

Lacks Creek Management Area Management Plan Update #1

Finding of No Significant Impact Determination

DOI-BLM-CA-N030-2009-0003-EA

**U.S. Department of the Interior
Bureau of Land Management (BLM)
Arcata Field Office
Arcata, CA**

Based upon a review of the EA and the supporting documents, the BLM Arcata Field Office has determined that this project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. The project includes no environmental effects that meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Design features to reduce impacts were incorporated into the project. None of the environmental effects discussed in detail in the EA are considered significant, nor do the effects exceed those described in the *Lacks Creek Management Plan* (USDI 2008), and the *Arcata Resource Management Plan and Final Environmental Impact Statement* (USDI 1992). The project involves use of common implementation and monitoring techniques and there is no scientific controversy or uncertainty over the type or level of impacts. The action will not adversely affect an endangered or threatened species or habitat, historic or cultural properties, wilderness, or other unique characteristics of the area. The action is in compliance with all laws and policies guiding management of the area. Therefore, an environmental impact statement is not needed.

Original Signed by
Lynda Roush
Arcata Field Manager

4/30/2010
Date

Lacks Creek Management Area Management Plan Update #1

Decision Record

DOI-BLM-CA-N030-2009-0003-EA

**U.S. Department of the Interior
Bureau of Land Management (BLM)
Arcata Field Office
Arcata, CA**

Decision and Rationale

It is the decision of the BLM Arcata Field Office to implement updates and associated design features to the Lacks Creek Management Plan to include: 1) The replacement of the 16 inch DBH diameter limit with the Northwest Forest Plan standards of an 80 year age limit for removal of trees that have encroached into prairie and oak woodland habitat types: 2) An update of acreage estimates of these habitat types to more accurately reflect expected post-restoration figures and 3) The option to remove and sell merchantable trees and/or biomass associated with excessive hazardous fuel loading within decommissioned road segments.

Treatment options under the proposed action would include hand falling with chain saws, use of rubber-tired or tracked equipment, such as skidders, feller bunchers, harvester-forwarders, tractors, small cable yarders, sky lines, or similar equipment. Selection of harvest methods will be based on slope, access, and least potential for soil disturbance and damage to leave trees. Non-merchantable material will be either removed for biomass utilization or treated on site. Methods may include piling and burning, lop and scatter, use of tracked or rubber tired equipment for mastication and/or chippers. Girdling of trees for snag creation may also be used where removal is not practical.

The selected alternative best meets the purpose and need to achieve effective and complete restoration of prairies and oak woodlands, more accurately reflect acreage figures of these habitat types following ground-level analysis, and to effectively reduce excessive hazardous fuel loading associated with road decommissioning.

This project is not expected to adversely impact elements of the human environment due to the design features and operations criteria outlined in the Lacks Creek Plan, as well as supplemental design features specific to the selected alternative including: 1) Limiting equipment operations based on soil instability and moisture contents in order to minimize increases in water turbidity; 2) The use of techniques to avoid increased runoff into streams including water bars, slash piling, and reshaping; repair of erosion control features on access roads;. 3) Equipment cleaning measures to minimize spread of exotic species, and 4) Requirements for inspection of equipment to reduce the potential for fluid leaks during implementation of the proposed action.

This decision is consistent with the *Lacks Creek Management Plan* (USDI 2008), and the *Arcata Resource Management Plan* (USDI 1995), and other relevant laws, regulations and policies guiding management of the Lacks Creek Management Area.

Administrative Remedies

Administrative remedies may be available to those who believe they will be adversely affected by this decision. Appeals may be made to the Office of Hearings and Appeals, Office of the Secretary, U.S. Department of Interior, Board of Land Appeals (Board) in strict compliance with the regulations in 43 CFR Part 4. Notices of appeal must be filed in this office within 30 days after publication of this decision. If a notice of appeal does not include a statement of reasons, such statement must be filed with this office and the Board within 30 days after the notice of appeal is filed. The notice of appeal and any statement of reasons, written arguments, or briefs must also be served upon the Regional Solicitor, Pacific Southwest Region, U.S. Department of Interior, 2800 Cottage Way, E-1712, Sacramento, CA 95825.

The effective date of this decision (and the date initiating the appeal period) will be the date this notice of decision is posted on BLM's Arcata Field Office internet website.

Original Signed by
Lynda Roush
Arcata Field Manager

4/30/2010
Date

**Lacks Creek Management Area
Management Plan Update #1
Environmental Assessment**

DOI-BLM-CA-N030-2009-0003-EA

**U.S. Department of the Interior
Bureau of Land Management (BLM)
Arcata Field Office
Arcata, CA**

Prepared By: Original Signed by 04/22/2010
Jared Hammatt, Fuels Specialist

Reviewed By: Original Signed by 04/26/2010
Bob Wick, Planning/NEPA Coordinator

Original Signed by 04/22/2010
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1. Introduction

Background and Setting

Lacks Creek is located in California's northern Coast Range, approximately 15 miles inland from the Pacific Ocean (T8N, R3E Sections 34, 35, 36 and T7N, R3E, Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, and 24). The area is in Humboldt County, approximately 20 miles northeast of Eureka. The area includes 8,673 Acres of BLM managed lands – 7,377 acres are within the Lacks Creek watershed, with the other acreage made up of contiguous lands. The management area is surrounded by large private land timber holdings, and the region contains some of the most productive and intensively managed commercial forest lands in the United States. The immediate area is sparsely populated with scattered ranches in adjacent Redwood Valley. Refer to Figure 1 for course-scale view of the Lacks Creek Management Area (LCMA).

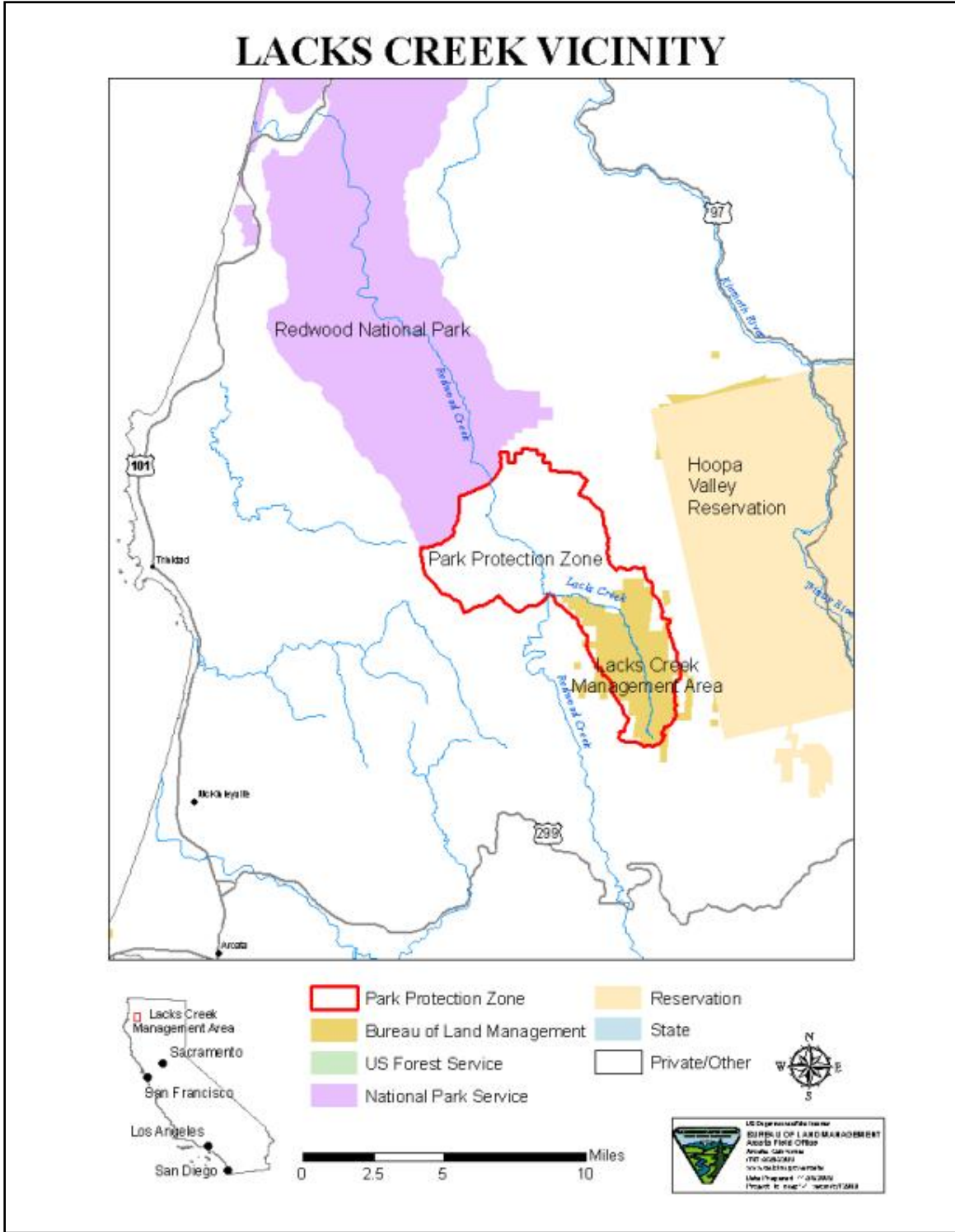


Figure 1: Course-scale view of LCMA.

This Environmental Assessment (EA) is an update to the Lacks Creek Plan (LCP) (EA-AR-08-15) that was completed in August 2008 and incorporates modifications determined to be necessary during initial LCP implementation. The LCP is a

comprehensive activity plan designed to assess actions throughout the management unit rather than separating each action into individual project-level assessments. The updates included in this EA are needed to more effectively meet restoration objectives identified in the LCP. The Lacks Creek Management Plan can be viewed at: http://www.blm.gov/ca/st/en/fo/arcata/lacks_creek_prelim.html

Purpose and Need for Action and Decision to be Made

The purpose and need for this project is twofold:

Oak woodland and prairie restoration

Absence of fire as a disturbance process in the prairies and oak woodlands in Lacks Creek is causing a loss in historic area and species composition. The LCP calls for the restoration and maintenance of these habitat types. The LCP currently places a 16 inch diameter breast height (DBH) limit on removal of encroaching coniferous trees (Decision Record page 2). Initial restoration efforts indicated that use of this prescription would not allow for removal of many larger encroaching conifers. These larger trees are shading-out oaks, causing a conversion from an open woodland/grassland to a dense closed canopy Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*) forest. The larger conifers within the historic prairie and oak woodland cover types are also providing a seed source for future encroachment (See Photos 1–3 and Figure 2).



Photo #1: Advanced conifer encroachment in prairie interior.



Photo #2: Intermediate conifer encroachment in prairie interior.



Photo #3: Intermediate encroachment into oak woodlands.

Lacks Creek Prairies and Oak Woodlands

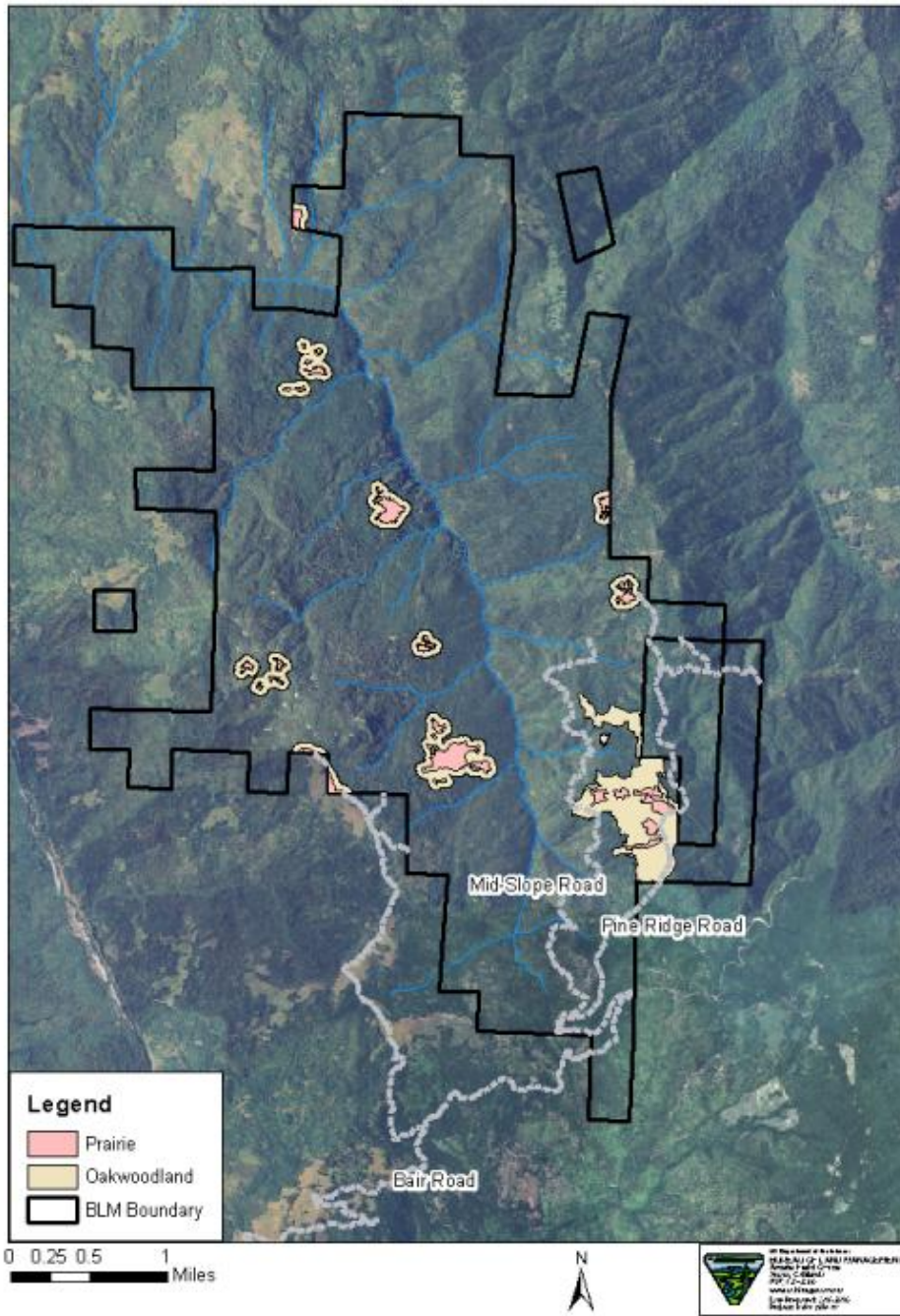


Figure 2: Map showing distribution of oak woodlands and prairies in LCMA

Road restoration

The LCP identifies roads for decommissioning for sediment reduction. Refer to Figure 3 for road status in LCMA. Some of these roads have not been used for 50+ years. Many of these older roadbeds contain segments with dense stands of older, larger forest vegetation. Despite the presence of vegetation, many of these roads are prone to continuing erosion through stream diversions, crossing failures and extensive gullyng. Trees must be removed within the footprint of the road decommissioning to allow for equipment access and roadbed removal/contouring. Typically the removed trees can be placed back on the restored surface to prevent erosion. However, during initial efforts in Lacks Creek, it was determined that while a portion of the vegetation can remain on the roadbed, the remainder contributes to excessive fuel loading and fire danger which necessitates removal.

Decision to be made:

This action would 1) update the existing oak woodland and prairie prescriptions; and 2) Allow for removal and sale of excessive fuel loading resulting from road decommissioning activities. Both of these actions would allow for plan implementation at a level that would fully meet existing plan objectives.

The decision to be made is whether or not to update the existing plan to expand the above prescriptions.

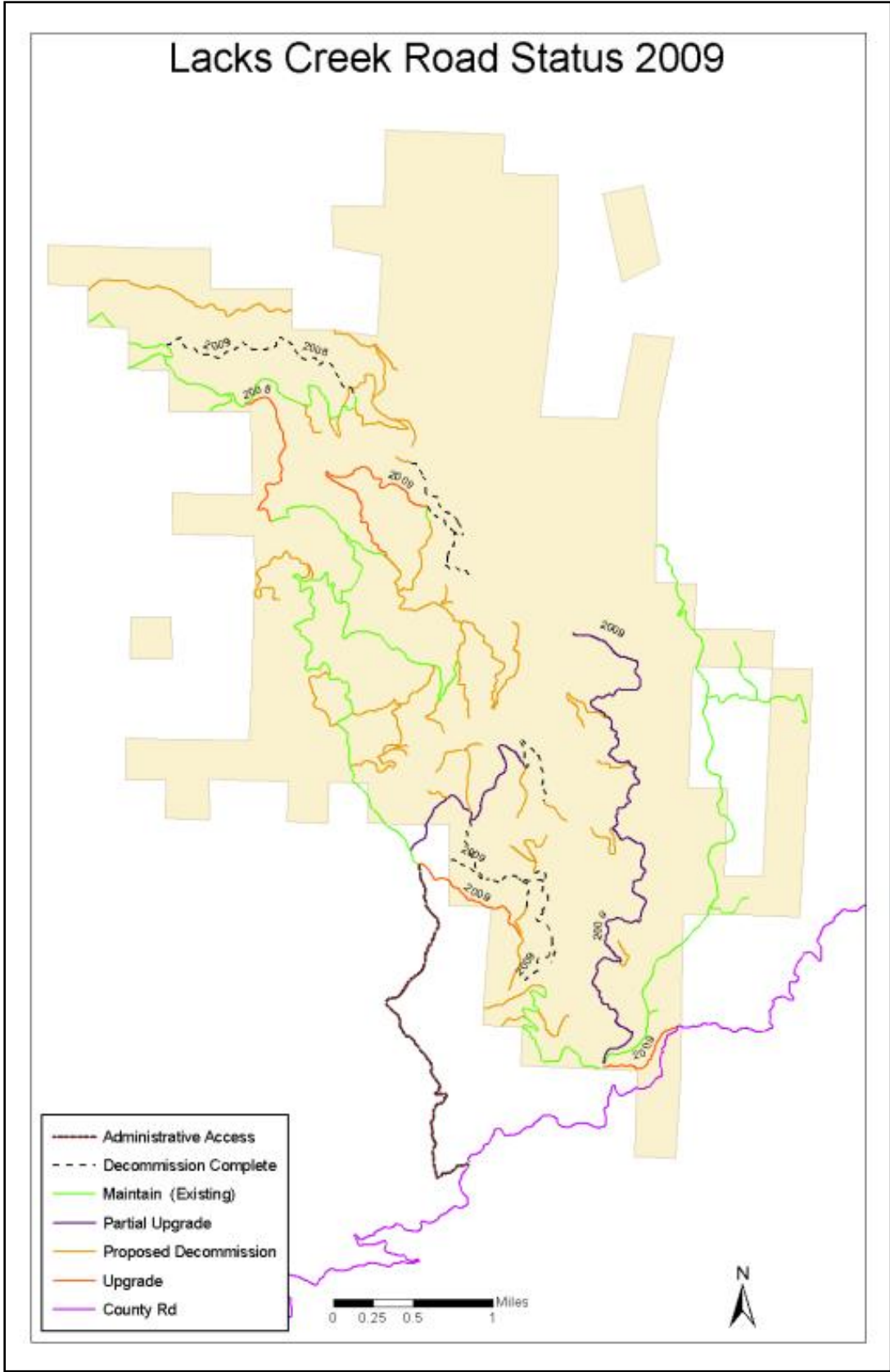


Figure 3: Map showing distribution and status of roads in LCMA.

Conformance with Land Use Plan

This EA is an update to the LCP, which fully conforms to the Arcata RMP (USDI BLM 1995). Specifically, Section III "Management Actions" on page 2–25 calls for Preparation of a watershed activity plan that includes:

- Silvicultural activities for previously entered stands for developing suitable habitat for late successional forest species where those conditions do not now exist.
- Cooperative management with Redwood National and State Parks to rehabilitate the Redwood Creek Watershed and ensure compliance with Public Law 95-250 and establishment of the Park Protection Zone.

Relationship to Statutes, Regulations or Other Plans

This document tiers off of the LCP which is in conformance with the Federal Land Policy and Management Act of 1976 and the National Environmental Policy Act (NEPA) of 1969.

Lacks Creek is identified as a Late Successional Reserve (LSR) land use allocation under the Northwest Forest Plan Record of Decision (USDI-USDA 1994), and the LCP objectives and actions must be implemented in a manner that is in conformance to the standards and guidelines of this plan.

This project is consistent with Standards and Guidelines for the Management of Habitat for Late-Successional and Old-Growth Forests Related Species within the Range of the Northern Spotted Owl as stated in the Northwest Forest Plan. The plan addresses the need for silvicultural activities as permitted in the western and eastern portions of the northern spotted owl's range west of the Cascades as follows: "Thinning (precommercial and commercial) may occur in stands up to 80 years old regardless of the origin of the stands" (USDI-USDA 1994).

The Redwood National and State Parks Expansion Act of 1978 (Public law 95-250) was enacted to protect the redwood resources within the park from damaging upstream activities within the watershed, and to establish a land-base to ensure protection of the resource, and to establish a park with more meaningful visitor opportunities. Within the area outside of, and immediately upstream from the park, a "Park Protection Zone" was established. Within this zone the Secretary of Interior is authorized to acquire lands to protect downstream park resources. The Lacks Creek watershed is within this zone. The act further directs that any lands acquired shall be managed in a manner that will protect park resources (USDI 2008).

Scoping and Issues

A scoping letter was sent out to local land owners, residents, and interested parties on July 2, 2009 detailing the proposed change. This letter generated one comment from a local resident in support of the proposed action. Refer to the LCP for scoping and issues under the initial LCP (Pages 124–127). Internal scoping by the BLM Interdisciplinary Team identified forest management, soils and geology, and terrestrial/T&E wildlife as

needing further analysis to determine potential impacts. These topics are further addressed in this EA.

2. Proposed Action and Alternatives

Proposed Action

The proposed action consists of the following adjustments to the LCP:

Eliminate the 16 inch DBH restriction and replace it with the Northwest Forest Plan standard for Late Successional Reserves (LSR) (no trees older than 80 years may be removed). Methods for establishing tree or stand age may include analysis of historic aerial photographs, use of geographic information systems (GIS), or the use of increment bores. This would allow for restoration of up to 200 acres of remnant prairies distributed across the watershed (up from 102 acres in the LCP). Oak woodland restoration area would increase from 253 acres up to approximately 350 acres (LCP pages 57–61). Acreage revisions are based on assessments conducted during initial project implementation.

Treatment options may include hand falling with chain saws, use of rubber-tired or tracked equipment, such as skidders, feller bunchers, harvester-forwarders, tractors, small cable yarders, sky lines, or similar equipment. Selection of harvest methods would be based on slope, access, and least potential for soil disturbance and damage to leave trees. Non-merchantable material would be either removed for biomass utilization or treated on site. Methods may include piling and burning, lop and scatter, use of tracked or rubber tired equipment for mastication and/or chippers. Girdling of trees for snag creation may also be used where removal is not practical. Long-term oak woodland and prairie maintenance would be the same as called for under the LCP (prescribed burning & mechanical treatments).

Reduce extreme fuel loading by removing excess merchantable trees as biomass and/or saw logs either by the contractor performing the restoration work or another willing local operator. The BLM would sell the biomass and/or merchantable logs and funds received would be placed into the BLM's Forest Health Fund for future forest health projects on public lands.

In summary, the decision to be made under this EA is to allow for updates to the LCP to include:

- The replacement of the 16 inch DBH diameter limit with the Northwest Forest Plan standards of an 80 year age limit for removal of trees that have encroached into prairie and oak woodland habitat types.
- An update of acreage estimates of these habitat types to more accurately reflect expected post-restoration figures.
- The option to remove and sell merchantable trees and/or biomass associated with excessive hazardous fuel loading within decommissioned road segments.

Alternative 1 (No Action)

Under the No Action Alternative, the parameters of the LCP would be followed as written in the relevant sections:

Prairies (pages 57–61)

Objective: Actively maintain prairies at 2005 distribution levels, and at a Fire Regime Condition Class 1 (see Appendix B-2). Prevent additional loss of prairie cover type to conifer encroachment in order to maintain a mosaic of habitat types for plants and wildlife. Restore prairies to levels beyond 2005 inventoried distribution levels where evidence of recent encroachment of conifers (dbh =12 inches) [(Increased to 16 inches in the attached Decision Record Page 2)] and presence of residual prairie species provide clear indicators of historic contiguous prairie. Maintain prairie type which represents a dominance of native perennial bunchgrasses and interstitial native herbs, with pockets of scattered and isolated white and black oaks within the prairie and along the periphery. The desired condition is that Douglas-fir/mixed-hardwood forest vegetation is absent to scarce within prairies.

Management Actions:

Remove conifer, tanoak and/or other forest vegetation encroachment within existing prairies (approximately 102 acres) through mechanical methods and prescribed fire. Conduct immediate mechanical removal of conifers that are shading white or black oaks at the boundaries of prairies.

Oak woodland restoration 253 acres

Implement oak woodland restoration treatments involving the removal of young Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*) -fir trees that have encroached into the white and black oak vegetation series. These oak habitats were historically maintained by a fire regime (Regime Class 1 as described in Appendix B-2) and are now being encroached upon by Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*) -fir. Without the mechanical removal of the conifers or the re-introduction of fire, this vegetation series would decrease in area, and in time, may be lost.

Road decommissioning (page 55–56)

Fisheries, Riparian and Water Quality Management

Objectives: The objectives for managing Lacks Creek include protection and restoration of watershed processes and habitat for native fish, fauna and riparian-dependent species.

Management Actions:

In addition, excavated woody material, brush, and other mulch materials would be placed on newly exposed bare soil surfaces to prevent surface erosion. If necessary, additional mulch materials such as weed-free straw may be used.

3. Affected Environment

Terrestrial Wildlife

The wildlife found in Lacks Creek includes forest adapted species such as black bears (*Ursus Americanus*), Douglas squirrel (*Tamiasciurus douglasii*), western grey squirrel (*Sciurus griseus*), spotted skunk (*Spilogale gracilis*) and non-forest obligated generalist species such as grey fox (*Urocyon cinereoargenteus*). Baited camera station surveys in 2000, 2001 and 2008 and 2009 indicate the area contains a healthy population of and are

regularly observed. Black-tail deer (*Odocoileus hemionus*) populations appears to be healthy based on camera station and casual observations. Roosevelt elk (*Cervus elaphus roosevelti*) are regular visitors to both sides of the Lacks Creek drainage. Deer and elk appear to utilize different the variety of available habitat types based on forage availability and other factors. In the summer of 2009, 120 trap nights in Faulkner Prairie resulted in the capture of deer mice (*Peromyscus maniculatus*) and California vole (*Microtus californicus*).

Avian species observed in the area include Stellar's jay (*Cyanocitta stellari*), California quail (*Callipepla californica*), ruffed grouse (*Bonansa umbellus*), turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), acorn woodpeckers (*Melanerpes formicivorous*), pileated woodpeckers (*Dryocopus pileatus*), northern flicker (*Colaptes auratus*), yellow-rumped warblers (*Denroica coronata*), varied thrush (*Ixoreus naevius*), American robin (*Turdus migratorius*), dark-eyed Oregon junco (*Junco hyemalis*), and a variety of sparrow species. A red-breasted sapsucker (*Sphyrapicus ruber*) was observed on one occasion in 2009. American dippers (*Cinclus mexicanus*) can also be observed in Lacks Creek and its tributaries. Flocks of band-tailed pigeons (*Columba fasciata*) are observed at the edges of clearings. White breasted nuthatches (*Sitta carolinensis*) can be observed at the wooded edges of prairies along with bushtit (*Psaltriparus minimus*), oak titmouse (*Baeolophus inoratus*), and Bewick's wren (*Thryomanes bewickii*). Brown creepers (*Certhia Americana*) can be observed in areas of larger trees. Chestnut-backed chickadees (*Poecile rufescens*) are found throughout the area.

Less frequently observed wildlife such as reptiles, amphibians, and invertebrates are also prevalent in much of the area. Rough-skinned newts (*Taricha granulose*), rubber boas (*Charina bottae*), and garter snakes (*Thamnophis spp.*) were among the species observed during the 2009 field season.

Threatened or Endangered Wildlife

The project area has potential habitat for marbled murrelets, (*Brachyramphus marmoratus*) (MAMU), and northern spotted owls, (*Strix caurina occidentalis*) (NSO). Lacks Creek is designated critical habitat for both species. MAMU have not been observed since 1999 while a NSO is regularly observed near the area. No breeding activity by NSO has been detected in the area.

Pacific fisher (*Martes pennanti pacifica*), a candidate species for protection under the Endangered Species Act, has been detected at locations throughout the LCMA. Baited camera stations have recorded fisher in second growth timbered areas and one location at the edge of a prairie.

Forest Management

All of the remaining prairies and oak woodlands on public land within the Lacks Creek watershed are under intense encroachment pressure by Douglas-fir and other forest hardwoods, such as tanoak, which shade out the grasses and both white and black oaks in the oak woodland vegetation series.

Soils and Geology

As described in detail in the LCP Chapter 2, two distinct sedimentary rock units underlie the Lacks Creek watershed and are responsible for the striking visual contrast between the east and west slopes. Both rock units, consisting of sandstone and shale, belong to the Franciscan Formation. The thickness of the rock layers, especially within the sandstones, and the relative abundance of shale layers appear to be overriding factors in soil development, slope stability, erosion potential, and vegetation types.

The east side of the watershed is dominated by the “Coherent Unit of Lacks Creek.” Thick, resistant sandstone layers form steep slopes, sharp ridge crests, and narrow V-shaped tributary canyons. Prairie areas along the eastern ridge top are an exception to this, as they are developed on localized occurrences of weaker rocks with deeper soils. Underlying much of the western portion of the watershed is the “Incoherent Unit of Coyote Creek”. The Incoherent Unit has a higher percentage of less resistant layers of shale and thinly bedded sandstone. The west side of the Lacks Creek watershed has gentler slopes with rolling topography, scattered prairies, and less developed drainages than the east side. Many of the prairies may be dormant earthflows that were active in the geologic past during wetter a climate.

The LCP Chapter 2 described specific soil types found throughout the watershed. Soils occurring in the prairies are developed on the weaker rocks and are very deep and clay rich with good water holding capacity. However, these areas are also highly susceptible to landslide mass wasting and gully erosion.

4. Environmental Effects – Direct, Indirect and Cumulative

Proposed Action

Direct and Indirect Effects

Project design features would be followed as outlined in Appendix 1 and the LCP (pages 83–87, 95, 97–99).

Terrestrial Wildlife

Enhancing the prairies and oak stands in the Lacks Creek drainage would benefit many wildlife species. The mature oaks surrounding the prairies provide an important food source for bears, deer, elk, acorn woodpeckers, and squirrel. The limited prairie habitat in Lacks creek is valuable to foraging raptors, voles, and other grazing species.

Mature oaks provide hollow cavities used by many species for shelter and rearing young. Without removing encroaching conifers, the oaks would eventually be shaded out. Conifers generally provide less food and shelter. Deer and elk are known to browse on Douglas-fir trees when other food sources become scarce. The removal of the Douglas-fir

in and around the prairies would have insignificant impact on the overall availability of Douglas-fir in the immediate and surrounding area because of the abundance of Douglas-firs in the surrounding area. Removing Douglas-firs would provide opportunity for other browse species such as salal (*Gaultheria shallon*) and huckleberry (*Vicinnium ovatum*) to expand. Deer and elk feed in the prairies when fresh shoots are available.

The project implementation would result in short-term disturbance to wildlife species in the area. Wildlife is expected to return to the treatment area soon after the project is completed. Trees large enough for use as raptor nest platforms would not be removed.

Threatened or Endangered Wildlife

The project would not remove trees of a size large enough for use as nest platforms by MAMU or NSO. Several years of protocol surveys have identified a single NSO near the project area. Nesting has not occurred recently and thus would not be impacted. The project areas, the edges of prairies and oak woodlands, are not considered primary habitat for NSO but may be used for intermittent foraging. There would be no impact to suitability for intermittent foraging activity. Due to the locations of the limited scope project area and the design standards, there would be no impact to NSO or MAMU resulting from this project.

Fisher would benefit from maintaining healthy oak trees to provide den sites and prairies to provide rodents to forage on.

Forest Management

The proposed action would arrest the encroachment of Douglas-fir and tanoak into the oak woodlands and the prairies and restore the pre-fire exclusion area and composition of both oak woodland and prairies in the LCMU. The proposed action is expected to have negligible impact on the area or composition of the Douglas-fir/tanoak vegetation series in the LCMU.

Soils and Geology

The effects are expected to be similar to those described in the LCP Chapter 4 (pg. 75). Where larger trees are removed from roads undergoing decommissioning, reshaping and stabilization of the former roadway would occur, reducing the long-term threat of sediment delivery but resulting in short-term generation and delivery of sediment where activities occur near streams (i.e., stream crossing removal sites). Up to 1 mile of road per year would be decommissioned that has the potential for denser, larger vegetation requiring removal. However, sufficient vegetation would remain on site as mulch to retard erosion from recently treated surfaces. Any damage to access roads during equipment access or hauling would be repaired. Thus, the incremental effect of removing larger trees from the road is expected to be negligible.

Removal of trees less than 80 years old in the prairies would result in a greater area being treated and subject to ground disturbance. Principal effects of the removal of the larger trees would be related to tree skidding and other equipment-related ground disturbances. Although many of the prairies may be large, dormant earthflows, equipment operations

and associated ground disturbance are not expected to influence the rates of movement. A principal mechanism for increased movement would be removal of sufficient vegetation to alter the water present in the hillslope. Removal of extensive swaths of vegetation has the potential to reduce evapotranspiration losses and increase the quantity of water in the hillslope. However, given the relatively small areas of treatment along the fringes of the landforms, compared to the overall size of the landform, any increases in groundwater are expected to be negligible and not exacerbate movement of the feature. Smaller scale features of instability such as slumping ground, tension cracks, bare scarps, and tilted trees would be avoided. Thus, the primary effect from removal of the larger trees during prairie treatments is expected to be overland flow and sediment transport from bare ground. Where ground disturbance occurs within riparian zones, mulch would be applied to cover the exposed ground and reduce the potential for sediment delivery. The disturbed areas are expected to revegetate within 1 to 2 years following treatment. Measures would be implemented along skid paths to ensure that any overland flow is not concentrated or diverted. Furthermore, few stream channels traverse the prairie areas proposed for additional treatment, and no equipment operations are proposed in stream channels. Any damage done to roads during equipment access and hauling would be repaired. Thus, the quantity of sediment delivery to channels from removal of trees less than 80 years old during prairie restoration efforts is expected to be negligible.

Cumulative Effects

For specifics regarding the Lacks Creek area refer to the LCP Chapter 4 (Pages 97–98, 102, 106–107, 109).

Terrestrial Wildlife

LCMA currently has multiple projects underway designed to enhance and restore habitat or to provide recreation opportunities. Portions of the area are undergoing forestry practices to accelerate growth of conifers by removing tan oak and thinning small conifers. Oak woodland and prairie restoration has been in progress for several years. This project is proposing removing larger encroaching conifers from oak woodlands. Some wildlife would benefit from both projects. Preserving oaks and their mast crop (acorns) would provide significant long term benefit to wildlife. The primary negative impact from the habitat and recreation work is short-term disturbance. Short-term disturbance would result from the equipment operating and human presence during project implementation.

Threatened or Endangered Wildlife

No nesting trees would be impacted by any action currently in progress or proposed at this time. Conifer enhancement work currently underway is expected to provide higher quality habitat for NSO sooner than if the area was left untreated.

Forest Management

The total amount of acres for both the grasslands and oak woodlands would increase approximately 195 acres, with the total acres of prairie being increased by 98 acres and the total acres of oak woodland increased by 97 acres. This increase in grassland/ oak woodland acres would have a negligible effect on the remaining Douglas-fir/tanoak forest

acres because the acres being restored were historically prairie and oak woodland. More than 90 percent of the vegetation in Lacks Creek would still be in the Douglas-fir/tanoak vegetation series.

Soils and Geology

Road decommissioning efforts along segments with larger trees would contribute to sediment reduction efforts implemented throughout the Lacks Creek watershed as well as the larger Redwood Creek watershed, an area of extensive sediment reduction efforts in previous decades. Where treatments occur adjacent to stream channels, small amounts of sediment may be delivered. However, previous experience in the watershed also demonstrates that treatment of these segments can eliminate extensive gully networks that are ongoing and chronic sources of sediment to the watershed. Thus, treatment of road segments with larger trees is expected to reduce sediment inputs to the channel network.

Where trees less than 80 years old are removed from prairies, localized sediment generation is expected to occur. This sediment is not expected to deliver to stream channels given the distances of channels from treatment areas. Any sediment transport that occurs would likely be confined to near the area of disturbance and these disturbed areas are expected to revegetate within 1 to 2 years following treatment.

Alternative 1 (No Action)

Terrestrial Wildlife

The no action alternative would lead to the continued shrinking and eventual loss of prairie and oak woodland. The loss of oak woodland would decrease the mast crop and potentially some den sites over time. Tan oak is abundant in the area and would continue to produce mast of varying quality and quantity each year. The no action alternative would also result in the loss of prairie habitat. The loss of oak woodland and prairie would diminish the diversity of forage options in the area.

Threatened or Endangered Wildlife

The no action alternative would have minimal impact on NSO or MAMU. All potential nesting trees would remain intact under this alternative.

Forest Management

With this alternative the encroachment of Douglas-fir and tanoak into the grassland/oak woodland prairies would continue and both the white and black oaks would be shaded out. All of the remaining oak woodlands and prairies are under encroachment pressure by conifers and other forest hardwoods, such as tanoak, which shade out grasses and the white and black oaks. Without management intervention it is likely that the majority of the existing oak woodlands and prairies would be lost.

Soils and Geology

Under this alternative, no ground disturbance would occur as a result of removing trees less than 80 years old from prairie restoration areas. These areas would not be restored to

prairie conditions. Where larger trees are present along roads, decommissioning would not occur and abandoned road segments would persist as chronic sediment sources through landslides, diverted stream channels and failed stream crossings.

5.0 Tribes, Individuals, Organizations and Agencies Consulted

Refer to the LCP Chapter 5 (Pages124–127) for initial scoping comments and description of scoping process that occurred under the LCP.

A request for comments letter that described the proposed action was sent to local land owners, residents, and interested parties on July 2, 2009.

Internal scoping conducted within Arcata Field Office February 24, 2010.

List of Preparers

<u>Name / Title</u>	<u>Date</u>
<u>Original Signed by</u> Jessie Irwin / Wildlife Biologist	<u>4/23/2010</u>
<u>Original Signed by</u> Henry Harrison / Forester	<u>4/22/2010</u>
<u>Original Signed by</u> Sam Flannagan / Geologist	<u>4/26/2010</u>

6.0 References

U.S. Department of the Interior Bureau of Land Management. 1995. *Record of Decision, Arcata Resource Area Resource Management Plan (as amended)*. Record of Decision, Environmental Impact Statement, Arcata, CA.

U.S. Department of the Interior Bureau of Land Management. 2008. *Record of Decision, Lacks Creek Management Area Management Plan*. Record of Decision, Environmental Assessment, Arcata, CA.

U.S. Department of Agriculture Forest Service and U.S. Department of the Interior Bureau of Land Management 1994. Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.

U.S. Department of Agriculture and U.S. Department of Interior Bureau of Land Management. 1994. Final Supplemental Environmental Impact Statement on Management of Habitat for Late-successional and Old-growth related Species within the range of the Northern Spotted Owl. Portland, OR.

Appendix 1. Design Features

(Supplemental to design features outlined in LCP)

- 1 All equipment operations would cease if soil moisture is sufficient to result in visible rutting or spinning tires on wet ground, or if operations result in a visible increase in turbidity within any receiving watercourses.
- 2 The BLM representative overseeing the project would make the determination to halt equipment operations or avoid areas based on on-site observations of soil conditions and potential instability. Evidence of recent instability includes, but is not limited to, slumping ground, tension cracks, bare scarps, and tilted trees.
- 3 Ground disturbances that have the potential to concentrate or divert runoff would be repaired through use of appropriate techniques including water bars, slash piling, and reshaping.
- 4 Significant damage caused to access roads (e.g., flattened water bars, debris plugging ditches) would be repaired prior to completion of activities.
- 5 Heavy equipment and vehicles contracted to conduct project activities would be inspected and cleaned of any reproductive plant parts prior to entry on BLM lands.
- 6 Equipment shall be inspected for leaks, frayed hoses, or loose hydraulic connectors. Equipment that may leak lubricants or fuels into drainages shall not be used until leaks are repaired. Re-fueling shall be done outside of Riparian Reserves and stream crossings.