BUCK MOUNTAIN ROAD
ENVIRONMENTAL ASSESSMENT
#DOI-BLM-OR-L014-2012-002-EA

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAKEVIEW DISTRICT - Klamath Falls Resource Area

ABSTRACT: The following Environmental Assessment addresses the environmental effects associated with building an additional ¼ mile of road onto an existing closed road to allow for removal of harvested material originally analyzed under the Cold Onion Forest Health Treatments Environmental Assessment (EA #OR-014-08-01).

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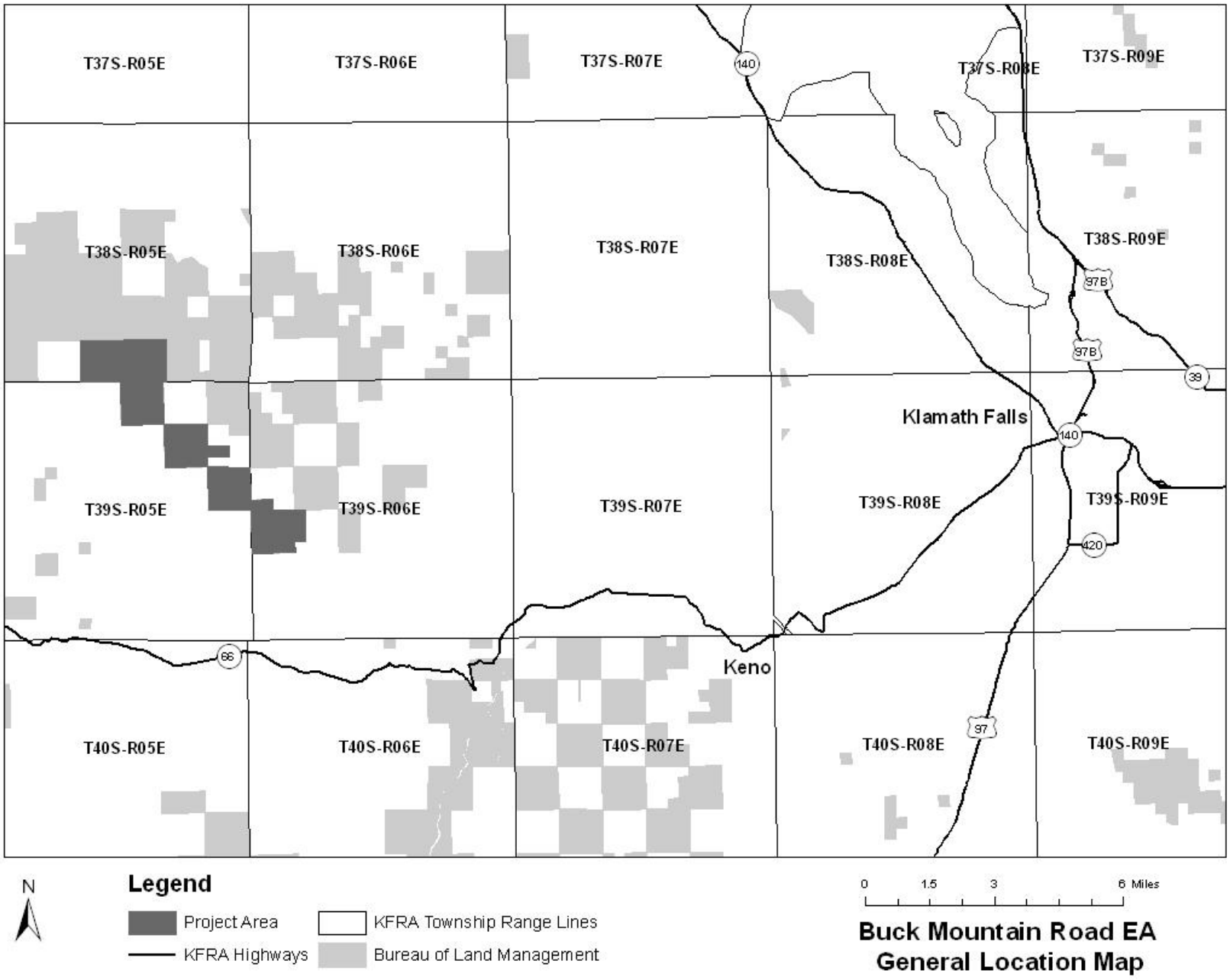
FREEDOM OF INFORMATION ACT AND RESPONDENT'S PERSONAL PRIVACY INTERESTS:
The Bureau of Land Management is soliciting comments on this Environmental Assessment. Comments, including names and street addresses of respondents, will be available for public review at the above address during regular business hours. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

Table of Contents

List of Tables

List of Figures

Figure 1 – General Location Map of the Project Area



CHAPTER 1 - INTRODUCTION

The Buck Mountain Road Environmental Assessment (EA) will tier to the Cold Onion Forest Health Treatments (EA) # OR-014-08-01and analyze the same project area. The only proposed action in the Buck Mountain Road EA is within the analysis area analyzed in the Cold Onion EA (see Figure 1). The Cold Onion EA analyzed the effects of proposed vegetation treatments and other management actions in and adjacent to the Cold Onion project area on BLM lands.

Proposed Action

The following activity is included in the Proposed Action:

Road construction – Approximately one-quarter mile of permanent road will be added to the end of road 39-6E-19. This road is currently closed by a metal barricade and will be reclosed with a barricade following harvest operations.

Location

The proposed Project area is located north of State Highway 66 and west of the town of Keno (refer to Table 1 and the General Location Map). All treatments proposed in this environmental assessment would occur exclusively on BLM-administered lands within the Klamath Falls Resource Area.

Table 1: Location of BLM-administered Lands within the Analysis Area

Proposed Treatment Area	Location		
	Township	Range	Section
Buck Mountain Road	39S	6E	19

RMP Objectives

Purpose for Action

To build a road in order to allow for the harvest of Buck Mountain plantation to meet the objectives of the RMP and EA #OR-014-08-01. The decision for this harvesting action is described in Decision Record #2 .

Need for Action

Allow economically feasible and permanent ground based logging access for the area west of existing road 39-6E-19.54 in the northwestern corner of section T39S, R6E, Sec 19.

Desired Future Condition

For Matrix forest stands, the RMP explains in detail the desired future condition and objectives of forested stands in the Matrix (See page 22 and pages E-8 to E-11). In general, the desired future condition of the Matrix forest landscape is a healthy, diverse, and productive forest that is resilient to natural disturbances (disease, drought, insects, and fire).

Page E-9 of the RMP discusses target stand, uneven-aged management conditions that over time would trend towards a forest composed of stands containing a variety of structure, trees of varying sizes and ages, and stands with an assortment of canopy configurations. Desired Species Composition (by percent conifer basal area), shown on Table E-1 of the RMP, is designed to improve stand resiliency. The Cold Onion Forest Health Treatments silvicultural prescription was developed to meet these desired future conditions.

Environmental Analysis and Decision Process

An interdisciplinary evaluation of the resources in the analysis area including wildlife, recreation, soils, fisheries, timber, cultural, hydrology, as well as other resources is documented in the previous Cold Onion EA environmental assessment .

The purpose of this EA is to assess the effects of the proposed action and to determine if the environmental effects associated with the proposed road construction are significant and/or greater than those already analyzed in the previous KFRA RMP EIS. If the effects are not significant or greater than analyzed in the KFRA RMP EIS, a Finding of No Significant Impact (FONSI) would be documented upon the completion of the analysis. In addition to providing analysis to determine whether or not an environmental impact statement is necessary, this EA will provide the public with information about the proposed action, describe the alternatives and the associated effects with each alternative, and disclose the effects to assist the decision maker in selecting an alternative.

The KFRA Field Manager, as the responsible official, will decide whether or not to implement the Proposed Action and determine whether or not the proposed action is consistent with the RMP as well as other laws and regulations (i.e., the Endangered Species Act and Clean Water Act, etc.). The proposed project would span an approximate five year period. Information obtained from biological surveys and consultation is included in the EA and will also be incorporated in the final Decision Records for this EA.

Public Input Summary and Issue Development

A scoping letter dated October 15, 2007 for the Cold Onion Forest Health Treatment EA was sent to the resource area timber sale EA mailing list of approximately 110 people. The letter explained the project proposal and asked the general public for comments. The resource area received comments from four individuals / organizations. The issues and concerns raised were considered in formulation of alternatives (Chapter 2), analysis of the alternatives (Chapter 3) and development of mitigation measures. Relevant issue statements are addressed in the Cold Onion Forest Health Treatment EA.

A scoping letter dated February 17, 2012 for the Buck Mountain Road EA was sent to interested parties and parties who commented on the Cold Onion Forest Health Treatment EA. No additional comments were received.

Management Direction and Conformance with Existing Plans

This Environmental Assessment (EA) is tiered to the Final - Klamath Falls Resource Area Resource Management Plan and Environmental Impact Statement, September 1994 (KFRA RMP EIS). The proposed actions are consistent with the management direction and guidance in the 1995 Record of Decision and Resource Management Plan (ROD/RMP) for the Klamath Falls Resource Area. The project design and recommendations for implementation are contained in the ROD/RMP and a number of other supporting documents including:

- Klamath Falls Resource Area Integrated Weed Control Plan EA (July 21, 1993).
- Range Reform FEIS (August 1995).
- Final Environmental Impact Statement, Vegetation Treatment on BLM Lands in Thirteen Western States (1991).
- 2004 Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Range of the Northern Spotted Owl – Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy.
- The Jenny Creek Watershed Analysis - Completed in October of 1994 - provides both historic and current information on the different resources in the watershed and also provides a number of recommendations for resource protection and restoration opportunities.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

Proposed Action

The Proposed Action is designed to meet the purpose and need of the EA by constructing an extension to an existing road to allow access to the Buck Mountain plantation (see Figure 2) analyzed in the Cold Onion EA #OR-014-08-01. The decision to thin and yard this plantation unit was made in Decision Record (DR) #2 to the Cold Onion EA.

Upon reviewing the harvesting plan with the contractor it was determined that access issues require that an existing road be extended by ¼ mile to allow approximately 50 acres of the plantation area to be harvested. Approximately 50 acres of the 30 year old plantation is located west of road 39-6E-19.54 in the NW ¼ of section 19. This area west of the road is downhill and would require yarding uphill to remove cut material. This would be difficult in general; however it is made more difficult by windrows of loosely packed rocks and soil that follow the contours of the unit. These would make operating machinery dangerous and could cause excessive soil impacts. In order to harvest and remove the material an additional ¼ mile of road would need to be built from the end of an existing road to reduce yarding distances for the harvested material. This information was not available when the Cold Onion EA was analyzed.

The additional ¼ mile would be added on to the end of road 39-6E-19 (see Map 3). This road is currently closed with a metal barricade and would be closed with a barricade and storm-proofed following harvesting operations. In order to complete the ¼ mile of road, trees will be cut within the proposed road right-of-way approximately 200 feet outside of the plantation harvest unit described in Decision Record (DR) #2 to the Cold Onion EA.

No Action Alternative

No new road construction would occur. The analysis of this alternative was covered in the Cold Onion EA and therefore will not be addressed in further detail in this EA.

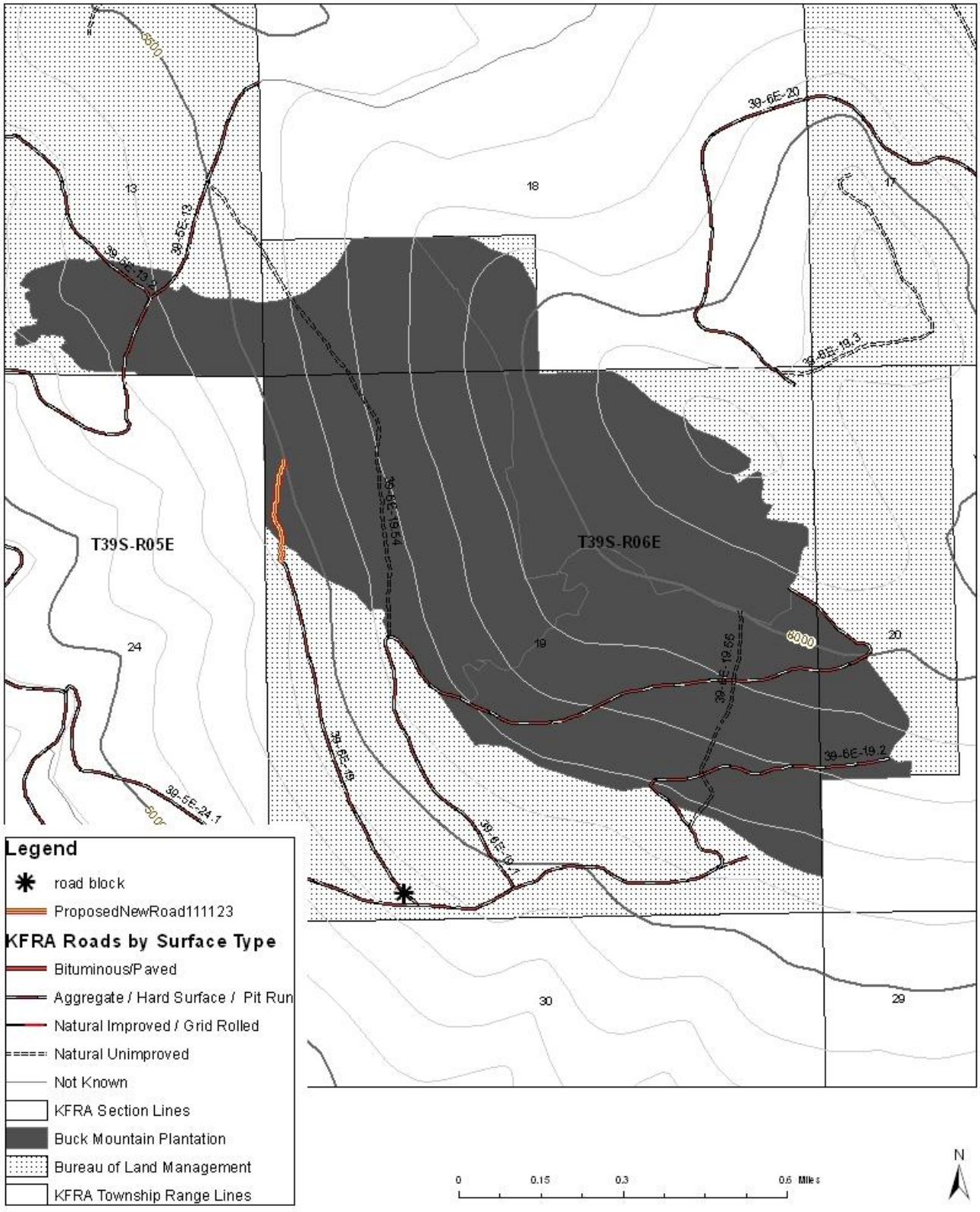
Other Alternatives Considered But Not Analyzed in Detail

Construct Temporary Road

The ID team considered construction of a temporary road to allow for utilization of the portion of the unit that is downhill from the existing 39-6E-19.54 road. A temporary road would be constructed to similar minimal specifications as a permanent road and obliterated after thinning, yarding and hauling were completed. The plantation being thinned is currently managed to support sustained yield forest harvests for the foreseeable future. The IDT determined that road access to this portion of the project would be needed in the future and a temporary road would need to be rebuilt for the same access reasons.

The need for a road to allow logging of the NW¼ of Sec 19 is permanent. Therefore the costs and recurring impacts of constructing a temporary road, obliterating it and then building again for the next entry were not acceptable.

Figure 2 – Map of proposed road construction



CHAPTER 3 – AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

Introduction

This chapter summarizes the physical, biological, and socioeconomic environment of the Buck Mountain Road EA project area and the consequences of the proposed actions. As this project area was previously covered under the Cold Onion EA, all general affected environment information, environmental consequences, and cumulative actions not resulting from the specific action described in this EA can be found in the Cold Onion EA. A detailed discussion on the affected environment and environmental consequences can also be found in the Klamath Falls Resource Area Record of Decision and RMP, and the Klamath Falls Resource Area RMP and FEIS (pages 3-3 to 3-79) and the Jenny Creek Watershed Analysis (pg 5 - 112). The analysis supporting this decision tiers to the analysis in the Final - Klamath Falls Resource Area Resource Management Plan and Environmental Impact Statement, September 1994 (KFRA RMP EIS).

Resource values that are either not present in the project area, or would not be affected by any of the proposed alternatives are: floodplains, wilderness study areas (WSAs), areas of critical environmental concern (ACECs), research natural areas (RNAs), paleontological resources, prime or unique farmlands, wild and scenic rivers, lands, air quality, and minerals. There are no known hazardous waste sites in the analysis area. Minority and low income populations are considered. The RMP does not identify any energy sources in the vicinity.

Project/Analysis Area

The Project Area for this analysis is the same as the Cold Onion EA to allow for tiering.

Design of This Chapter

This Chapter is designed to first describe the affected environment and environmental consequences of the proposed action that would occur in addition to what was analyzed in the Cold Onion EA. If no additional impacts are likely to occur beyond what was analyzed in the Cold Onion EA then the analysis may tier directly to the Cold Onion EA. Cumulative effects may be tiered directly to the Cold onion EA unless the proposed action is likely to cause additional cumulative effects.

All environmental consequences and cumulative effects of the no action alternative were analyzed under the Cold Onion Forest Health Treatment EA and will not be discussed further.

Vegetation - Affected Environment

The Buck Mountain plantation unit that would be affected by the proposed treatment is overstocked and in need of treatment. Approximately 50 acres of the 30 year old plantation is located west of road 39-6E-19.54. If the road is not built, this area will not be thinned.

Vegetation - Environmental Consequences

Proposed Action

The plantation would be thinned to a density that would promote growth and be underplanted with fir in order to promote the formation of a multi-storied and multi-species stand. This treatment would mitigate for density dependent mortality as well as additional insect and fuels concerns. A lack of treatment would leave the area overly dense and at a greater risk of attack by western pine beetle which respond to high stand densities and kill these trees during drought periods (Maffei, et al, 2012). In addition leaving a plantation at such a high density with no future plans to thin it can only increase the risk of wildland fire.

Cumulative Effects of Proposed Action

All cumulative effects of the proposed action on vegetation were analyzed in the Cold Onion EA.

Terrestrial Wildlife Species – Affected Environment/ Environmental Consequences

Proposed Action

The special status species described in the Cold Onion Forest Health EA are associated with mature forest stands and not associated with pine plantation habitat and therefore would not be found in this habitat type. Based on this assumption, there would be no additional impacts from this proposed action to special status species than those impacts already assessed in the Cold Onion Forest Health EA.

Cumulative Effects of Proposed Action

All cumulative effect of the proposed action on terrestrial wildlife species were analyzed in the Cold Onion EA.

Soils - Affected Environment

The NRCS mapped the plantation area as the Woodcock-Pokegama soils of map unit 205, as described in the Cold Onion EA. Soils in the area identified for new road construction exhibit an abundance of surface organic matter, subsurface root stabilization, and high rock content. The area of the proposed road extension was windrowed at some time in the past and densely planted (6-10 feet apart) with ponderosa pine. Slopes are 10 to 15%.

Soils - Environmental Consequences

Proposed Action

Potential soil impacts resulting from density thinning were analyzed in the Cold Onion EA. Implementation of the Proposed Action is expected to result in an additional one-half to one acre of soil disturbance not analyzed previously. A loss of topsoil and compaction would occur initially, with a potential for erosion over time. With implementation of the proposal, it is expected that RMP objectives for soil resource protection would be met, and impacts to the soil resource would remain below RMP threshold limits. Due to favorable soils and site conditions, the Proposed Action would result in negligible localized effects on the soil resource.

Cumulative Effects of Proposed Action

Although additional adverse effects from road construction would occur, the cumulative effects are expected be negligible because the proposed action impacts a very small area. Once the project is completed the new road would then be blocked.

The adverse influence of past harvest treatments and windrowing would continue to diminish over time. Soil productivity in these historically disturbed areas would continue to improve, as evidenced by the retention of small woody material, and the abundance of vegetative cover and surface organic matter.

Transportation - Affected Environment

Current road densities on BLM land in the density management project area are approximately 4.3 miles (1.9 miles of open roads) of BLM road per square mile (Cold Onion EA: Table 15). The RMP objective is to reduce road density to 1.5 miles per square miles. Access on roads within the analysis area is typically limited during the winter months due to snow depths. Current road locations do not allow for access to a portion of the Buck Mountain plantation.

Transportation - Environmental Consequences

Proposed Action

As shown in Cold Onion EA: Table 15, there would be a small net increase in road density in the project area due to projects analyzed under the Cold Onion EA. This project would add another ¼ mile to that figure.

See Appendix B for Project Design Features for the proposed action

Cumulative Effects of Proposed Action

The KFRA continues to strive to reduce open road density and environmental effects associated with roads and road use during implementation of projects. The RMP road density objective goal is approximately 1.5 miles of road per square mile. However, the combination of BLM and private checkerboard ownership and subsequent access agreements with adjacent landowners reduces BLM's flexibility to reduce road densities. At the watershed level, the Proposed Action would result in a minimal increase in road density

Hydrology - Affected Environment

The road extension project is located in the Jenny Creek 5th Field Watershed (10 digit hydrologic Unit) in the Upper Klamath River Sub-basin. The drainage density of this area is approximately 1.5 miles of stream per square mile on BLM, This project however, does not propose any stream crossings. Direction from the RMP ROD for Key Watersheds includes reducing road mileage and a no net increase in road mileage.

Hydrology-Environmental Consequences

Proposed Action

No adverse impacts to hydrology would be expected from this road extension because road related BMPs would be followed in the construction, closing, and storm-proofing of the road following the timber sale. The proposed road does not cross any streams and therefore has no sediment delivery potential. The increase in Equivalent Clear-cut Area (ECA) due to conversion to road surface is inconsequential and would not have project level, catchment, or watershed level effects. Although there would be additional miles of the roads in the watershed, (less than 0.25), 0.7 miles of additional road would be obliterated, thus road density per square mile would be decreased in the watershed.

Cumulative Effects of Proposed Action

No cumulative effects are anticipated since the action is inconsequential for hydrologic effects.

Grazing Management - Affected Environment

The proposed treatment areas are within small portions of the Buck Lake (#0104) and Buck Mountain (#0103) livestock grazing allotments. Cattle grazing is permitted within the proposed treatment areas, though most of the treatment areas receive little if any grazing due to steep slopes, thick timber, and/or limited herbaceous growth. A complete description of the grazing activities in these allotments, including current use levels, historical use, allotment boundaries, etc. is found in the Topsy-Pokegama Landscape Analysis, July 1996 (Buck Mountain allotment)and the Spencer Creek Pilot Watershed Analysis, August 1995 (Buck Lake allotment). In addition, Rangeland Health Standards Assessments were completed in 2000 for both grazing allotments; these assessments may also be referenced for more information on livestock grazing. Additional information is found in the KFRA RMP/FEIS, KFRA ROD/RMP and Rangeland Program Summary.

Grazing Management - Environmental Consequences

Proposed Action

Harvesting activities as described in the proposed action would have a small, mid-term (2 to 10 years) positive effect on livestock grazing due to an increase of palatable, herbaceous plant species that would be more abundant once some of the over story trees are removed. There could be a short-term (1 to 2 years) negative effect on forage amounts due to the ground disturbing impacts of the timber harvesting machinery. Observations of the grazing use in the proposed activity area by BLM range personnel have indicated that cattle make little use of the majority of these BLM administered lands. Most of the grazing use in the area is made on the lower elevation lands to the north and west. The lands to the west are predominantly privately owned and leased for cattle grazing by JWTR. The lands to the north are a mix of BLM and private lands.

A much more detailed description of potential impacts, including the cause and effect relationships between grazing, timber harvest activities, vegetation community structure, and forage production is found within the Rangeland Health Standards Assessments for both grazing allotments (Buck Lake & Buck Mountain), the July

1996 Topsy-Pokegama Landscape Analysis, and the Spencer Creek Pilot Watershed Analysis, August 1995. Additional information is also found in the Klamath Falls Resource Area Resource Management Plan/EIS, Record of Decision, and Rangeland Program Summary.

Cumulative Effects of Proposed Action
Cumulative effects in the short term (less than two years), include a slight decrease in available forage for livestock. The long-term cumulative effects of vegetation treatments in the area would be to improve ecological condition and provide an increase in palatable herbaceous plant species, especially in overstocked areas with little understory now.

Cultural Resources – Affected Environment

Native American use of the area spans a millennia. The area is within the larger territory ceded to the United State in 1864 by the Klamath Tribes. Along with the Klamath and Modoc, Shasta and Tekelma peoples likely utilized this area. The Klamath River Canyon, to the southeast of the project boundary, is extremely rich in archaeological and historical resources and presumably served as one corridor for entry into the analysis area by both prehistoric and historic inhabitants. To date, archaeological and ethnographic research has demonstrated a significant and apparently year-round use of the Klamath River Canyon by prehistoric groups.

Historically (post 1864), after the establishment of the Applegate Trail, the project vicinity was used primarily for logging and ranching. Logging began in the 1860s with a few small enterprising sawmills. The industry boomed in the early twentieth century in and around the project area after the introduction of railroads on Pokegama Plateau. Weyerhaeuser arrived in 1923 and began constructing logging roads. Early historic towns and mills in the region include Snow, Pokegama, and Dixie. This region was also crossed by numerous early important travel routes such as the Applegate Trail. Today logging and ranching continue to be significant in the area.

Additional information about cultural resources in the area can be found in various overviews of the history and prehistory of the region (Beckham 2005, Follansbee and Pollack 1978, Mack 1991, and Spier 1930).

Cultural Resources – Environmental Consequences

Proposed Action
Portions of Section 19 have been surveyed for cultural resources utilizing BLM Class III survey methods, minus the area which is comprised of a large brush field. The proposed 0.25 miles of road construction falls within this brush field. Because no archaeological sites have been located in the vicinity of this area that have had cultural survey, the project lead will notify the KFRA Lead Archaeologist when slash busting activities have occurred. At this time, KFRA archaeology will visit the location as to better assess ground conditions when they are made more visible for cultural remains prior to construction of the road.

Cumulative Effects of Proposed Action
The cumulative effects are expected be negligible because the proposed action impacts a very small area and the project area is believed to have a low site density due to past cultural survey results, as well as the heavy land disturbance of the historic land use of this area.

Recreation Resources - Affected Environment

Because the existing road is closed to public vehicular access, this portion of the analysis area provides opportunities for dispersed recreation such as hunting, fishing, and camping,

Recreation Resources - Environmental Consequences

Proposed Action
Although this ¼ (0.25) additional miles of roads would be available for non-motorized use, recreationists would not realize any real increase in opportunities or setting.

Cumulative Effects of Proposed Action
Cumulative effects from the proposed action are expected to be negligible.

Visual Resources - Affected Environment

All of the BLM lands within the proposed treatment area are within the VRM Class III area. Management objectives for VRM Class III are to manage for moderate levels of change to the characteristic landscape. Management activities may attract attention but should not dominate the view of the casual observer. For additional information about scenic resources in the analysis area, refer to the Klamath Falls RMP/ROD pp 43-44 and RMP maps 2-5.

Visual Resources - Environmental Consequences

Proposed Action

Proposed road construction would remove trees and create a short road template . The proposed road addition is behind a closed gate and not visible from any open road or similar public viewing points. The addition of this road mileage (0.25 miles) in context to the road density of the project area, (4.3 miles of road per square mile) is not expected to cause negative impacts to the visual resource.

Cumulative Effects of Proposed Action
Cumulative effects from the proposed action are expected to be negligible, except in the event of a large scale wildfire which could drastically alter visual resources.

Climate Change - Affected Environment /Environmental Consequences

The affected environments and Environmental Consequences of the climate change as a result of the proposed action are not expected to vary measurably from what was analyzed in the Cold Onion EA.

Cumulative Effects of Proposed Action
The cumulative effects of the proposed action on climate change are not expected to vary measurably from what was analyzed in the Cold Onion EA.

Socioeconomics – Affected Environment/Environmental Consequences

The affected environments and environmental consequences of the socioeconomic situation as a result of the proposed action are not expected to vary from what was analyzed in the Cold Onion EA.

Cumulative Effects of Proposed Action
The cumulative effects of the proposed action on socioeconomics are not expected to vary measurably from what was analyzed in the Cold Onion EA.

CHAPTER 4 – CONSULTATION

Endangered Species Act (ESA) Consultation

Consultation with the U.S. Fish and Wildlife Service (FWS) as required under Section 7 of the Endangered Species Act (as amended 1973) was completed for the Cold Onion Forest Health Treatments EA including the approximately 560 acres of plantation treatments. The BLM made a "Likely to Adversely Affect" determination for the Northern Spotted Owl due to the downgrading of suitable habitat to dispersal habitat within two spotted owl territories as a result of the proposed timber sales under this EA. The FWS concurred with this determination and issued a Biological Opinion (8-10-09-08F0009) on August 12, 2009. The Service has determined that the proposed actions under the Cold Onion Forest Health Treatments EA will not jeopardize the continued existence of the northern spotted owl. A "No Effect" determination was made for all other listed species and designated critical habitat.

The Buck Mountain plantation thinning treatments described and the proposed road construction are not within any known spotted owl territories. The ¼ mile of proposed road construction would occur within habitat classified as spotted owl dispersal habitat and the proposed road construction and plantation thinning would not change that classification or the determinations made by the BLM for the actions consulted on under the Cold Onion EA. The proposed road construction is outside of the 2012 Proposed Critical Habitat for the spotted owl.

The BLM notified the FWS about the proposed road building needed to complete the plantation thinning. On May 21, 2012 the FWS agreed that the proposed road would not trigger re-initiation and the Cold Onion Forests Health Biological Opinion (8-10-09-08F0009) would meet our Section 7 consultation requirements.

Cultural Resources Consultation

Perry Chocktoot, Director of Culture and Heritage for The Klamath Tribes, was consulted on this project at the KFRA bi-annual tribal consultation meeting on December 14, 2007.

CHAPTER 5 – LIST OF PREPARERS

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APPENDIX A– LITERATURE CITED

Maffei, H., A. Eglitis, and M.L. Simpson 2012. Pest Risk Assessment for Stands Managed for the Northern Spotted Owl, Bureau of Land Management – Lakeview District, Klamath Falls Resource Area 2012. USDA FS, Central Oregon Service Center for Insects and Diseases.

APPENDIX B – APPLICABLE BEST MANAGEMENT PRACTICES AND PROJECT DESIGN FEATURES

Road construction, stormproofing, and closure BMPs

- Road construction would be limited to the dry season (generally between May 15 and October 15).
- Manage road construction so that any construction can be completed and bare soil can be protected and stabilized prior to fall rains.
- While constructing the pioneer road, avoid deposition of materials outside the designated roadway limits.
- Outslope final road for proper drainage.
- Construct embankments using compaction equipment.
- After use, road will be closed to vehicle traffic.

BMPs To Reduce Sediment Delivery from BLM Roads

In 2011, the Klamath Falls Resource Area RMP (1995) was maintained to update Best Management Practices to reduce sediment delivery from BLM roads in Oregon as per Instruction Memorandum No. OR-2011-074. The complete updated list of Western Oregon Road BMPs can be viewed on the BLM website at: http://www.blm.gov/or/districts/lakeview/plans/files/BMPPlanMaintMemo1995_120109.pdf

APPENDIX C – MAPS

Map 1 – Road Management in Cold Onion Analysis