United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Mother Lode Field Office
5152 Hillsdale Circle
El Dorado Hills, CA 95762
www.ca.blm.gov/motherlode

Brownsville fuel breaks (CA-180-10-24)
Finding of No Significant Impact
October 2010

It is my determination that this decision will not result in significant impacts to the quality of the human environment. Anticipated impacts are within the range of impacts addressed in the Sierra Resource Management Plan (RMP)/Final Environmental Impact Statement. The proposed action does not constitute a major federal action having a significant effect on the human environment; therefore, an environmental impact statement is not necessary and will not be prepared. This conclusion is based on my consideration of CEQ's following criteria for significance (40 CFR §1508.27), regarding the context and intensity of the impacts described in the EA, and based on my understanding of the proposed action:

1) Impacts can be both beneficial and adverse and a significant effect may exist regardless of the perceived balance of effects. Potential impacts include negligible soil disturbance caused by the use of a rubber-tracked chipper or masticator and temporary dust due to mastication of vegetation and temporary smoke due to burning piled vegetation. However, none of these impacts would be significant at the local or regional scale (cumulatively) because of the small scale of the proposed action. Visual resources may be negatively impacted but these impacts are in accordance with management goals and objectives stated in the Sierra RMP and are not considered significant. BLM's visual resource management standards for the area would be met. Of critical concern is the preservation of the uncommon mafic/ultramafic soils underlying the project area and the rare plant community (including a diversity of woody species) that these soils support. Project design features of the EA will ensure that these important environmental resources are preserved.

2) The degree of the impact on public health or safety. No aspects of the proposed action have been identified as having the potential to significantly and adversely impact public health or safety. In fact, the project is designed to help firefighters fight wildfire; therefore protecting public health and safety, especially for local residents.

3) Unique characteristics of the geographic area. The area affected by the proposed action contains a mafic/ultramafic substrate and associated vegetation community—McNab cypress woodland—including special status plants. This characteristic is rare, not unique, though some of the plants are rare endemics. However, they would not be negatively affected. The special status plants would be avoided by project design. Impacts to the soils derived from the mafic/ultramafic substrate would be negligible.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial effects. No anticipated effects have been identified that are scientifically controversial. As a factor for determining within the meaning of 40 C.F.R. § 1508.27(b)(4) whether or not to prepare a detailed environmental impact statement, "controversy" is not equated with "the existence of opposition to a use." *Northwest Environmental Defense Center v. Bonneville Power Administration*, 117 F.3d 1520, 1536 (9th Cir. 1997). "The term 'highly controversial' refers to instances in which 'a

substantial dispute exists as to the size, nature, or effect of the major federal action rather than the mere existence of opposition to a use.'" *Hells Canyon Preservation Council v. Jacoby*, 9 F.Supp.2d 1216, 1242 (D. Or. 1998).

5) The degree to which the possible effects on the human environment are likely to be highly uncertain or involve unique or unknown risks. The analysis does not show that the proposed action would involve any unique or unknown risks.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. Fuel break construction and maintenance using hand crews, mechanized equipment (i.e., rubber-tracked chipper, masticator, etc.), and prescribed fire is not precedent setting. BLM undertakes these types of projects on a regular basis.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. No significant cumulative impacts have been identified. The proposed action is consistent with the actions and impacts anticipated in the Sierra RMP.

8) The degree to which the action may adversely affect National Historic Register listed or eligible to be listed sites or may cause loss or destruction of significant scientific, cultural or historical resources. The proposed action would not affect cultural resources listed on or eligible for the National Register of Historic Places.

9) The degree to which the action may adversely affect ESA listed species or critical habitat. In informal consultation with the US Fish and Wildlife Service, BLM determined that the proposed action, with project design features, is not likely to adversely the listed plant species.

10) Whether the action threatens a violation of environmental protection law or requirements. There is no indication that this decision would result in actions that would threaten such a violation.

_____ _____

William S. Haigh Date
Field Manager, Mother Lode Field Office

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EA Number: CA-180-10-24

Project Name: Brownsville fuel breaks

Location: MDM, T 19 N, R 6 E, Section 34, Brownsville, Yuba County, CA (see attached map)

1.0 Purpose of and Need for Action

1.1 Need for Action

The Bureau of Land Management's Mother Lode Field Office (BLM) manages scattered public lands on the outskirts of the community of Brownsville, Yuba County. Much of this area has not experienced wildfire in decades. Manzanita and other fuels have grown, increasing the possibility of a catastrophic wildfire. At the same time, the local community has grown. There are now numerous private residences in the area, including adjacent to BLM-administered parcels containing dense fuels. Local residents are concerned about wildfire. The area is considered to be within the wild land-urban interface (WUI) and the local community, Brownsville, is considered "at risk." Some residents are anxious to see public land managers like the BLM take action to reduce fuels on public lands. Fuel breaks are needed to help give firefighters places to hold wildfire or launch suppression efforts. The location of the proposed fuel breaks would serve as a strategic holding point in the event of human or natural caused wildfires. The BLM-administered parcels that would be subject to the fuels project contain areas leased by the local government for recreation and public purposes including ball fields, hiking trails, and a transfer station. The fuel breaks are needed to help protect these public facilities, as well as homes on adjacent private property.

1.2 Conformance with Applicable Land Use Plans

The proposed action—to build and maintain fuel breaks on public land—is consistent with the Sierra Resource Management Plan, approved in February 2008. The Sierra Resource Management Plan's Record of Decision (pages 15-16) gives BLM the goal of establishing a cost-efficient fire management program commensurate with threats to life, property, public safety, and environmental resources. BLM's objectives for meeting these goals are to 1). reduce the risk of wildfire in WUI communities; 2). reduce the risk of catastrophic wildfire through fuels management; 3). use prescribed fire, mechanical, and biological treatments to reduce fuels and promote ecosystem diversity and resilience, control invasive species, reduce fuel hazard, improve wildlife habitat, increase water yield, and enhance watersheds. The Folsom/Mother Lode Field Office Fire Management Plan, approved in March 2008 gives BLM various fire and fuels treatment objectives and strategies for specific lands under BLM's administration. Specific objectives and strategies for the fire management unit, in which the project area is located, are laid out in the plan. The proposed action is consistent with these objectives and strategies.

2.0 Proposed Action and Alternatives

2.1 Proposed Action

The proposed action is to construct and maintain shaded fuel breaks along the existing roads and property boundaries on two BLM-administered parcels. The fuel breaks would be 100 ft wide (see attached maps) and would affect approximately 26 acres of public land.

The fuel break would be built by a hand crew (i.e., BLM fuels crew, inmates, Hotshots, contractor, etc.) under BLM supervision. In addition to using chainsaws and other hand tools, the crew would use any of the following methods:

1. The crew would feed cut vegetation into a rubber-tracked brush chipper staged on existing roads/trails. To avoid unnecessary impacts to the diverse native chaparral community and areas of habitat for special status plant species, the chipped vegetation would not be broadcasted over certain portions of the project area. For these portions of the project area, the chips would be hauled off site, or if necessary, piled at an un-vegetated site to be identified by a qualified botanist. The portions of the project area where chips would not be broadcasted are indicated on the botanical resource inventory report map attached.

2. The crew would pile and prep vegetation in 6 x 6 ft piles for burning at a later date in accordance with a BLM-approved burn plan and other BLM policy. Approximately 100 piles per acre would be constructed.

Once completed the fuel break would be maintained at any time over the following 10 years. At the end of this 10-year period, fuel break maintenance would need to be reauthorized, perhaps with a "fresh" NEPA document. This EA would need to be reviewed by the relevant staff to determine whether it is adequate to use to reauthorize maintenance. During the 10-year period, maintenance would be done by a hand crew under BLM supervision. The fuel break would be maintained using any or all of the methods described above.

Any new methods of fuels treatment work (i.e., broadcast prescribed burn) that BLM may propose in the future, or if the same methods are applied to land outside of the project area analyzed in this EA, this new work would be subject to BLM's full environmental review/decision-making process. In other words, a new NEPA document may be needed. Certainly, new cultural and biological recommendations would be needed.

2.2 Project Design Features

BLM botanists have identified rare plants including the federally threatened species *Packera layneae* (Layne's butterweed) within the area potentially affected by the proposed action. A dwarf flannelbush that occurs in the project area will be treated in the same way as other special status species (see the Affected Environment section below for rationale). Ensuring that these rare species are not negatively affected by fuel break construction and maintenance is critical. Any negative affects to the rare plants, albeit small, would be avoided. Using flagging tape, BLM botanists have marked for avoidance each rare plant or group of plants within the project area. These flagged areas must be avoided. Vegetation will not be treated within these areas. Chips will not be broadcasted over these areas. After the fuel breaks are constructed, a BLM or other qualified botanist must flag for avoidance rare plants or groups of rare plants before any proposed maintenance can occur over the life of this EA—the following 10 years.

Shrub cutting would be accomplished by a crew using chainsaws, avoiding alternative methods of shrub clearing that would entail equipment running through rare plant habitat, and habitat that has the potential to support these rare species. Equipment use always results in some degree of soil disturbance, with unknown effects to rare species and the plant community. Absent definitive information, the conservative approach is to avoid such an unnatural disturbance. A buffer of at least 15 feet would be maintained around any rare plant occurrence. For the federally listed Layne's butterweed, the buffer would be 30 ft. The 15 ft buffer around *Fremontodendron* occurrences should insure that this species will not be cut or degraded in any way. Many *Fremontodedron* plants found in the project area appear to be old and other shrubs are overtopping them. This makes the flannelbush hard to see. Some *Fremontodendron* branches are intertwined in complex patterns with other shrubs. It would be easy for *Fremontodedron* to be cut accidentally if no buffer was marked. Boyd (1996) has shown that *Fremontodendron decumbens* seed can be transported up to 8 meters (approximately 24 ft) by ants. This is beyond the planned shrub-cutting buffer. However, using chainsaws to remove the canopies of presumably competitive shrub species would not be expected to negatively affect reproduction from seed. Any time in the 10-year period that the fuel breaks may be maintained under this EA, a qualified botanist must resurvey the project area and flag for avoidance the rare plants before maintenance work could occur. Mapping of the species distribution in 2010 provides a baseline for future surveys, whether the proposed action moves forward or not.

A geologic substrate of gabbro underlies the project area, according to geologic mapping. Soil-mapping specialists found that this substrate contains mafic intrusive igneous rock substrate, tending toward ultramafic. This substrate supports a rare plant community including a diversity of woody species, some of which like McNab cypress are serpentine or serpentine-gabbro endemics (see sections below for more information). Other plant species present are associated with these uncommon geologic substrates, although they are not substrate endemics. Minimizing adverse impacts to the uncommon and diverse plant community is one of the goals of the proposed action. Where roads or existing clearings on BLM-administered or private land provide additional width to the proposed fuel break, new clearing on BLM-administered land would be reduced commensurately. In general, impacts to soils would be avoided and brush clearing would be kept to the minimum level that provides for public safety.

The project area is relatively weed-free, except in major disturbances like the transfer station. To prevent the spread of weeds to new areas within the BLM parcels and adjacent private lands, all equipment used to implement the proposed action must be thoroughly cleaned of adhering soil and vegetation before entering the project area. Generally, equipment used to implement the proposed action would avoid areas with significant weed populations. These areas include the area adjacent to the transfer station and one area beside Ponderosa Road across from the junction with a road that travels west into the Honcut Creek canyon (see map with botanical report). If equipment is used in an area with weeds, it must be cleaned after leaving the weed occurrence and before continuing work on the fuel break.

2.3 No Action

Under the no action alternative, BLM would not build and maintain a fuel breaks on the subject parcels on the outskirts of Brownsville.

2.4 Alternatives Considered but Eliminated from Detailed Analysis

BLM did not consider any other alternatives in detailed analysis.

3.0 Affected Environment

The project area is located along boundary lines and existing roads on two BLM-administered parcels near Brownsville in the central Sierra Nevada foothills. Elevations within the project area average 2300 ft above sea level. The uncommon mafic/ultramafic substrate supports an equally uncommon and diverse mixed chaparral community, along with westside ponderosa pine forest, and stands of McNab cypress. Woody chaparral species include common species like white leaf Manzanita, Lemmon's ceanothus, toyon, holly-leaf redberry, as well as locally less common shrubs and small trees like chaparral pea, silk tassel, Brewer's oak, Oregon grape, and dwarf flannelbush. Douglas fir occurs with pine in the canyon of Honcut Creek. McNab cypress is a species usually restricted to ultramafic substrates and is found within the project area. Uncommon understory species include Sanborn's onion and Butte County fritillary. The plant species of greatest conservation concern are the federally threatened species *Packera layneae* (Layne's butterweed) and a dwarf *Fremontodendron* (flannelbush). The latter is a close relative of the federally endangered species Pine Hill flannelbush, but research has shown it to be genetically distinct. Currently, the dwarf flannelbush of the Brownsville area/project area has no conservation status and it has not been recognized as a separate taxon, although it has been shown to have a distinct genetic profile (Kelman 2006). Until research occurs that clarifies the taxonomic placement of this population, the conservation of these plants is critical.

This vegetation community is habitat for a variety of wildlife including black bear, coyote, bobcat, grey fox, California quail, Steller's jay, raven, hawks, and eagles. There are numerous private residences in the general area.

Under the Sierra RMP, BLM manages the project area/two BLM-administered parcels as an extended recreation use area, meaning that recreation management is not a high priority here. This is not to say that recreation and public use are not substantial. Portions of the subject parcels have been leased for recreation and public purposes. A landfill that was once leased to Yuba County has since been closed and replaced by a transfer station. A separate lease with the County provides for a community park (ball fields, picnic grounds, hiking trails, meeting hall, associated parking areas, etc.). The community park receives a fair amount of recreational use. A portion of the area potentially affected by the proposed action is adjacent to the transfer station and community park. At the transfer station, the scar of the old landfill dominates the landscape. On the landfill site annual grasses have replaced native chaparral over tens of acres. The fuel break would be a minor visual impact in this setting. At the park site, fuels reduction has been implemented in the past. .

BLM manages the project area in accordance with class III visual resource management (VRM) standards. BLM's objective for class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat basic elements found in the predominant natural features of the characteristic landscape.

4.0 Environmental Effects

The following critical elements have been considered in this environmental assessment, and unless specifically mentioned later in this EA, have been determined to be unaffected by the proposal: areas of critical environmental concern, prime/unique farmlands, floodplains, wetlands and riparian zones, wild and scenic rivers, wilderness, and environmental justice.

4.1 Impacts of the Proposed Action and Alternatives

The proposed action—construction and ongoing maintenance of fuel breaks over a 10 year period—would cause small or negligible negative impacts to atmospheric, water, or soil resources because the area to be treated is relatively small in size. Cutting and chipping of fuels would create some dust, but

this would be temporary and would not enough to seriously affect air quality. There are small seasonal streams in the area. The project area is not located on a major stream. The rubber-tracked chipper would be staged on the existing roads and trails. Of concern are negative effects to the mafic or ultramafic soils found within the project site which are uncommon generally. Outside of the portion of the project area that supports rare plant species and the uncommon northern gabbroic mixed chaparral plant community (this zone is indicated on the map for the botanical resource report), chipped brush may be broadcasted across the soil surface. Road access for the chipper would be another determinant of where chips would be spread. This layer of chips/mulch would help prevent erosion. Where the chaparral occurs, no chips would be spread, to better simulate natural ecosystem processes at these sites. These sites usually lack any substantial litter or duff layer. The seed of species adapted to chaparral sites often fail to germinate or establish if litter or duff is present.

BLM botanists analyzed the impacts of the proposed action on botanical/vegetation resources, especially special status plants. The analysis is designed to help BLM meet its obligations under the Endangered Species Act and other applicable authorities. Rare plants associated with the underlying mafic/ultramafic substrate were found in the area potentially affected by the proposed action. Direct negative impacts to these plants would be prevented by avoiding them during project implementation—during initial construction and ongoing maintenance (please refer to design features 2.2). Cutting operations would not occur in the immediate vicinity of Layne's butterweed or the flannelbush. Brush would not be piled and chips would not be spread on these species. Likewise no vehicles or equipment would be used in the habitat of these species.

Indirect effects could include lengthening the fire return interval by enhancing fire suppression. Another potential effect could be reducing the extent of dozer clearing of rare plant habitat during fire suppression efforts in the event of wildfire, if project fuel breaks prove effective in reducing fire size. Although these effects could theoretically occur, their likelihood is too difficult to estimate to provide useful analysis. Therefore, looking at direct effects that can be analyzed, the proposed action would not affect threatened and endangered plants or other BLM special status plants. In informal consultation with the US Fish and Wildlife Service, BLM concluded that the proposed is not likely to adversely affect the listed plant species Layne's butterweed.

The BLM wildlife biologist analyzed the impacts of the proposed action on wildlife, especially on special status wildlife. Her analysis was designed to help BLM meet its obligations under the Endangered Species Act and other applicable authorities. The biologist recommended that the proposed actions would not affect threatened and endangered wildlife or other BLM special status wildlife.

The BLM archaeologist conducted a cultural resource study of the proposed actions to determine whether significant cultural resources could be affected by the proposed action. The study included a background records search and field inventory. The study was designed to help BLM meet its obligations under Section 106 of the National Historic Preservation Act. He found that the proposed actions would not affect significant cultural resources. No places of traditional religious and cultural significance to Native Americans would be affected.

The proposed action could perhaps have some negligible short-term impacts on recreational use. Walkers, joggers, bicyclists, and motorists might be inconvenienced temporarily during project implementation due to the noise and dust caused by cutting, chipping, and masticating fuels. This negative impact would be temporary, lasting as long as the proposed action is being implemented (perhaps only a few days at the most). Recreationists would continue to use the project area and adjacent leased lands during and after the proposed action is completed. This includes initial construction and ongoing maintenance.

The project area is not known for its visual resources. The proposed action would have a negligible negative impact on visual resources. Understory vegetation and small trees would be removed, with the exception of areas containing rare plants. The fuel break would not be visible, except by the air. Because a shaded fuel break is proposed, the tree cover would be maintained. After the initial signs of the work have faded, park users may find the park more visually attractive after understory brush removal than before the clearing occurred. Outside of the park where chaparral is more prevalent, some might consider the removal of dense chaparral to be an improvement to the scenery in and around the project area. Importantly, the proposed action is in line with BLM's VRM class III management objective which is to partially retain the existing character of the landscape.

4.2 Impacts of the No Action Alternative

Under the no action alternative, there would be no impacts to environmental resources, such as the uncommon soil and vegetation derived from the underlying mafic/ultramafic substrate. However, there could be negative impacts to firefighting efforts and efforts to protect local residents and the Brownville community and their parks from wildfire. If a wildfire occurred, firefighters would not have this strategic fuel break to stop the advance of the fire and attack the fire. The result could be a larger wildfire that impacts environmental resources well beyond the project area. The environmental impacts of such a wildfire could be positive (e.g., enhanced reproduction of some fire dependent species), or they could be negative (e.g., large-scale clearing of habitat by bulldozers in the course of fire suppression for a larger fire). There may also be impacts to private property.

4.3 Cumulative Impacts

The proposed action could have negligible negative impacts on mafic/ultramafic soils which are relatively uncommon on the regional and larger geographic scale. BLM would keep mechanized equipment on established roads and trails to minimize this impact and conserve these soils. The proposed action is expected to have beneficial cumulative impact on wildfire suppression in the area as long as BLM maintains the fuel breaks.

5.0 Agencies and Persons Consulted

The US Fish and Wildlife Service was informally consulted regarding the proposed action. They concurred with BLM's finding that the project design features in the EA are enough to ensure that the special status plants including the threatened Layne's butterweed would be preserved (please refer to the attached correspondence).

5.1 Authors

James Barnes, BLM NEPA coordinator/Archaeologist
Al Franklin, BLM Botanist
Brian Mulhollen, BLM Fuels Specialist

5.2 BLM Interdisciplinary Team/Reviewers:

/s/ James Barnes	*9/26/10*
NEPA coordinator/Archaeologist	Date
/s/ Brian Mulhollen	*9/26/10*
Fuels specialist	Date
/s/ Jeff Horn	*9/17/10*
Recreation	Date
/s/ Albert Franklin	*9/20/10*
Botany	Date
/s/ Peggy Cranston	*9/17/10*
Wildlife/fisheries	Date

5.3 Availability of Document and Comment Procedures

This EA will be posted on Mother Lode Field Office's website (www.ca.blm.gov/motherlode) under NEPA and will be available for a 15-day public review period. The EA is also available by mail upon request during this 15-day public review period. Comments should be sent to James Barnes at Bureau of Land Management, Mother Lode Field Office, 5152 Hillsdale Circle, El Dorado Hills, California 95762 or emailed to jjbarnes@blm.gov.

5.4 References Cited

Boyd, Robert S.
1996 Ant mediated seed dispersal of the rare chaparral shrub *Fremontodendron decumbens* (*Sterculiaceae*). *Madrono* 43: 299-315.

Kelman, W.M., L. Broadhurst, C. Brubaker, and A. Franklin
2006 Genetic relationships among *Fremontodendron* (*Sterculiaceae*) populations of the central Sierra Nevada foothills of California. *Madrono* 53: 380-387.