 (MB)
Broom Removal
Ironically broom— that shares equally with dead fall fuel load as a fire risk factor is given a mere one paragraph discussion in the MND. The fire plan fails to detail precisely how broom removal will not promote imminent explosive repopulation of this highly flammable noxious weed. Walking along Bridge Street and from the cemetery one can see numerous large areas of broom. Along Sunbury where the Covell Ranch shares a boundary with private homes are more huge amounts of broom. And adjacent to Camp Yeager even more enormous amounts of broom.
Not included in the fire plan is Cambria Pines Road; lined with broom for about 1/3 mile. In fact in the Cambria Pines neighborhood in private yards are broom hedges and large healthy looking broom bushes. None of this broom is within the fire plan and slated for eradication.
Page 9 of the MND "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. Subsequent efforts to control the spread of broom will be made prior to fuel break maintenance activities as well."
The following excerpt on Broom is from California Invasive Plant Council California Invasive Plant Council:
*Native to countries surrounding the Mediterranean and in the Azores, French broom is thought to have been introduced to the San Francisco Bay Area In the mid-1800s as an ornamental. It spreads via prodigious seed production. A medium-sized shrub can produce over 8,000 seeds a year (Bossard unpubl. data). After pods open explosively, flinging seeds up to 4 m, the seeds are further dispersed by ants, birds, and animals and in river water and rain wash (McClintock, pers. observation), in mud, and on road grading or maintenance machinery (Parsons 1992). It resprouts readily from the root crown after cutting, freezing, and sometimes after fire (Bossard et al. 1995).French broom currently occupies approximately 100,000 acres in California*
*(D.Barbe, pers. comm.). It displaces native plant and forage species, and makes reforestation difficult. It is a strong competitor and can dominate a plant community, forming dense monospeclfic stands. In an experiment in New Zealand French broom had a higher growth rate than any other broom species found in California, reaching an average height of more than 4.5 feet (141 cm) in two growing seasons. Since it can*
*grow more rapidly than most trees used in forestry, it shades out tree seedlings in areas that are re-vegetated after harvest French broom foliage and seeds are toxic, containing a variety of quinolizldine alkaloids, especially in young leaves (Montlor et al. 1990). In some livestock, ingestion of plant parts can cause staggering followed by paralysis (McClintock 1985). Foliage can cause digestive disorders in horses (Parsons 1992). Infestations of broom degrade the quality of habitat for wildlife by displacing native forage species and changing microclimate conditions at soil levels. French broom is believed to be responsible for*
*reducing arthropod populations by one-third in Golden Gate National Recreation Area (Lanford and Nelson 1992). It burns readily and carries fire to the tree canopy layer, increasing both the frequency and intensity of fires. French broom along roadside obstructs views, requiring expensive ongoing road maintenance. This species establishes a dense, long-lived seed bank, making it difficult to eradicate.*

Response to Comment #73

French broom removal as restated in the comment will be conducted as a pre-treatment prior to mastication. 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. 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 recutting using various tools or equipment. The scope of the maintenance need will be determined over time and appropriate measures will be developed.

The prolific nature of this plant as described in the comment emphasizes the need for the project. Large wildfires often result in the establishment or spread of invasive species. If a large fire were to occur in Cambria, French broom could quickly spread and out-compete native vegetation in areas burned.

Fuelbreak establishment along Cambria Pines Drive on adjacent parcels is currently being considered. Contact with those landowners was not made in time to include those areas in this project. However, discussions are ongoing between CAL FIRE and the affected landowners.

Comment #74 (MB)

**Fuel Break Maintenance**

An inherent challenge with fuel break systems is the need for periodic maintenance to retard the growth of flammable shrubs and saplings, grasses, weeds and other non-native undesirable plants that can thrive in the increased sunlight and disturbed soils of cleared sites. Fuel breaks without proper maintenance, become ineffective because the combined effects of vegetation and soil disturbance created during fuel break construction, and the increased exposure to sunlight in thinned areas, can lead to prolific growth of grasses, brush, weeds and particularly broom. Lack of maintenance on a regular basis will quickly negate functionality of the fuel break as a defensible space.

**Page 8 of the MND**

*"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**. *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."*

Apparently if funding is not available there will be no maintenance. Therefore prior to this fire plan implementation of a detailed environmentally sound plan for future maintenance should be mandatory— preferably manual cutting that can precisely target specific trees or vegetation for maintenance thinning and utmost a method of broom control. It is reasonable to hold The Nature Conservancy as holder of the conservation easement as the financially responsible party.

Response to Comment #74

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, 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

recutting 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. Lack of funding does not eliminate the ability to perform maintenance; it just limits the number of options and excludes the most expensive means, such as goat grazing.

Comment #75 (MB)

**In Summary:**

To comply with the procedural requirements of CEQA and to avoid and minimize wildlife impacts and harm to ESHA and to listed and sensitive plants, wildlife, and habitat that are likely to be adversely affected,

Actual on ground surveys by a botanist and wildlife biologist for plant and animal species that inhabit and utilize the forest and that surveys be conducted during the time when sensitive resources could be detected. An attempt to predict what species may be present cannot reliably demonstrate the "absence" of a species on the project site.

A qualified on-site biologist should be on hand to review proposed clearing areas for the presence of imperiled species, and for avoiding clearing along streams, wetlands, wet meadows, and during nesting or breeding seasons.

Response to Comment #75

The project was reviewed by several agencies, including the Department of Fish & Game. Informal surveys were conducted with assistance from a local agency biologist. Project review by this and other biologists led to the development of mitigation for woodrats (page 37 of the CEQA document). Based on these surveys, mitigations developed, and project review/input from wildlife professionals, the Department determined significant adverse impacts to wildlife species were not likely, and as a result additional surveys were not warranted. No clearing along streams is proposed and no wetlands or wet meadows are present within the project area.

Comment #76 (MB)

(To comply with the procedural requirements of CEQA and to avoid and minimize wildlife impacts and harm to ESHA and to listed and sensitive plants, wildlife, and habitat that are likely to be adversely affected,) A detailed plan explaining the measures in the fire plan to prevent the spread of such
diseases as pitch canker and sudden oak death in the forest.

Response to Comment #76

Most of the pine material treated with mastication will be shredded into sizes too small to be utilized as brood material for *Ips* bark beetles, the primary vector of pitch canker. Project design has incorporated methods to discourage colonization of *Ips* into pine material too large to be shredded with the masticator, such as debarking and cutting into smaller sizes to expedite the drying of green material. No pruning is proposed with the masticator. Any pruning will be conducted by hand crews, and sanitation of equipment will occur prior to cutting green pine limbs. Sudden Oak Death has not yet been documented south of Monterey County. Preventative measures are in place through a contract that requires contractors to sanitize equipment and gear of host material prior to leaving the Pitch Canker zone of infection. The proposed project has been reviewed by, and incorporated the recommendations of, the CAL FIRE Forest Pest Specialist. In addition to Pitch Canker, numerous other pests and pathogens are present at epidemic levels including dwarf mistletoe and western gall rust. Propagation of these species has severely impacted the health of the Monterey pine forest and is largely a function of the overcrowded forest conditions. Within the project area, a significant improvement in forest health is expected through removal of unhealthy, diseased trees and in the improvement in growing conditions. Healthy, vigorous forest conditions are one of the best defenses against disease and insect attacks.

Comment #77 (MB)

(To comply with the procedural requirements of CEQA and to avoid and minimize wildlife impacts and harm to ESHA and to listed and sensitive plants, wildlife, and habitat that are likely to be adversely affected,) A precise maintenance plan with known funding to prevent the forest from becoming re-populated with invasive plants that will displace the natives necessary for the species that inhabit the forest.

Response to Comment #77

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, 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 recutting 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.

Comment #78 (MB)

(To comply with the procedural requirements of CEQA and to avoid and minimize wildlife impacts and harm to ESHA and to listed and sensitive plants, wildlife, and habitat that are likely to be adversely affected,) Consistency with the TNC conservation easement

Response to Comment #78

The Department has reviewed the agreement and believes the proposed project is consistent with the intent and meaning of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both the Grantor and Grantee carefully considered the project within the context of the CE and have determined that the project is consistent with the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is intended to preserve, protect, enhance and restore habitat and is therefore fully consistent with these purposes.

Thank you for the opportunity to comment on the above mentioned Mitigated Negative Declaration (MND). Greenspace is a founding board member of the San Luis Obispo County Community FireSafe Council and have just recently retired from nearly10 years of service.

I want to make it clear that Greenspace supports a shaded fuel reduction project along the Urban Wildland Interface (WUI) in our community but the proposed project is flawed and will not have our blessing until some significant changes occur.

With that said, I offer the below comments:

- The first issue is the name of the project. It is misleading and gives many in the community a false sense of where the project is located. If you have ever been in our community and driven on Bridge Street you would be confused. Perhaps 10% of the project is located adjacent to Bridge Street. The entire project is located on the Covell Ranch. Consider calling it by a name that accurately describes the project location. A suggestion is the 'Covell Ranch Fuel Break'.

Comment #79 (GS)

Response to Comment #79

CAL FIRE prefers to name projects geographically using landmarks or common place names. Road names are commonly used and this is consistent with computer aided dispatch (CAD) systems which help efficiently manage emergency traffic. Given that Bridge Street is a public road directly adjacent to the project, is available in CAD, and can be found easily using software such as Google Maps, the Department feels it is an appropriate and acceptable name that accurately describes the location.

Comment #80 (GS)

We are aware that the entire proposed project is under a public financed Conservation Easement (CE) held in the public trust by The Nature Conservancy (TNC). We obtained a copy of this document and discovered that much of the work proposed by this MND is not allowed in the declarations of the CE. We also noticed that public access to the property is required but under docent supervision one month per year. Please explain these discrepancies. This is a very important issue that the MND fails to consider and we believe it is not consistent with California Environmental Quality Act (CEQA).

Response to Comment #80

The Department has reviewed the agreement and believes the proposed project is consistent with the intent and meaning of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both the Grantor and Grantee carefully considered the project within the context of the CE and have determined that the project is consistent with the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is intended to preserve, protect, enhance and restore habitat and is therefore fully consistent with these purposes.

The Department interprets the prohibition of motorized vehicles off of ranch roads as intent to restrict recreational use of cars, trucks, motorcycles or other all terrain vehicles from inflicting resource damage to soils, creeks, vegetation and wildlife. It is the Department's position that prohibiting equipment needed for the management of resources within the ranch is beyond the intent and meaning of the vehicular restrictions discussed in the Conservation Agreement.

Under the CE, native vegetation removal is allowed if it presents harm to humans. The current forest state is vulnerable to a high intensity wildfire and presents a hazard to the citizens of Cambria. Removal of selected vegetation in strategic areas, as proposed with this project will reduce this hazard, and is therefore consistent with this aspect of the CE. The CE also states "There shall be no taking or harvesting of timber…except… pursuant to the Forest Management Plan." The project is consistent with the objectives of the *Forest Management Plan for Covell Ranch* (Staub 2010).

CAL FIRE assumes no control over access to this property other than for completion of the project as proposed. Landowner has granted temporary written access to CAL FIRE for the purpose of the proposed project. Access for purposes other than proposed project activities is not within the scope of this project and has not been considered.

Comment #81 (GS)
We also think that the document is not consistent with the Local Coastal Plan nor is consistent with the California Coastal Act.

Response to Comment #81
The SLO County Planning Department is processing our application for a Coastal Development Permit. The project will be reviewed according to Local Coastal Program policies and if found to be consistent with the Local Coastal Plan, a permit will be issued.

Comment #82 (GS)
The MND lacks essential findings that support the plans lack of identifying and securing funds to monitor and maintain this disturbance from becoming an exotic plant and weed-infested fire trap.

Response to Comment #82
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, 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 recutting 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.

Comment #83 (GS)
Based on the fact that native Monterey pine forests are considered a forest habitat that is under severe threat due to habitat loss, fragmentation, and development, we question the need for a 100 foot to 150 foot wide fuel break when a 50-75 foot graduated shaded fuel break would result in defensible space appropriate for the climate and forest type. The plan fails to consider the distance between existing structures and the CE. The onus of fuel modification is clearly placed on the Covell ranch and the Cambria side of the equation appears not included in the total fuel reduction area.

Response to Comment #83
In the professional opinions of fire behavior experts, environmental scientists, ecologists, and Registered Professional Foresters who participated in the planning and analysis for this proposed project, 100-150' is considered the minimal width necessary to provide a functional shaded fuel break in these conditions. Most structures adjacent to the project area lack adequate defensible space, and a 100' shaded fuelbreak will allow consistency with PRC 4291.

Comment #84 (GS)
We think that the project is creating a classic "edge effect" and as proposed will require a level of mitigation that has not been remotely analyzed or even considered in this document. As a matter of fact, the edge effect has two sides on part of the proposed project as new fragmentation occurs as the proposed project leaves the Bridge Street area and a fuel break swath of 150 feet occurs that has two sides. Consequently, the effected area could easily double. Again, poorly thought and no mitigation for the loss of habitat.

Response to Comment #84
The "edge effect" in forested areas generally refers to areas where all the trees have been removed creating distinct ecological communities. This boundary is sometimes referred to as an ecotone where biological diversity is highest since two distinct habitat types are present in the same area. This project proposes understory thinning and removal of ladder

fuels and will retain a fully intact forest with modified stand structure. No change in vegetation community, habitat type, species composition, overstory shade canopy, or site occupancy is expected. The ecotone between developed and undeveloped areas of the forest will remain unchanged.

Forest fragmentation generally refers to areas where all vegetation is cleared for human uses such as agriculture, roads, and development. The Cambria Forest was fragmented when the community was established. The boundary between the developed and undeveloped portion of the Cambria Forest will remain unchanged as a result of this project. No loss of habitat will result from this project.

Comment #85 (GS)

**Based on tree loss in California by fragmentation, habitat loss, and disease we think the carbon sequestration issue in our state is vastly underestimated and the loss of carbon sequestration with 50 acres of vegetation removals PLUS the edge effect must be included in the MND and adequate mitigation developed.**

Response to Comment #85

As discussed above, understory thinning and removal of ladder fuels as proposed by this project will not cause fragmentation, habitat loss, or increased edge effect. Within forested areas, rates of carbon sequestration are directly linked to the rate of growth. Forests accumulating biomass sequester more carbon than forests in decline. The project proposes to thin the understory by favoring the largest, healthiest trees and removing competing trees and shrubs. This will likely improve growing conditions and increase the photosynthetic capability of the residual stand. Improved growth rates will result in greater carbon sequestration over time. The objective of the project is to reduce the risk of a large damaging wildfire which would release massive quantities of carbon into the atmosphere.

Comment #86 (GS)

Masticators create fear and angst for residents. There are studies that prove the use of masticators to reduce fuel loads actually worsen the problem of wild fires.

Response to Comment #86

The word “masticator” has certainly created fear and angst for those unfamiliar with this equipment. Many central coast residents are less familiar with common forest management activities than in many other areas of California. “Mechanical mulcher” or “tractor with mulching attachment” may have been a less disturbing term for this equipment. The proposed use of mastication equipment is not intended to reduce fuel loads. All masticated vegetation will remain on site in the form of shredded mulch that is incorporated into the litter/duff layer. The only reduction in fuel load is from French broom and other vegetation that will be piled and burned by hand crews. The total fuel load will gradually decline over time as ground fuels decay. The removal of ladder fuels and understory thinning will eliminate the vertical and horizontal fuel continuity and change fuel orientation from vertical to horizontal. This type of fuel modification will dramatically reduce fire intensity and allow fire suppression resources to use a broad variety of tactics and strategies that would otherwise not be available.

Comment #87 (GS)

This type of equipment (masticators) is not appropriate for the soil types and the species of pine in this project.

Response to Comment #87

Soil analysis for the sandy loam soils found throughout most of the project area indicated low to moderate erosion potential. An important advantage of the type of equipment that will be used is the low ground pressure rating (3.5 psi) that is less than that of the average human footstep. Use of this type of equipment is considered a Best Management Practice (BMP) for forestry activities. This type of small rubber-tracked masticator causes less overall disturbance that hand crews performing the same work. The shredded material that will be produced through mastication is expected to enrich the soil organic matter and temporarily improve the soil productivity and stability during the period of decomposition.

Mastication is an appropriate and common method of understory thinning in most forested areas, and is ideally suited to the gentle terrain and conditions of the project area. Mastication equipment has been used successfully in Monterey pine stands north of Big Sur.

Comment #88 (GS)

It (masticators) is also not appropriate to use because of the proximity of people. The Masticator aerates poison oak into fine particles that can be inhaled or settle on skin, furniture, pets and other things that humans frequently come in contact with. No mitigation was offered for this condition.

Response to Comment #88

Urushiol is not known to travel long distances following mastication of poison oak. As indicated in the Air Quality section of the CEQA document (page 29), the project is in accordance with APCD rules and regulations. During prevailing onshore

northwest winds, dust, smoke and particulate matter generated will generally be carried directly away from populated areas. In addition to prevailing winds, generation of particulate matter is not anticipated to significantly impact air quality due to project design components intended to minimize particulates and the relatively short duration of project activities. All adjacent residents have been contacted to encourage them to share any concerns they have regarding the project.

Comment #89 (GS)

The Masticator appears to be used as a cost saving application only and little thought has gone into the health issues raised by this equipment. We think our forests and residents are more important than saving a few dollars for expediency sake. We think employing people to conduct this work is the correct method of removing fuel ladders and trimming vegetation not pulverizing and grinding and then broadcasting matter back into the surrounding habitat. To be blunt, this project appears to be underfunded.

Response to Comment #89

Cost considerations are one of several factors that led to the decision to use mastication. This equipment is generally considered the most cost-effective way to complete work of this nature. Environmental advantages of this equipment when compared to hand crews in these conditions include less smoke, less tree scorch from burning, less noise, less removal of ground cover, and fewer days to complete the project which causes less neighborhood disruption. Public monies are funding this work and as stewards of this money, CAL FIRE would be unable to fund private hand crews due to their cost prohibitive rates. CAL FIRE uses hand crews on a daily basis to complete work of this nature; however, available crew days are not adequate to complete this entire project. CAL FIRE hand crews do not provide employment opportunities for the public.

Comment #90 (GS)

The Bridge Street asphalt surface must be used as part of the fuel break width thereby reducing the encouragement into the forest along this reach of the project. It will also reduce the cost.

Response to Comment #90

The width of Bridge Street was considered in project design. Where the fuel break leaves the roadside to follow a ridge toward downtown Cambria, the width of the fuel break increases approximately 50 feet. In the professional opinions of fire behavior experts, environmental scientists, ecologists, and Registered Professional Foresters who participated in the planning and analysis for this proposed project, 100-150' is considered the minimal width necessary to provide a functional shaded fuel break in these conditions.

Comment #91 (GS)

The monitoring impacts for wood rats are an important part of this project. The monitoring plan is not adequate and will NOT give any science based information on the impacts to these mammals caused by habitat loss from this proposed project.

Response to Comment #91

Neither monitoring nor a monitoring plan of woodrats is proposed. Project review by biologists led to the development of mitigation for woodrats to protect houses (page 37 of the CEQA document). Based on surveys, mitigation, and project review/input from wildlife professionals, the Department concluded significant adverse impacts to wildlife species are not likely. Masticated vegetation provides ideal woodrat building material and no habitat loss is expected.

Comment #92 (GS)

The tree removal regime as described in the MND is not clear and makes little sense. It appears to be based on a timber harvest plan and not from the perspective of a forest ecologist. The forest is now protected using state funds. The state of California has a financial investment in this property and owns certain rights held in the public benefit. We see no facts that support the removal of a certain class of trees over another age class of trees. The point of the CE is to protect the forest unit and promote regeneration. We believe that fuel management is part of conservation and public safety goals but the MND has not demonstrated this balance.

Response to Comment #92

As indicated in the project description on page 8 of the CEQA document, all trees 10" DBH and over (except for hazard trees) will be retained. 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 12-15 feet. Retaining all size classes of trees will ensure replacement trees are available as overstory trees continue to die. Based on Staub's management plan

and observation, regeneration of pine in this forest has not been an issue. Following the project, an increase in pine regeneration is expected in some areas. 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 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. A timber harvest plan does not dictate the tree removal regime, but is a planning document used to explain the project objectives and ensure compliance with the Forest Practice Act. A forest ecologist must be a Registered Professional Forester or working under the direction of an RPF when practicing "forestry" (§753). Grantor, Grantee, and CAL FIRE have determined that the project is consistent with the conservation values of the forest in accordance with the CE.

Comment #93 (GS)

The protocol on monitoring the fuel break over time for invasive plants and for forest regeneration is basically worthless. We would like to see a plan developed for this monitoring and see a secure funding source to do this work. The plan needs to address fixing problems of no regeneration and invasive plant removal plus show a secure funding source to do the work. The results of this monitoring and remediation must be accessible to the public and reported to the Cambria Forest Committee by CalFire and TNC. This is an essential part of mitigation for the proposed project.

Response to Comment #93

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, 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 recutting 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. Lack of regeneration is not expected due to the prolific nature of Monterey pines. CAL FIRE does not require a secure funding source in order to conduct maintenance activities, however, all feasible options will be considered based upon the need.

Comment #94 (GS)

The fuel break will not increase biodiversity unless you mean the introduction of weedy and invasive material. This fiction needs to be taken out of this document unless you have specific examples that prove otherwise.

Response to Comment #94

The following is from page 33 of the CEQA document, "*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*." This is a reasonable expectation based on ecological processes. Disturbance in forested areas typically generates early successional stages of plant development. Several studies have documented exponentially higher numbers of plant, animal, bird, and reptile species in recently disturbed areas than in nearby undisturbed areas. Available habitat in the undeveloped portion of the forest is fairly uniform consisting of dense live and dead vegetation with little variability. The project area will offer a small area with less dense ground cover increasing the variability of habitat.

We have concerns that there are parts of this fuel break regime that are not fully disclosed to the public. At a meeting with CalFire, TNC, and the Cambria Fire Department it was said that grazing would be part of the invasive weed control after the understory removal occurs. There is no mention of grazing. That is not to say that grazing is necessarily bad or good but it now appears it is not part of the program. Is this true or not?

Comment #95 (GS)

Response to Comment #95

Grazing, along with a variety of other management options, are included in Staub's *Forest Management Plan for Covell Ranch* and was discussed at a Cambria Forest Committee meeting earlier in the year as one possible method for maintenance. Grazing is not within the scope of this project.

The MND also mentions potential road building but it is not part of this plan – what does this mean? Will the community need to review other parts to this fuel reduction program? It appears that this plan is a piece of a larger plan and therefore not in compliance with CEQA.

Comment #96 (GS)

Response to Comment #96

The MND references six of the fire management priorities listed in Staub's *Forest Management Plan for Covell Ranch*. Two of these priorities address road access for emergency personnel. The six priorities are mentioned in the MND to illustrate that the objectives of the proposed project are consistent with several of the priorities. Road construction or ranch road improvements are not within the scope of this project. Expansion of the scope of the project proposed by CAL FIRE would likely require additional environmental review.

Lastly, Greenspace supports proper and appropriate fuel management but the proposed plan fails to address many issues of concern and does not adequately support claims in the document.

Again, we appreciate the opportunity to comment on this potentially beneficial plan and look forward to reading a revised fuel management plan that demands a broader approach to managing a rare forest ecosystem.

Comment #97 (GS)

Response to Comment #97

The Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

This letter is a revised replacement version of our earlier dated letter. It incorporates additional suggestions and deletions from Cambria Forest Committee directors not included in the earlier letter. Our Committee generally supports the creation of shaded fuel breaks along the urban interface. Please consider the following comments on the Mitigated Negative Declaration for the Bridge Street Fuel Break Project in Cambria, compiled by and approved by the Cambria Forest Committee. In summary, we believe that certain potential adverse impacts have not been fully identified and that additional mitigation measures are needed.

The currently named project does not adequately describe the area that is under review. It is misleading and clearly confuses the public. Nearly the entire proposed project is on the Covell Ranch and it would be more appropriate to identify the project as the "Covell Ranch Fuel Break Project", or a similarly more accurate name.

Comment #98 (CFC)

Response to Comment #98

CAL FIRE prefers to name projects geographically using landmarks or common place names. Road names are commonly used and this is consistent with computer aided dispatch (CAD) systems which help efficiently manage emergency traffic.

Given that Bridge Street is a public road directly adjacent to the project, is available in CAD, and can be found easily using software such as Google Maps, the Department feels it is an appropriate and acceptable name that accurately describes the location.

Comment #99 (CFC)

**In the project description, it is stated that trees less than 10 inches DBH beneath the canopy of overstory trees will be removed. We recommend that in areas where the larger trees are unhealthy, widely spaced or near the end of their lifespan, healthy trees less than 10 inches DBH be retained to promote the re-establishment of larger trees as quickly as possible in all areas. This policy should apply to future maintenance clearing as well. In the future, replanting of trees in areas with no existing healthy trees should be considered.**

Response to Comment #99

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 12-15 feet. Retaining all size classes of trees will ensure replacement trees are available as overstory trees continue to die. This prescription will be applied to maintenance activities as well. Natural regeneration is expected to eliminate any need for tree planting due to the prolific nature of Monterey pines

Comment #100 (CFC)

**The use of a masticator or other heavy equipment in a Monterey pine forest can have an adverse impact on the health of the trees. Compaction of the soil and tree roots as well as direct machine impacts can injure or kill the trees. We recommend a mitigation measure that requires all heavy equipment to remain at least 15 feet away from retained trees and brush.**

Response to Comment #100

The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. This machine is not considered heavy equipment by industry standards. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

A small amount of residual tree and shrub damage can always be expected following any thinning operation. Excessive damage to residual vegetation caused by improper operation is not acceptable. Experienced operators and proper oversight will be used to minimize damage to the greatest extent feasible. A requirement to remain at least 15 feet from trees is not feasible since target spacing between trees/shrubs will be 15 feet or less.

Comment #101 (CFC)

**The statements in the current project description about monitoring the fuel break in the future for the invasion of exotic plants into the disturbed habitat are lacking adequate information. More detailed and specific information is required on how exotics will be effectively controlled or eliminated so that the fuel break does not contribute to the degradation of the forest.**

Response to Comment #101

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, 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 recutting 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.

Comment #102 (CFC)

**Closely related to the issue of monitoring invasive vegetation, is what monitoring will be done to ensure that native trees indeed regenerate and grow to maturity in the fuel break, as the proposed MND claims will happen. Additional description of the planned monitoring activities should be added to the project description.**

Response to Comment #102

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 12-15 feet. Retaining all size classes of trees will ensure replacement trees are available as overstory trees continue to die. This prescription will be applied to maintenance activities as well. According to the *Forest Management Plan for Covell Ranch*, regeneration is active and sufficient to maintain forest cover on the forested areas of the ranch (Staub 2011). An overall increase in pine regeneration is expected following the project, and likely additional future thinning will be needed to ensure forest health. Evaluations and determinations that ensure optimal stocking will be made by Registered Professional Foresters (as required by PRC 753) and will be based on site specific conditions.

Comment #103 (CFC)

**The claim that the fuel break will increase biodiversity is questionable. The likely increase in diversity will be in exotic weed species, not the few natives that are characteristic of the forest in Cambria.**

Response to Comment #103

The following is from page 33 of the CEQA document, "*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*." This is a reasonable expectation based on ecological processes. Disturbance in forested areas typically generates early successional stages of plant development. Efforts will be made to control the spread and establishment of non-native species, such as French broom.

Comment #104 (CFC)

**There seems to be an inconsistency in the project documentation regarding the treatment of snags. This should be clarified. In one part of the document they are to remain standing, whereas in another section they are to be removed. While the discussion of the importance of snags for bats is accurate, we think that snags are important as granaries for acorn woodpeckers and especially as a source of nesting cavities for a large number of birds.**

Response to Comment #104

The Department agrees and has not proposed the felling of snags over 10 inches diameter at breast height, unless posing a safety hazard.

Comment #105 (CFC)

**During the public meeting on March 10, 2011, it was stated that existing invasive plants would be treated or removed in the affected area before the main project begins. The plan does not mention herbicides even though at the March 10th meeting it was clearly stated that herbicides would be used. The plan states that French broom will be removed by hand only when feasible. Does this mean herbicides will be used in other areas? The CFC thinks this statement points to a pervasive problem in this plan, which is a lack of an effective clear and specific plan of action to address the removal of current and future invasive exotic plants. In addition, using a masticator to remove existing invasive plants like brooms will almost certainly spread the seeds of this plant, which must be avoided. To remove the existing brooms by cutting them at ground level is not a solution because these plants will regrow from the remaining root. They must be either completely removed including roots, or killed with a herbicide. The CFC would like to know how many gallons of herbicide will be used and what the half-life is of the specific herbicide.**

Response to Comment #105

Chemical treatment, along with a variety of other management options, are included in Staub's *Forest Management Plan for Covell Ranch* and was discussed at a Cambria Forest Committee meeting earlier in the year. Herbicide use is beyond the scope of this document. CAL FIRE proposes pre-treatment of French broom by hand cutting/pulling, piling and burning by hand crews prior to mastication. 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, 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 recutting 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. Until the scope of the maintenance need is determined, likely 3-5 years following initial treatment, development of a detailed maintenance plan with specific methods would be speculative and is not included in this analysis. Additional environmental review will be conducted as necessary for future work that falls beyond the scope of this project. In general, fuelbreaks in

conifer forests require less maintenance and at greater intervals than fuelbreaks in oak woodland or shrub dominated areas.

Comment #106 (CFC)

**One of the justifications for the project is the high level of public use based on the number and condition of trails in the area, which increases the chance of an accidental fire started by people in the forest. A fuel break, without an effective method of controlling access, could expand the probabilityof public access and the potential for starting a fire.**

Response to Comment #106

CAL FIRE assumes no control over access to this property other than for completion of the project as proposed. Landowner has granted temporary written access to CAL FIRE for the purpose of the proposed project. Access for purposes other than proposed project activities is not within the scope of this project and has not been considered. Landowner may attempt to control access by fencing the property following project operations. CAL FIRE has no legal authority to control access to private land except during emergency incidents. This property, except for Camp KEEP, is private land and permission to pass is required. CAL FIRE law enforcement will investigate any unauthorized or negligent use of fire.

Comment #107 (CFC)

**At the CFC public meeting held on March 10, 2011 there was a discussion of cattle grazing and fencing, and the need for monitoring of regeneration of both native and exotic plants. This issue was not included in the MND. The CFC thinks the document must clearly state what the plan is for grazing. If grazing is to be used, it should be clearly defined in this document as part of maintenance of the fuel break. The use of cattle is an important issue (and it need not be negative), and a clear plan of exactly how the cattle will be managed**

Response to Comment #107

Grazing, along with a variety of other management options, are included in Staub's *Forest Management Plan for Covell Ranch* and was discussed at a Cambria Forest Committee meeting earlier in the year. CAL FIRE has not suggested that grazing will be included with this project. The consideration of grazing as a maintenance method is beyond the scope of this project. Analysis of maintenance methods is speculative at this point in time and if CAL FIRE is lead agency for a grazing project in the future, additional environmental review may be necessary.

Comment #108 (CFC)

**The CFC is concerned that the proposed project is not in compliance with the Conservation Easement (CE) that was placed on the property. Public funds were used to augment the purchase of this land for the public benefit. The CE prohibits cattle grazing and motorized vehicles and allows public access on certain weekends with docent led hikes. We question if the proposed plan actually is legal from a CE point of view and why the California Department of Forest and Fire Protection or The Nature Conservancy has not addressed this problem.**

Response to Comment #108

The Department has reviewed the agreement and believes the proposed project is consistent with the intent and meaning of the conditions set forth in the Cambria Coast Ranch Conservation Easement (CE). Both Grantor and Grantee have carefully considered this project within the context of the CE and have determined that the project as proposed is consistent with the intent of the CE. The purpose of the CE is "*that the Property be managed and maintained in manner that is consistent with the preservation and protection of the Conservation Values of the Property, in order to preserve, protect, enhance and restore…habitat of plants and wildlife…and…confine the use of the property to such activities and facilities as are consistent with the Conservation Purposes of the Easement.*" The proposed project is intended to preserve, protect, enhance and restore habitat and is therefore fully consistent with these purposes.

Grantor and Grantee have agreed to review all future maintenance efforts on the fuelbreak, which could include cattle grazing, to ensure compliance with the CE. CAL FIRE will not be involved with any decision on the use of cattle grazing or in determining compliance with the CE. The prohibition of motorized vehicles off of ranch roads is intended to restrict the use of cars, trucks, motorcycles or other all-terrain vehicles that could inflict resource damage to soils, creeks, vegetation and wildlife. Mastication equipment is a management tool and that has been determined by Grantor and Grantee to be consistent with the intent of the CE. Conditions found in the CE that are beyond the scope of this project, such as public access, have not been considered.

Comment #109 (CFC)

**The CFC is aware of three fuel breaks in the Cambria pine forest. The one at the Top of the World was implemented in 1996 by CalFire. Based on discussions with residents adjacent to the fuel break, it was poorly executed and never included any monitoring or maintenance. It has and continues to contain large amounts of fuel, including invasive plant material that probably resulted from the creation of the fuel break. A limited fuel break was completed in Strawberry Canyon and is partially maintained by the land owner. The fuel break on the East West Ranch is maintained by the Cambria Community Services District on a limited level. In order to avoid past problems with poorly maintained firebreaks, the CFC believes that the project documentation should include specific information about what agency or organization is responsible for maintaining the proposed fuel break in the Cambria Monterey Pine forest. Otherwise, the effort is a waste of effort and current funding that results in a potentially major impact on the forest with little long-term benefit for fire prevention.**

Response to Comment #109

Fuelbreak projects completed in Cambria by CAL FIRE hand crews were conducted at the request of the project sponsor. The most commonly used agreement for this type of work is an FC 31/32 package that details the work to be done. It is likely that these agreements for the work referred to did not contain provisions for future monitoring or maintenance. Unless otherwise agreed, follow-up work is the responsibility of the landowners or the project sponsors.

For this fuelbreak project, the landowner, TNC, and CAL FIRE have agreed to collaborate to maintain the fuelbreak based on the scope of the maintenance need and upon available resources. While maintaining the functional condition of a fuelbreak for long term strategic value is considered most desirable, the lack of maintenance does not necessarily negate the short term benefits of a fuelbreak.

Comment #110 (CFC)

**In conclusion, the Cambria Forest Committee supports the creation of fuel breaks along the urban interface and agrees that protecting residents and community resources from wildfire is an important part of community planning. The Monterey Pine forest with its associated habitats in Cambria is a rare and important asset to the area. The CFC Directors feel that the proposed plan lacks adequate mitigation measures for the adverse impacts caused by the use of heavy equipment and masticators and does not adequately define future monitoring and maintenance responsibilities to ensure that the forest resource is protected and public funds are spent wisely.**

Response to Comment #110

The community of Cambria and the Monterey pine forest have been identified in the Unit Strategic Fire Plan as important assets at risk of catastrophic fire. Current conditions and the unique values of the forest emphasize the need for this high priority project and for other work that will reduce the threat of fire.

The Department has concluded that the project as designed and the mitigations proposed will not likely cause significant adverse impact to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Mastication equipment proposed for use is not considered heavy equipment by industry standards due to small size, high flotation rates and a ground pressure rating of 3.5 psi.

A detailed maintenance plan is not possible since the exact scope of this need will only develop over time as plants grow. Until the scope of the maintenance need is determined, likely 3-5 years following initial treatment, development of a detailed maintenance plan with specific methods would be speculative and is not included in this analysis. Additional environmental review will be conducted as necessary for future work that falls beyond the scope of this project. For this fuelbreak project, the landowner, TNC, and CAL FIRE have agreed to collaborate to maintain the fuelbreak based on the scope of the maintenance need and upon available resources.

Comment #111 (KM)

I hope I am not too late to express my concerns regarding the upcoming plans of the California Department of Forestry and Fire Protection to use a masticator machine to clear the 50 acres surrounding Cambria.
While I recognize the importance of a fire break for the WUI around my town and realize that the use of this machine may be more

economical, I feel that other options to clear the area need to be looked into because of the damage these type of machines do to the ecosystem and the possible health hazards they
One of the reasons I purchased a house in Cambria is because of the exquisite forest and uniqueness of the landscape. I am also aware that one of the important ways to keep it healthy is to maintain
I have read a few accounts of masticating equipment being used and the following problems associated with that type of vegetative removal. Therefore I ask that other options be considered to not totally rely on using this, in my eyes, destructive method.

Response to Comment #111

Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. No health hazards are associated with mastication when proper operation practices are followed. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #112 (KM) 1)

In the oak woodlands in San Luis Obispo County near Diablo Canyon, the use of the masticator reduced the woodlands to clear land and many invasive plants now have colonized the once intact habitat.

Response to Comment #112

No land clearing is proposed under this project. This project proposes understory thinning to create a shaded fuelbreak with a fully intact forest. French broom is an important invasive species present within the project area and will be pre-treated prior to mastication to minimize the potential for spread. Pre-treatment will be conducted by hand crews who will remove French broom by cutting/pulling and piling for burning. This technique will occur prior to mastication and piles will not be masticated. An important advantage of mastication equipment is the maintenance of a mulch layer created by shredding the excess vegetation which can help retard the growth and spread of invasives. Proper future maintenance will include techniques for control of invasives.

Comment #113 (KM) 2)

It breaks the material into fine particles that are then dispersed in the air. For someone - me! - who has a severe reaction to poison oak and a husband who is sensitive to pollen, this seemed unnecessarily dangerous to have in the air where I live. I had a friend who was sent to the emergency room due to inhaling poison oak while burning it.

Response to Comment #11

As indicated in the Air Quality section of the CEQA document (page 29), the project is in accordance with APCD rules and regulations. During normal winds, which are onshore typically from the northwest, dust, smoke and particulate matter generated will generally be carried directly away from populated areas. In addition to prevailing winds, generation of particulate matter is not anticipated to significantly impact air quality due to project design components intended to minimize particulates and the relatively short duration of project activities. All adjacent residents have been contacted in order to address their concerns. Damp soil conditions will minimize the airborne transfer of emissions and particulate matter. Urushiol is not known to travel long distances when poison oak is masticated.

Comment #114 (KM)

I have heard that you need a follow truck to put out the fires the masticating equipment might cause which just seems silly...we don't want fires, right?

Response to Comment #114

A support vehicle is not expected to be needed. Much of the mastication work will be supported by the use of CAL FIRE hand crews, fire engines, and personnel. The Contractor will have on hand trained personnel and all tools and equipment

needed to meet the minimum required fire prevention tools and equipment specifications of PRC Sections 4427, 4428, 4431, and 4442 of the CA Forest Practice Rules for Commercial Timber Operations. Additional work site fire prevention measures and mitigation equipment is dependent on the specified PAL levels as described in the contract.

Comment #115 (KM) 3)
The other concern for me is the wildlife. If through the course of removal, no thought is given to what is chewed up, many nesting young birds and other small wildlife who make their home in the masticator's path will be killed unnecessarily. Since this habitat does have some animals, like the burrowing owl, whose population is declining in California, I would like my tax dollars to be spent clearing the area WITHOUT further distressing the local fauna.

Response to Comment #115
On the contrary, potential impacts to wildlife were given diligent consideration during the planning for this project. The project, as proposed, has been reviewed by environmental scientists from State Parks and the Department of Fish & Game. Some animals may be harmed, as with all human activities, but project is planned for months of the year when most plants have completed their annual growth cycles and outside of the spring nesting and fawning season. No known burrowing owl habitat is located within the project area. Use of mastication equipment is proposed to allow the project to be completed in the shortest time possible which will minimize overall disturbance. No clearing is proposed. Project proposes understory thinning and removal of excess vegetation to create a shaded fuel break which will retain a fully intact forest with no loss of habitat.

Comment #116 (KM) 3)
With the economy the way it is, hiring more people to clear the area, would be a good thing to consider even though it seems more costly. In the long run, with maintaining a healthier ecosystem and tourist-friendly forest, the costs may be less and the profits more if you use man-power. You also wouldn't have the problem of fire since you have to use a masticator when the conditions are dry.

Response to Comment #116
Limited amounts of hand crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews in direct support of the mastication work. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. CAL FIRE hand crews do not provide employment opportunities to the public. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Grant dollars were not available to hire private contractors. The project is expected to promote a healthy ecosystem by helping reduce the risk of catastrophic fire. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak and minimizing environmental impacts. In addition to cost and crew availability considerations, mastication was proposed due to a number of important environmental advantages including less soil disturbance, less noise, less smoke, less tree scorch from burning, retention of treated material on-site as organic matter, and less time need to complete the project. Masticators are suitable for damp and moderately wet conditions when soil impacts, such as compaction, are not likely.

Comment #117 (KM)
My biggest concern is that you are using a short-term, cheaper solution that has shown to cause longer-lasting, permanent damage that will most likely cost more in the long run.

Response to Comment #117
The Department is not aware of long-term permanent damage caused by suitable mastication equipment where properly planned and supervised projects are implemented by skilled operators. As stewards of the public monies to be used for this project, the Department has concluded that the project as proposed is the most prudent use of these limited funds. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak and minimizing environmental impacts. In addition to cost and crew availability considerations, mastication was proposed due to a number of important environmental advantages including less soil disturbance, less noise, less smoke, less tree scorch from burning, retention of treated material on-site as organic matter, and less time needed to complete the project. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the

form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. No health hazards are associated with mastication when proper operation practices are followed. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #118 (WMG)

We are long time Cambria residents and have lived in our home which backs up the the (now) Covell Ranch for 30 years.
Although we are not opposed to the proposed "Firebreak", and understand the purpose and benefits of such, we are concerned about the methods of mass clearing by use of the "masticator" as described in the CEQA documents.
We are concerned about destroying existing native plants and shrubs such as the Coffeeberry, Toyon, and rare Madrone growing near our property. These are often multi-trunked and are far less than the 10" diameter being slated for destruction. We are also concerned about the existing young, healthy Monterey Pines and Coastal Oaks which will be mowed down according to the criteria of anything under 10" in diameter. These are the specimens which should be preserved and allowed to grow to maturity to replace the old ,diseased, and dying trees.

Response to Comment #118

No mass clearing is proposed. The project proposes understory thinning and removal of excess vegetation and ladder fuels. A fully intact forest will be retained will 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 12-15 feet. Retaining all size classes of younger trees will ensure replacement trees are available and natural succession occurs. Pruning of retained trees will occur by hand, if needed, to discourage surface fire from moving into tree canopies. 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. Additionally one madrone was observed in the fuel break during the botanical survey (the only one observed to date) near your residence and it is planned for retention. Most of the common species present are aggressive sprouters and prefer frequent disturbance to propagate. Removing the aerial portion of these plants does not destroy the plants as the roots remain intact and resprouting generally begins in a few weeks. Monterey pine is a prolific seeder and is expected to produce adequate, if not excessive, natural regeneration.

Comment #119 (WMG)

We are also concerned about disturbing the natural habitat of various wildlife such as the quail which nest in the forrest understory.

Response to Comment #119

From page 33 of the CEQA document, "*In general, the size, location, timing and methods used will minimize the potential for significant adverse impacts to biological resources… It is anticipated the proposed project will not eliminate the available habitat for any wildlife species."*

Quail are an excellent example of a disturbance-dependent species that will likely benefit from the new forage that becomes available following project operations. Extensive dense ground cover will remain available in the adjacent untreated areas of the forest. Mastication is not planned for the quail nesting season. The project is designed to prevent catastrophic fire that could severely impact wildlife habitat. The project has been reviewed by the Department of Fish & Game and other agencies. Informal surveys were conducted with assistance from a local agency biologist. Project review by this and other biologists led to the development of mitigation for woodrats (page 37 of the CEQA document). Based on these surveys, mitigation, and project review/input from wildlife professionals, the Department determined no significant impacts to any wildlife species were likely.

Comment #120 (WMG)

We would like to encourage more use of the hand crews to clear the brush and understory around the healthy young trees and native trees and shrubs instead of the clear cutting effects of the proposed masticator.

Response to Comment #120

The understory thinning and removal of excess vegetation and ladder fuels as proposed does not produce "clear cutting effects". A fully intact forest will be retained with a modified stand structure including trees of all sizes. Except for burning of French broom and incidental vegetation, all treated vegetation and ground cover will remain on-site in the form of shredded organic matter. Thinning is a commonly used forest management technique used in both even and uneven-aged regimes. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak and minimizing environmental impacts. In addition to cost and crew availability considerations, mastication was proposed due to a number of important

environmental advantages including less soil disturbance, less noise, less smoke, less tree scorch from burning, retention of treated material on-site as organic matter, and less time needed to complete the project. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. No health hazards are associated with mastication when proper operation practices are followed. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #121 (BB)

I am a resident of Cambria. I have resided at 656 Weymouth Street for approximately 35 years. We are about 300 feet from the WUI that you are considering for a fuel reduction program and I am very familiar with the forest that borders our neighborhood.

I am not opposed to the fuel reduction idea….the removal or thinning of the understory…. however I am concerned with the proposal to use heavy equipment ( masticator ) to do the removal.

In my experience of walking the forest trails for 35 years, I have noticed that **ALL** the areas in which the forest floor was disturbed by heavy equipment…. the invasive plants have taken over….specifically scotch broom. A good example can be seen in the forest area bordering the eastern Leimert Estates and Camp Yeager …Buckley Road and Cambria Pines Drive. When that area was developed 20-25 years ago, they were required to clear a 100 ft. break along the forest border. Within a few years, the scotch broom took over….and is now very apparent in those areas.

I think a good example of a successful fuel reduction program can be seen on the WUI areas of the Fiscalini Ranch. To my knowledge, that was all done by hand crews without disturbing the forest floor.

I appreciate the work you are doing to protect our neighborhoods from devastating wild fires….my hope is that you can find a balance between preserving the delicate nature of the forest and protecting our neighborhoods.

Response to Comment #121

Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

The project area, except for Camp KEEP, is private property and permission to pass is required by the landowner for recreational activities such as hiking. CAL FIRE has been granted temporary written access for the purposes of this project.

French broom is well established throughout the Cambria area and in many areas proposed for treatment by this project. Pre-treatment by CAL FIRE hand crews will include cutting/pulling and piling of French broom for later burning in order to minimize spread. This technique will occur prior to mastication and piles will not be masticated. An important advantage of mastication equipment is the maintenance of a mulch layer created by shredding the excess vegetation which can help retard the growth and spread of invasives. Proper future maintenance will include techniques for control of invasives.

Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak and minimizing environmental impacts. In addition to cost and crew availability considerations, mastication was proposed due to a number of important environmental advantages including less soil disturbance, less noise, less smoke, less tree scorch from burning, retention of treated material on-site as organic matter, and less time needed to complete the project. Hand crew projects such as at the Fiscallini Ranch cause minimal ground disturbance comparable to mastication equipment; however, mastication equipment is approximately 2-4 times faster than a 16-man hand crew in the same conditions which allows work to be completed in less time which minimizes overall disturbance to the neighborhood.

Comment #122 (RS1)

I wish to comment on the Initial Study (IS) and Draft Mitigated Negative Declaration (MND) for the proposed Bridge Street Fuel Break Project located in Cambria, northern San Luis Obispo County, California.

I am a Cambria homeowner whose property is directly adjacent to a portion of the project area that will occur on Covell Ranch. Before I present my comments, I would like to state that I welcome the fuel break effort because even though it will alter the present scenic value of the forested area behind my home, it promises to significantly reduce the threat of wildfire damage to my property and that of my neighbors. With that, I will sleep more easily.

My comments on the IS/MND arise from two separate areas of concern: 1) my concern as a homeowner about increased runoff to my property as a result of vegetation removal, and 2) my concern as a professional archaeologist about the adequacy of the cultural resources assessment for the project.

1. Concern about increased runoff

My property abuts Covell Ranch and is situated downslope. Even with existing vegetation on the ranch behind my back fence, rain runoff flows into my property, at times aggressively. I have installed several French-type tubular drains to alleviate this, but they are usually overwhelmed in a heavy downpour.

I am concerned that vegetation removal resulting from the project, which I understand will occur 50 feet or less from my property, will cause faster and more aggressive runoff and exacerbate the situation. I regard this as a secondary but direct impact of my property by the project. When I verbally presented this concern at a public meeting about the project earlier this year, CAL FIRE personnel indicated that they would work with me on this issue, perhaps by adding minor trenching or berm features to redirect rainwater toward a natural drainage next to my property. I would like to request, therefore, that CAL FIRE assist me in this matter during or soon after the fuel break work takes place, particularly if the rainy season is imminent, to help prevent undue damage to my property.

Response to Comment #122

Evidence of runoff, other than flows along roads, trails, and watercourses were not observed during project planning activities. One of the most important advantages of using mastication is than no removal of vegetation is necessary; all treated vegetation is mulched and retained on-site as incorporated organic matter. In addition to providing nutrients to the soil and vegetation, the mulch stabilizes the soil and improves the filter strip properties which reduces runoff compared to other available treatment alternatives. CAL FIRE foresters will meet you on-site to discuss this issue and appropriate measures can be developed to avoid increasing or concentrating runoff. Please call Unit Headquarters at your convenience to discuss this issue and schedule a site visit.

Comment #123 (RS1)

2. Concern about archaeological assessment

In addition to being a homeowner affected by the project, I am also a Registered Professional Archaeologist (RPA, #12069) with 17 years of experience in California CRM (Cultural Resource Management), and I am familiar with the CEQA process as it relates to cultural resources. I also realize that, because the Archaeological Survey Report is not circulated with other documents for public review, I am not able to read about the methodology and supporting documentation in more detail at this time.

First, I am concerned that CAL FIRE's assigning of the archaeological assessment to its own staff (p. 42 of the IS/MND) represents a conflict of interest. Too often, an internal approach of this nature creates a way to provide the project proponent (in this case, the lead agency) with an outcome it desires (i.e., the least costly). Thus, it reduces objectivity and puts actual or potential resources at risk. In the interest of best serving actual or potential resources, therefore, I request that the Phase I archaeological study be redone by a qualified, contracted consultant not associated with CAL FIRE to produce more objective results and more appropriate recommendations about mitigation (see below). I remove myself from this process.

Second, I am concerned that CAL FIRE has dismissed any possibility that archaeological materials might be present in the project area (p. 43 of the IS/MND). Even though the records search by the Central Coastal Information Center at UC Santa Barbara did not indicate any previously recorded archaeological evidence in the vicinity, it is clear that the project occurs largely within the heavily forested Covell Ranch, and that substantial buildup of forest debris (decaying wood and so on) is the very reason for needing the project.

Adequate visibility of the ground is key to archaeological survey, and it is readily apparent that visibility of the project surface -- at least

directly behind my property -- is highly constrained by fallen trees and limbs, leaves, pine needles, and other forest debris. As an archaeologist, I would rate ground visibility here as no more than 25% and characterize it as "poor." That said, poor ground visibility is often the case during archaeological survey, but the appropriate response in this case is hardly a negative assumption. Rather, a proactive approach to natural and relatively undisturbed areas such as this is to recommend some level of archaeological monitoring of ground-moving activities so that topsoils can adequately be examined as they are exposed, especially in proximity to natural drainages. I request, therefore, that archaeological monitoring of ground-disturbing activities (grubbing, grading, etc.) in natural areas with poor ground visibility be required as a mitigation measure for the project.

Third, I am concerned that CAL FIRE has dismissed any possibility that paleontological resources might be present in the project area (p. 43 of the IS/MND). I agree that the nature of the project, which is assumed to cause only shallow ground disturbances, likely precludes any impacts to fossil deposits, which typically occur at greater depths. However, the IS again appears to offer only a negative assumption, and this assumption should not be made without supporting documentation (i.e., a records search by a qualified paleontologist at an appropriate repository). I do not see a citation of this type and therefore request evidence of the documentation, or at least the rationale used to come to this conclusion.

I do not make these comments simply to criticize CAL FIRE, whom we all depend on to safeguard our homes from the devastation of wildfires. I have the deepest respect for all firefighting agencies and the critical work their personnel perform, and I welcome the proposed fuel break. As a professional archaeologist, I have an ethical obligation to protect cultural resources, even when this is essentially a matter of logic and methodology, and I submit my comments entirely from the perspective of doing the job right.

Response to Comment #123

A Confidential Archaeological Addendum (CAA) has been prepared that contains provision for the protection of cultural resources. RPF's responsible for project oversight are certified archaeological surveyors for CAL FIRE projects. The following response was prepared by the Department's professional staff archaeologist responsible for this archaeological survey and report:

"*I appreciate your concern regarding the "conflict of interest" you feel may arise by assigning cultural compliance to internal cultural resource staff. As is common with many government agencies, CAL FIRE maintains a staff of professionally qualified archaeologists to assist with cultural compliance on CAL FIRE sponsored projects; these archaeologists provide a valuable service not by producing desired outcomes to lead agencies, as you may worry, but by providing more timely and less costly archaeological review than can be accomplished through a contract archaeology process. In reference to this specific project, the Central Coast Archaeological Information Center recommended since the project area had been previously surveyed that we "consult reports prior to beginning construction;" the Information Center did not recommended survey for this project. Therefore, in choosing to survey the project area, CAL FIRE went beyond what the Information Center deemed necessary. Furthermore, the archaeological survey did result in the location and documentation of cultural resources; this information is not included in the current IS/Draft MND as that portion of the fuel break was removed from the current project scope. Due diligence is CAL FIRE's archaeology program's priority.*

*The language referenced on pg. 43 of the IS does not dismiss the possibility that archaeological materials may be present in the project area; it simply indicates no sites are currently known and, therefore, no changes to archaeological resources are anticipated. Ground visibility and the potential for unidentified cultural resources are issues inherent to all archaeological survey, and are mitigated through survey process and development of specific, enforceable recommendations. The survey method employed was based on pre-field research, previous survey coverage, Information Center recommendations, environmental factors and land use, coupled with consideration of proposed project activities (which present limited ground disturbance); more invasive survey techniques may have been warranted had high cultural sensitivity been suggested. CAL FIRE's archaeological review process programmatically addresses inadvertent discovery on all CAL FIRE sponsored projects by requiring, in event of new discovery, project activities immediately halt within 100 feet, immediate notification of a CAL FIRE archaeologist, and notification of Native American groups and the Native American Heritage Commission (in event new discovery is Native American); the archaeological compliance report for this project includes this requirement as one of its protection measures. Archaeological trained project managers regularly inspect projects throughout the implementation phase and examine for previously unknown archaeological resources to comply with this requirement. CAL FIRE understands the risk projects pose to archeological resources and takes the protection of archaeological and cultural resources seriously.*

*I sincerely hope these responses help alleviate concerns you may have regarding this project."*

Like wise, the Department has not dismissed any possibility that paleontological resources might be present in the project area, but rather none are known. Given their unlikely occurrence combined, and minor soil disturbance from low ground pressure equipment used with the project, potential significant impacts to these resources are not anticipated.

Comment #124 (VK)

The tools of a successful shaded fuel break are chain saws and wood chippers, not masticators. (emphasis added)

Response to Comment #124

Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. Chainsaws and a number of hand tools will be used as needed. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #125 (VK)

Cambria had a successful shaded fuel break on the Fiscalini Ranch when Bob Putney was our District Fire Chief. The only pine trees of any size that were cut down were done so that the best tree of a cluster would grow.

The masticator will remove all of the small volunteer "baby" pine trees that are needed to eventually produce a safe canopy for the forest floor. The fallen pine needles from a pine canopy will suppress a fire hazard of weeds under the canopy.

Response to Comment #125

This proposed treatment involves understory thinning with the objective of retaining the best trees available of all sizes, just as described for the Fiscallini Ranch fuelbreak. A fully intact forest will be retained with a modified stand structure including trees of all sizes. Monterey pine is a prolific species and is expected to adequately regenerate from natural seed fall. No lack of natural reproduction has been observed on the project area and the overstory canopy will be retained. Mastication allows the retention of ground cover in the form of mulch. Altering the fuelbed orientation from vertical to horizontal is expected to greatly reduce fire behavior.

Comment #126 (VK)

Chief Putney removed all of the horizontal limbs from all trees with chain saws up to a height of 5 to 6 feet above the under story to allow the under story to burn without setting the trees on fire. All cut branches and those lying on the ground were chipped; and, the chips were used as foot paths through the area treated. Large logs were cut in lengths less than 3 feet and separated from one another for fuel reduction.

Response to Comment #126

The objective of this project is identical to the project described which is to remove the vertical and horizontal continuity of the vegetation in order to eliminate fuel ladders. All treated vegetation will be masticated and retained on-site as an even layer of organic matter. Large sound logs be mulched or may be bucked into short segments and left in place to reduce fuel concentration and facilitate natural decomposition. Pruning of retained trees will occur by hand, where needed to eliminate fuel ladders.

Comment #127 (VK)

It is important to retain forest insects, and not masticate them, because they will eventually consume the flammable cellulose of dead vegetation; and, the insects are preyed upon by our birds and other forest inhabitants.

Response to Comment #127

Epidemic levels of insects such as western pine beetles have caused extensive mortality and associate forest health issues in the Cambria Forest. These epidemics are largely a function of the overcrowded, senescent forest conditions found throughout the Cambria Forest. Although the project will treat only a small portion of the forest, the forest health in the area treated is expected to improve resulting from retention of the healthiest trees and improvement of growing conditions resulting from reduced competition. Mastication allows retention of treated vegetation in the form of mulch that is incorporated into the litter and duff layers. Improved growing conditions are conducive to improved photosynthetic capability and a normal carbon cycle. The main impact to insect populations is the reduction to more endemic levels in the number of harmful insects that cause tree mortality, dieback, and fungal spread of Pitch Canker. Any measurable reduction in bark beetle population that causes reduced forage for woodpeckers is not expected to cause significant impacts due to the relatively small size of the area treated and the availability of forage in adjacent untreated areas.

Comment #128 (RCO)

Many thanks for sending my wife (Rosalie) the materials regarding the planned clearance project---somebody has obviously been doing their homework! Very impressive planning.

I have a couple of questions:

1) Does this work require prior approval from the Calif. Coastal Commission? (It seems just about everything else in Cambria does!) If so, what is the schedule for that?

Response to Comment #128

Currently, the Department has submitted an application for a Minor Use Permit (MUP) to County Planning. Staff determined that a Coastal Development Permit is warranted for the purpose of “removal of major vegetation”. A permit will be issued at the successful conclusion of this process if County Planning and the Coastal Commission determine the project is consistent with the Local Coastal Program and the Coastal Act.

Comment #129 (RCO)

2) Several of us in the Leimert area (on Cambria Pines Drive and Buckley Drive) have already cleared brush, etc. 100 ft. or more around our homes. Adding another 100 ft. of depth behind these houses would appear redundant; is there any possibility of recognizing this and cancelling the planned clearance adjacent to our homes? It would certainly enhance the rear forest views, which was one of the reasons most of us built here, and our own clearances should provide the same fire-break protection.

Many thanks for taking the time to communicate with us.

Response to Comment #129

In most areas adjacent to the fuelbreak project, adequate defensible space of 100’ is not currently available as required by PRC 4291. The project proposes to create a 100’ wide shaded fuelbreak by thinning the understory and removing ladder fuels along the residences bordering the Covell Ranch, Bridge Street and Cambria Pines Drive. Current conditions around homes has been considered and the project is designed to augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established. This distance may not always be sufficient based on topography, fuels and expected fire behavior. Significant impacts to views are not anticipated due to the retention of overstory trees and scattered understory vegetation which will produce a managed forest condition. Although visual impacts are subjective and varied, similar conditions produced in other areas of the State are generally considered favorable or appealing by adjacent residents.

Comment #130 (CRH)

Cambria residents are becoming understandably (in my opinion) weary of the negative declaration. It no longer comforts us when local government says, "This will have no effect on the environment." Because there are rarely any studies to back it up. They say it won't hurt because they say it won't hurt.

It seems to me that an environmental impact report is the tool for learning whether something will hurt the environment or not. The neg dec seems to be the tool for those who don't care to know.

Response to Comment #130

Multiple agencies and resource professionals, including wildlife biologists, environmental scientists, forest pathologists and Registered Professional Foresters participated in the design, planning and review of the project. Due to the sensitive nature of the Cambria area, the level of due diligence performed for this project exceeds the level normally considered appropriate for projects of this nature in comparable conditions. Studies/analysis performed included archaeology, biology/botany, soils, air quality, geopolitical, legal, silvicultural, entomology, pathology, fire modeling, and fire behavior. The Covell Ranch Forest Management Plan was prepared by The Nature Conservancy specifically to support this project.

A Negative Declaration (ND) is prepared and adopted when, following environmental review and completion of an Initial

Study, a determination is made that the project is not likely to produce significant adverse effects on the environment. A Mitigated Negative Declaration (MND), such as in the case of this project, is prepared similarly to an ND except that mitigations are developed that are considered necessary to prevent significant adverse effects on the environment. An Environmental Impact Report (EIR) is similarly prepared and adopted if, after completion of environmental review, significant impacts are considered likely that cannot be mitigated to a less-than-significant level. The type of CEQA document filed is predicated on the determination made and not upon the number of studies necessary for due diligence. The number and type of studies necessary for a given project are dependent on the site-specific conditions for the project and the identified resource issues and have little to do with the type of CEQA document used.

After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #131 (CRH)

As to this giant masticator that will grind a 100-foot wide swath through our rare pine forest and chew up 50 acres of it

Response to Comment #131

The masticator proposed for use is a high flotation, rubber-tracked, low ground pressure machine not considered heavy equipment by industry standards. The machine dimensions are comparable to a mid-size SUV. A swath of chewed up forest is not proposed, but rather mechanical understory thinning resulting in a shaded fuel break, as indicated in the project description on page 8 of the CEQA document. The masticator planned for this impact is comparable in size to a Bobcat tractor. The initial width of the fuelbreak was 300'. The reduced width of 100' was derived from a fire behavior analysis performed by the Nature Conservancy for their conservation easement combined with input from fire behavior experts familiar with fire behavior in this environment and with the needs of fire suppression resources in the event of a fire. 100' is also consistent with the current legal standard for defensible space. The project is intended to improve forest health in the treated areas and augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established. Of the feasible alternatives considered, mastication was chosen because it is the method considered to cause the least overall amount of environmental disturbance and is the most efficient and cost-effective method available. The Nature Conservancy and the landowner have determined that the project is consistent with the conservation values of the ranch.

Comment #132 (CRH)

I'm all for stopping fires. But where I come from, when you take live, growing wood, cut it dead, chip it into small pieces and leave it in the sun to dry, that's not called a fire break. That's called kindling.

I've tried to read up on the issue, and it seems that hand cutting is far preferred, and that it is indeed true that masticator-cut forest can often accelerate a fire instead of retarding it.

Response to Comment #132

Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. The primary objective of a shaded fuelbreak is to alter the fuelbed by changing the fuel orientation from vertical to horizontal which dramatically reduces expected fire behavior allowing a greater number of tactics and strategies to be safely used by suppression resources in the event of a fire that would not otherwise be available. Chainsaws and a number of hand tools will be used as needed. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure

ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

Comment #133 (CRH)
I know hand-cutting is more expensive, but I hope money doesn't matter more than Cambria homes, and Cambria ecology.

Response to Comment #133
Hand cutting by CAL FIRE hand crews is not more expensive; hand cutting by private contract hand crews is approximately 3-4 times more expensive than mastication and was considered cost prohibitive for this project. Mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present.

Comment #134 (CRH)
Please, this issue needs more study. By the time we chew up 50 acres of dry tinder, it will be too late to learn more.

Response to Comment #134
Project planning has been underway since at least the mid-1990's. Until this point, project implementation has been hampered by resource and funding limitations. Due diligence has been performed in the preparation of this document. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results.

Comment #135 (NA)
You have undoubtedly received other letters of concern regarding the proposed fuel break planned for the Covell Ranch. At the risk of overloading your desk with another letter, I feel compelled to add my concerned voice to the others you have heard.
As a home owner and full time resident in Cambria, I appreciate that CAL.FIRE wishes to protect Cambrians from a devastating fire. My concern regards the manner in which the plan is evolving.
The plan to expand the urban wildlife interface well into the forest by using a masticator that destroys everything in its path is frightening. Such a plan endangers wildlife habitats and…

Response to Comment #135
No expansion or relocation of the WUI is proposed. The ecotone between developed urban areas and the undeveloped forest is not affected by this project. The project has been determined to be consistent with the Cambria Forest Management Plan, the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication

equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results. No habitat destruction is anticipated and prudent forest management designed to protect the forest and the community should not be a source of fear.

Comment #136 (NA)
(Such a plan)… leaves a swath of land open to invasive growth that may lead to more damaging fires than a more careful and ecologically balanced plan.

Response to Comment #136
A swath of open land is not proposed. The project proposes to create a 100' wide shaded fuelbreak by thinning the understory and removing excess vegetation and ladder fuels. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation. The project has been determined to be consistent with the Cambria Forest Management Plan, the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present.

Comment #137 (NA)
Please consider the ecological implications of the current plan and encourage a modified plan that removes dangerous growth but preserves important protective understory growth and avoids the damage that will be done with a masticator.

Response to Comment #137
Multiple agencies and resource professionals, including wildlife biologists, environmental scientists, forest pathologists and Registered Professional Foresters participated in the design, planning and review of the project. The project has been determined to be consistent with the Cambria Forest Management Plan, the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. No substantial evidence has been found that would indicate significant damage to the environment is likely to occur as a result of the masticator.

Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results. No habitat destruction is anticipated and prudent forest management designed to protect the forest and the community should ensure an ecologically sound plan.

After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #138 (JJ2)
I read about the proposed fire break for Cambria in our local newspaper. I think this is a great idea. Cambria is a fire disaster just waiting to happen. Years and years of downed trees and pine needles have made this area a prime target for a major fire.
I have contracted with Cal Fire since 1975. We have worked over 130 fires in the State of California. I would like to donate my dozer to work with Cal Fires dozers in creating this fire break. I also can come up with several local Cambria contractors who would love to get involved with this project. This would be our way to give something back to the community.
Please keep me in mind, we would love to do this project.

Response to Comment #138
We appreciate your input and your offer of support and agree that there is a substantial need for this project. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Use of dozers is one of several treatment alternatives considered, however, mastication supported by CAL FIRE hand crews has been selected as the means for establishing the fuelbreak.

Comment #139 (CE)
This letter is to ask you to stop the use of the Masticator to clear a firebreak around my hometown of Cambria. I am highly opposed to this type of massive disruption of our special forest environment. It is highly destructive of the native shrubs, grasses, and animals who rely on this place for existence.

Response to Comment #139
No massive forest disruption is proposed, The project proposes to create a 100' wide shaded fuelbreak by thinning the understory and removing excess vegetation and ladder fuels. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation. The project has been determined to be consistent with the Cambria Forest Management Plan, the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results. There is no substantial evidence that the mastication proposed for this project will be highly destructive to the environment. After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #140 (CE)
Please approve the use of manual hand cutting which was used in Santa Barbara County.

Response to Comment #140
Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the

minimal disturbance that results. No habitat destruction is anticipated and prudent forest management designed to protect the forest and the community should ensure an ecologically sound plan.

The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results.

After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #141 (CE)

Also, a much less wide (100 ft. is overkill) of 50 feet wide is more realistically achievable by manual removal of selected plant material that is more apt to burn out of control. This would insure that we get the protection we need but without the massive disruption of the ecology in the break area.

Response to Comment #141

There is no substantial evidence that massive ecological disruption is likely as a result of this project. The initial width of the fuelbreak was 300'. The reduced width of 100' was derived from a fire behavior analysis performed by the Nature Conservancy for their conservation easement combined with input from fire behavior experts familiar with fire behavior in this environment and with the needs of fire suppression resources in the event of a fire. 100' is also consistent with the current legal standard for defensible space in PRC 4291. In certain areas, the project is intended to augment defensible space established by some adjacent landowners and create adequate defensible space near adjacent homes where not currently established. Of the feasible alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Mastication was chosen because it is the method considered to cause the least amount of environmental disturbance in the conditions present. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present.

Comment #142 (CE)

Please work with us, Cambria citizens, our Fire Department, and a professional arborist to implement the Cambria Forest Management Plan to manage and protect our rare forest.

Response to Comment #142

This project is implementation of the Cambria Forest Management Plan (CFMP). The CFMP was authorized by SB 1712 in 1998 and was prepared by the Cambria CSD with grant funding from CAL FIRE (then CDF). The CFMP was a useful planning document that aided in selection of the methods to be used and the specific project location. All planned project activities are fully in conformance with the CFMP and all activities will be conducted under the direction of CAL FIRE RPF's in accordance with the CFMP and all other applicable regulations and policies. Stakeholders and supporters of this project include Cambria citizens, CCSD, NCAC, SLO County Planning Department, the Cambria Forest Committee, The SLO County Community Fire Safe Council, State Parks, and The Nature Conservancy. The project has also been determined to be consistent with the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan. As required by law (PRC CODE § 750-783), all forestry activities must be performed under the direction of a Registered Professional Forester.

Comment #143 (CH)

Regarding the proposed use of a masticator to clear firebreaks in the Monterey Pine forest in Cambria: This is an inappropriate technology for a project that is too large for the forest.

Response to Comment #143

Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. An important advantage of mastication equipment is the reduction in noise compared to several chainsaws and the reduced time to complete the work which minimizes disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered,

but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards.

The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results.

The size of the fuelbreak was determined to be the minimum necessary for establishment of a functional fuelbreak. The strategic public benefit is considered high for this relatively small amount of treatment area. From a forest health perspective, the small project size relative to the undeveloped portion of the forest will yield correspondingly small forest health improvement benefits and additional treatment is warranted to address this concern.

After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #144 (CH)

Using this noisy, destructive machinery to cut 100-foot firebreaks applies too much technology to a natural area that was purchased by the community to protect it.

Response to Comment #144

An important advantage of mastication equipment is the reduction in noise compared to the combined noise from 4-6 chainsaws which would be used if hand crews were used to treat the same area. Use of a masticator reduces the time needed to complete the project by 75-80% compared to using hand crews only. This reduced time working in close proximity to residences will minimize disturbance to the neighborhood. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest and the close proximity to adjacent residences along the eastern edge of Cambria. The objective of the project is to complete the work as quickly as possible which will minimize noise and overall disturbance.

Reference to the “natural” area purchased (assuming the Conservation Easement) neglects consideration of the noise potential of the current management regime. For the past several decades, the Cambria Forest has been passively managed using fire suppression only as a management tool. Equipment used for fire suppression includes air tankers, helicopters, bulldozers, fire engines, pickups, and chainsaws. This equipment is often extremely disruptive to the environment and to communities and can create significant noise impacts.

Comment #145 (CH)

As a Cambria resident, I appreciate the need to protect against fire. This recommendation from the knowledgeable fire professionals is valuable. Now we need an evaluation from a forest professional who understands trees and forest ecology before we send in these destructive machines to cut huge swathes through the forest.

Response to Comment #145

No huge swathes are proposed for cutting. The size of the fuelbreak was determined to be the minimum necessary for establishment of a functional fuelbreak. The strategic public benefit is considered high for this relatively small amount of treatment area. Fuelbreak width of 100’ as proposed is consistent with expected fire behavior conditions and with PRC 4291 defensible space requirements. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation and diseased, severely deformed trees.

No destructive machinery will used. The project proposes to use a rubber-tracked mechanical mulcher with a mastication

attachment approximately the size of a mid-size SUV. This type of equipment is used extensively in various forest conditions around the world and is frequently chosen for work in sensitive environments due to the low level of overall environmental disturbance compared to other alternative methods. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results.

All planned project activities have been developed under the guidance of, and will be conducted under the direction of, Registered Professional Foresters (RPFs). As required by law (PRC CODE § 750-783), all forestry activities must be performed under the direction of a RPF.

Comment #146 (CH)

Residents live in our community because we love the forest. It's not credible to me that the only way we can be safe from fire is to create a dead zone around the forest.

Response to Comment #146

Creating a dead zone around the forest is not the only way to be safe from fire and would not be proposed by this Department. A dead zone would only protect from fire if all or most combustible fuel were removed.

The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. The project proposes to create a 100' wide shaded fuelbreak by thinning the understory and removing excess vegetation and ladder fuels. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation. All trees 10" diameter breast height (DBH) and over, except for hazard trees will be retained. When less than 10" DBH 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 12-15 feet. Pruning of retained trees will occur by hand, if needed, to discourage surface fire from moving into tree canopies. 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. Of the feasible alternatives considered, mastication was chosen because it is the method considered to cause the least amount of environmental disturbance. This project is expected to improve the health, vigor, and resiliency of the forest.

Comment #147 (CH)

Hand cutting to thin underbrush is one possible alternative. Let's find a better way.

Response to Comment #147

Hand cutting by CAL FIRE crews will be performed in support of mastication to remove French broom and clear vegetation in areas not suitable for equipment. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. This machine is not considered heavy equipment by industry standards.

The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project.

Comment #148 (AS)
Please avoid using this method of fire control in Cambria. The forest has many valuable functions that would be needlessly destroyed if this method were used.

Response to Comment #148
The size of the fuelbreak was determined to be the minimum necessary for establishment of a functional fuelbreak. The strategic public benefit is considered high for this relatively small amount of treatment area. Of the feasible alternatives considered for establishment of a fuelbreak, including hand crews, bulldozer piling, logging, and prescribed fire, creation of a shaded fuelbreak using mastication equipment was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch, and the need to maintain and improve forest health. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project.

No substantial evidence has been revealed that would indicate that the proposed project would cause needless destruction of valuable forest functions. After careful consideration of the potential impacts from the project as proposed and after carefully considering comments received during the public comment period, the Department has concluded that no significant environmental impact is likely to occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems.

Comment #149 (HJP)
As long-time homeowners in Cambria, CA, we have just learned of the plan to clear a "swath" of our beautiful Monterey Pines by a Masticator Machine.
PLEASE do not do this. It would be much more appropriate to keep our forest and community safe from fire by working as a community to maintain our trees.
NO Masticator!!

Response to Comment #149
A cleared swath is not proposed. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. The project proposes to create a 100' wide shaded fuelbreak by thinning the understory and removing excess vegetation and ladder fuels. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation. 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.

This project has been planned with extensive community and agency support. Stakeholders and supporters of this project include Cambria citizens, CCSD, NCAC, SLO County Planning Department, the Cambria Forest Committee, The SLO County Community Fire Safe Council, State Parks, and The Nature Conservancy. The project has also been determined to be consistent with the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan.

No substantial evidence has been revealed that would indicate that mastication equipment is not ideally suited to this environment and this project. Of the feasible alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results. This equipment is generally considered the most cost-effective way to complete work of this nature in an environmentally prudent manner. Environmental advantages of this equipment when compared to hand crews in these conditions include less smoke, less tree scorch from burning, less noise, less removal of ground cover, and fewer days to complete the project which causes less neighborhood disruption.

Comment #150 (RS2)
I would like to go on record as saying that the use of the masticator as proposed in Cambria is a bad idea.
Such destructive technology is unnecessary and environmentally insensitive. I am opposed to it and suggest
you look into less extreme measures to reduce the fire danger in this town.

Response to Comment #150

No substantial evidence has been revealed that would indicate that mastication equipment is not ideally suited to this environment and this project. Diligent oversight and proper equipment use by skilled operators will be required. Of the feasible alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results. This equipment is generally considered the most cost-effective way to complete work of this nature in an environmentally prudent manner. Environmental advantages of this equipment when compared to hand crews in these conditions include less smoke, less tree scorch from burning, less noise, less removal of ground cover, and fewer days to complete the project which causes less neighborhood disruption.

Comment #151 (PA)

I am against using the masticator for creating this fire break it will not be possible to leave a natural environment using this machine.

Response to Comment #151

This statement neglects consideration of the equipment currently used to manage the forest. The “natural environment”, assuming this means the undeveloped forest, is currently passively managed using only fire exclusion as the primary regime. Equipment used for fire suppression includes air tankers, helicopters, bulldozers, excavators, fire engines, pickups, and chainsaws. This equipment is often extremely disruptive to the environment and to communities and can create significant environmental impacts. By comparison, mastication equipment is specifically designed for forestry applications and is used effectively in many forest types throughout the world in an environmentally sound manner. No substantial evidence has been revealed that would indicate that mastication equipment is not ideally suited to this environment and this project. Of the feasible alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results. This equipment is generally considered the most cost-effective way to complete work of this nature in an environmentally prudent manner. Environmental advantages of this equipment when compared to hand crews in these conditions include less smoke, less tree scorch from burning, less noise, less removal of ground cover, and 75-80% fewer days needed to complete the project than hand crews only which causes less neighborhood disruption.

Comment #152 (PA)

If the construction of this fuel break goes through I believe it should be done in a more human labor style that will be more sensitive to the environment.

Response to Comment #152

No substantial evidence has been revealed indicating that mastication equipment is not ideally suited to this environment and this project and is more environmentally sensitive than hand crews. Of the feasible alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen as the primary treatment tool due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Masticator use and hand crews are equally capable of creating a functional shaded fuelbreak in these conditions and minimizing environmental impacts. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results. This equipment is generally considered the most cost-effective way to complete work of this nature in an environmentally prudent manner. Environmental advantages of this equipment when compared to hand crews in these conditions include less smoke, less tree scorch from burning, less noise, less removal of ground cover, and fewer days to complete the project which causes less neighborhood disruption. Use of mastication equipment supported by CAL FIRE hand crews will complete the project in 75-80% less time compared to hand crews only which significantly reduces the amount of disturbance.

Comment #153 (PA)

I am also very concerned about the size of the trees that will be allowed to remain as shade. As the years go by and the culling of the smaller trees continues eventually the old large trees will die and there will be no replacements.

Response to Comment #153

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 12-15 feet. Retaining all size classes of trees will ensure replacement trees are available as overstory trees continue to die. According to the *Forest Management Plan for Covell Ranch*, regeneration is active and sufficient to maintain forest cover on the forested areas of the ranch (Staub 2011). Monterey pine is a prolific seeder and natural regeneration is expected to be high with the improvement in growing conditions and elimination of competing vegetation. Future thinning will be likely needed to ensure forest health and maintain optimal health and vigor. Evaluations and determinations that ensure optimal stocking will be made by Registered Professional Foresters (as required by PRC 753) and will be based on site specific conditions. Tree selection criteria includes favoring pines over live oak in order to modify species composition away from the current trend. The project area will have a higher

percentage of site occupancy by pines following thinning and average stem diameter will be increased which favors development of larger trees with larger crowns which will increase canopy coverage and shade over time. Removal of diseased and severely deformed trees will improve forest health and resiliency.

Comment #154 (LH)
I am sending these comments by the Webbs to express my total agreement with the points they make in their thorough analysis.

Response to Comment #154
Refer to the responses given to Jim and Mary Webb (JMW).

Comment #155 (LH)
In summary, the masticator is literally and figuratively overkill and will ultimately be counter-productive as it creates space for invasive, highly flammable grasses. Do not desecrate the Cambria Pine Forest by implementing this plan!

Response to Comment #155
Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. This mulch will retard the growth of highly flammable grasses and increase soil organic matter and stabilize areas lacking ground cover. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Grasses that may occupy the site in some areas are combustible, but easily extinguished relative to the heavy fuel loading currently in place. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

The project proposes to use a rubber-tracked mechanical mulcher with a mastication attachment approximately the size of a mid-size SUV. This type of equipment is used extensively in various forest conditions around the world and is frequently chosen for work in sensitive environments due to the low level of overall environmental disturbance compared to other alternative methods. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. Extensive research and science is available about this type of project in similar conditions and in a variety of forest types worldwide. Similar projects have been conducted in the Monterey pine forests north of Big Sur with positive results.

Comment #156 (WMB)
We want to echo the thoughts in this letter (Valerie Bentz letter) and ask that something less drastic be implemented.

Response to Comment #156
Refer to the responses given to Valerie Bentz (VB).

Comment #157 (SB)
Valerie Bent's letter is included with SB's comments; refer to Valerie Bertz's comments (VB).

Response to Comment #157
Refer to the responses given to Valerie Bentz (VB)

Comment #158 (SB)
Using your influence, I again ask that you reconsider this plan by looking into alternatives, checking into the web sites above and giving careful attention to who and what possible special interests are involved in promoting this plan.

Response to Comment #158
Of the alternatives considered, including hand crews, bulldozer piling, logging, and prescribed fire, mastication was chosen due to the sensitive nature of the Cambria Forest, the cost and the desire to retain the treated material on-site as mulch. Limited amounts of hand-crew work will be conducted to remove vegetation in areas not suitable for equipment, adjacent to parts of Bridge Street, remove French Broom, prune trees as needed, perform future maintenance and complete other tasks as needed. This work will be conducted by CAL FIRE crews. However, CAL FIRE crews are very limited and available crew days are not adequate to complete the entire project. Private hand crews were also considered, but the estimated cost is approximately four times that of mastication equipment which was considered cost prohibitive for this project. Chipping and pile burning are two commonly used methods to treat material generated from hand crew work. Of these options, chipping is

not possible in all areas due to access limitations, and pile burning creates concerns with smoke impacts, exposed areas of bare mineral soil and crown scorching of vegetation adjacent to piles. Potential impacts from pile burning have been addressed in the CEQA document, and pile burning will occur with this project; however the number of piles created will be significantly less as a result of mastication. An additional benefit of mastication is the retention of most of the vegetative material treated in the form of fairly uniformly distributed mulch which increases soil organic matter which in turn improves soil productivity, stabilizes the soil and duff layers, reduces erosion, and retards the growth of weeds such as French broom. Important forest components including leave trees/shrubs, large downed logs and wood rat houses will be identified and flagged for retention by Registered Professional Foresters prior to operations. The particular machine that will be used is a small, rubber-tracked machine with lower ground pressure ratings (3.5 psi) than that of the average human. Use of this type of equipment with high flotation rates is considered a standard Best Management Practice (BMP) for forestry activities. Mastication equipment is used for vegetation removal in sensitive habitats throughout the world, such as the Everglades, due to the minimal disturbance that results.

The Sierra Forest Legacy website has an excellent article that strongly supports the need for prudent fuel reduction treatments such as the proposed project. The results quoted are to be expected and are likely a function of the amount of surface fuels present. This particular study refers to plantations where concentrations of surface fuels from mastication likely resulted in concentrated heat around the root collars of the trees killed. Nearby trees where fire burned through the dense shrub understory, but without the heavy surface fuels, were likely scorched but were able to survive. Young thrifty plantations are often able to survive significant crown scorch as long as the terminal buds are not killed. Locally however, experimental underburning in the Cambria Forest by State Parks has shown that mortality is high even from low intensity fires. Thus, it is expected that most areas of the Cambria Forest, in the event of a wildfire, would experience very high levels of mortality regardless of fire intensity. Compared to most Sierran forest types, high mortality in the Cambria Forest is much more likely due to the age of the trees, the density of the forest, and the fire dependent nature of Monterey pines. Monterey pines produce serotinous cones, are shallow rooted and are particularly vulnerable to wildfire. Following mortality and full exposure of the ground to sunlight, extensive germination of a new stand of seedlings typically occurs. While stand-replacing fire is a natural component of the Monterey pine forest, and was the likely origin of the present Cambria Forest, the objective of the project is to reduce the threat of stand-replacing wildfire in order to reduce the mortality of the trees currently present and protect the citizens of Cambria. The fuelbreak is expected to help reduce areas potentially burned which will yield a corresponding reduction in the amount of tree mortality. Refer to the discussion of alternatives, in the paragraph above for a response to the Los Padres Forest watch article.

This project has been planned with extensive community and agency support. Stakeholders and supporters of this project include Cambria citizens, CCSD, NCAC, SLO County Planning Department, the Cambria Forest Committee, The SLO County Community Fire Safe Council, State Parks, and The Nature Conservancy. The project has also been determined to be consistent with the Covell Ranch Forest Management Plan, the Conservation Easement, the SLO County Local Hazard Mitigation Plan, and the CAL FIRE Strategic Fire Plan.

Comment #159 (AF and 178 petitioners)

I just signed the following petition addressed to: California Department of Forestry and Fire Protection. ---------- Not use a mechanical Masticator to clear a Fire Path Because everything but the top largest trees are saved.

Response to Comment #159

As indicated in the project description on page 8 of the CEQA document, all trees 10” DBH and over (except for hazard trees) will be retained. 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 12-15 feet. Pruning of retained trees will occur by hand, if needed, to discourage surface fire from moving into tree canopies. 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. A fully intact forest ecosystem will be retained with a modified stand structure including trees of all sizes. Improved forest health and growing conditions are expected by retaining the largest, healthiest, best formed trees and shrubs available and by removing excess competing vegetation and ladder fuels.

Comment #160 (AF and 178 petitioners)

All the small animals - fawns, owls, and other wildlife my not be able to flee fast enough and destroys the forest floor.

Response to Comment #160

The project, as proposed, has been reviewed by environmental scientists from State Parks and the Department of Fish & Game. Some animals may be harmed, as with all human activities, but project is planned for summer, fall, or winter months when most plants have completed their annual growth cycles and after the spring nesting and fawning season. No newborn fawns or baby owls are expected to be present during operations. Use of mastication equipment reduces the time needed to complete the project by 75-80% compared to hand crew only which minimizes the overall level of disturbance.

No evidence has been revealed that this proposed project will destroy the forest floor. Mastication equipment was chosen because of its ability to retain all treated vegetation on site as organic matter that is incorporated into the litter and duff. Retention of this organic matter yields a number of soil benefits including increased nutrient availability, increased soil productivity, soil stabilization and minimization of erosion, improved filter strip properties along streams preventing sedimentation, and enhancement of the carbon cycle.

Comment #161 (AF and 178 petitioners)
It also does not actually prevent fires as shown in other areas where it has been used. (Sierra Nevada, Santa Barbara and Yosemite)

Response to Comment #161
Fuelbreaks such as this are not intended to prevent fires, but rather lessen fire intensity. In the absence of fire suppression activities only non-combustible areas such as large water bodies, fuels with sufficient moisture, rock outcrops, beaches and roads or large precipitation events will stop fires. Fuelbreaks are intended to alter the fuel bed which in turn alters fire behavior in a manner that will allow fire suppression resources to take effective action to stop fire spread. Shaded fuelbreaks such as this allow suppression resources to employ far less intrusive tactics than could otherwise be used which often results in significantly less ground disturbance during firefighting activities and reduces the area burned.

Comment #162 (AF)
Unnecessary wildlife razing isn't good management.

Response to Comment #162
The Department supports minimization of unnecessary disturbance to wildlife. Environmentally sensitive Best Management Practices and methods designed to minimize disturbance will be used. Project has been reviewed by a number of agencies and wildlife professionals and no significant adverse impacts to any wildlife species are anticipated.

Comment #163 (HH)
Thank you for your letter of 7 September. We appreciate your work to make this project go smoothly. Regarding the property line of our lot at 975 Northampton Street, Cambria:
The northeast corner of the property is marked by a 6-foot tall 4-inch diameter wooden post that was put in some years ago by a former owner of the adjacent property. It is our understanding that it properly marks that corner of our lot. From there the property line extends diagonally in a southwest direction to rather close to the end of the fence between our lot and our neighbors at 957 Northampton.
Please let me know if I can help in any other way; and please thank all concerned for their efforts to make our properties safer from fire.

Response to Comment #163
The Department appreciates your support and cooperation. We look forward to meeting with you during implementation of this project.

Comment #164 (GW)
I am the owner of the residence at 6435 Cambria Pines Road here in Cambria. Using a metal detector, I have located the survey monument at the North-East corner of my property. I have marked it with a 3 foot green stake to which I have attached a yellow ribbon with the word "Corner" on each end of the ribbon.
I hope this will be of assistance in your worthwhile project. If you need any further information or assistance please feel free to contact me at this email address.

Response to Comment #164
The Department appreciates your support and cooperation. We look forward to meeting with you during implementation of this project. Your input during project activities near your home will be appreciated.

Comment #165 (MH)
We support and appreciate the plan to develop a fuelbreak in the Cambria area between the forested and populated areas.
We learned the importance of being proactive rather than reactive in the 90's when a large fire approached where we lived then in the Santa Rosa Mountains of Riverside County. We had cleared material to develop a defensible area around our property and when we were told to evacuate, our reward for being prepared came when the fireman said "I think we can save your house". Others were not so prepared and were not so lucky.

Response to Comment #165
The Department appreciates your support and cooperation. The Department considers the proposed project the most practical, environmentally sensitive, efficient, and cost-effective way to establish this shaded fuelbreak in the conditions present. Due diligence has been performed in the preparation of this project. We look forward to meeting with you during implementation of this project. Your input during project activities near your home will be appreciated.

Comment #166 (BM)
I apologize for the delay in picking up your letter and responding. I have been out of the country for three months.
I live at 6465 Cambria Pines Rd in Cambria and have a boundary with the area you that you will be treating. The boundary is clearly marked with a deer fence and you are authorized to clear fuel right to the fence. I have lived here for ten years and have occasionally

done a bit of clean up, with Mr. Covell's consent, but I have not been equipped to do much more than move the problem further from the property line. I am a retired forester (educated and practiced in Canada) and I have been advocating fuel management with my neighbours and friends since I moved here so I am a strong supporter of the project you are about to undertake.
Please drop by when you in the neighbourhood for coffee and a chat.

Response to Comment #166
The Department appreciates your support and cooperation. We look forward to meeting with you during implementation of this project. Your input during project activities near your home will be appreciated.

Comment #167 (BJ)

My property at 6406 Buckley Drive is the last parcel to adjoin the Covell Ranch on the west, and intersects with the Yeager Youth Camp. There is a permanent marker at the southeast corner of my property by the fence which will allow you to do whatever close up work is available to me. I am pleased to know that this fuel reduction project will be taking place.

I am, however, equally concerned about the amount of fuel buildup on the Yeager Camp property adjacent to the Covell Ranch. There is an abundance of Scotch Broom growing and lots of down wood, including one whole tree, against my property line fence. A number of other homes along the division of the Camp and residences have the same problem along their fence lines. At one time the camp manager cut the brush annually but finances curtailed that program. I hope some plan can be devised to provide more security to homes along that area and I am appealing to you to intercede. If this is not your role, I would greatly appreciate your forwarding my concerns to the proper person or agency.

Please contact me if you need further information or if I can be of any help.

Response to Comment #167 The Department appreciates your support and cooperation. The Camp Yeager property is included in the scope of the project and areas surrounding the ball field will be treated, primarily to remove the French broom concentrations. Your input during project activities near your home will be appreciated.