

**Revised Green Peak II Density Management
Environmental Assessment and
Finding of No Additional Significant Impact**

Environmental Assessment Number OR-080-08-14

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United States Department of the Interior
Bureau of Land Management
Oregon State Office
Salem District
Marys Peak Resource Area

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Abstract: This revised EA (Environmental Assessment) discloses the predicted environmental effects of one project on federal land located in Township 14 South, Range 6 West, Section 7, Willamette Meridian and within the Benton Foothills and South Fork Alsea Watershed Analysis Areas.

Revised Green Peak II Density Management is a proposal to increase structural diversity and implement the BLM (Bureau of Land Management) DMS (Density Management and Riparian Buffer Study). Forest stands on approximately 131 acres would undergo additional density management thinning treatments within the 248 acres study area.

The actions would occur within Late Successional Reserve (LSR) and Riparian Reserve (RR) LUAs (Land Use Allocations).

As the Nation's principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/AE-10/018+1792

FINDING OF NO ADDITIONAL SIGNIFICANT IMPACT

Introduction

The Bureau of Land Management (BLM) published the *Green Peak II Density Management* (EA) (EA# OR080-08-14) in March of 2008). Comments received on the EA were reviewed and as a result, the BLM revised the *Green Peak II Density Management EA*. The *Revised Green Peak II Density Management EA* is attached to and incorporated by reference in this Finding of No Additional Significant Impact determination (FONASI). The analysis in this revised EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS).

The proposed density management thinning activities have been designed to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (*EA Section 1.3*). Consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service is described in Section 7.1 of the revised EA.

This project is on BLM-managed lands in Township 14 South, Range 6, Section 7, Willamette Meridian in Benton County, Oregon. The proposed action is to implement density management thinning on approximately 131 acres of 70 year-old stands. The proposal would increase structural diversity and implement treatments for research purposes as part of the BLM DMS (Density Management and Riparian Buffer Study) in RR (Riparian Reserve) and LSR (Late Successional Reserve) LUA (Land Use Allocations).

The revised EA and FONASI was made available for public review from February 17, 2010 to March 6, 2010. The notice for public comment was published in a legal notice in the *Gazette Times* newspaper. Written comments were addressed to Trish Wilson, Field Manager, Marys Peak Resource Area, 1717 Fabry Road S., Salem, Oregon 97306. Emailed comments were sent to OR_Salem_Mail@blm.gov. Attention: Trish Wilson.

Finding of No Significant Impact

Based upon review of the Revised Green Peak II EA and supporting documents, I have determined the proposed action is not a major federal action and would not significantly affect the quality of the human environment, (individually or cumulatively) with other actions in the general area. No site-specific environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, supplemental or additional information to the analysis done in the RMP/FEIS through a new environmental impact statement is not needed. The finding is based on the following information:

Context: Potential effects resulting from the implementation of the proposed action was analyzed within the context of the Marys River and Upper Alsea River Watersheds and the project area boundaries. The proposed actions would occur on approximately 131 acres of BLM LSR and RR LUAs, encompassing less than 0.1 percent of the forest cover within the Upper Alsea River Watershed and less than 0.2 percent of the forest cover within the Marys River Watershed [40 CFR 1508.27(a)].

Intensity:

1. The resources potentially affected by the proposed density management thinning activities are: air quality, fire hazard/risk, fish species/habitat (except ESA listed species/habitat), invasive, non-

native plant species, migratory birds, other special status species / habitat – wildlife, recreation, soils, threatened or endangered species – northern spotted owl, visual resources, water quality, and wildlife habitat components. The effects of density management thinning are unlikely to have significant adverse impacts on these resources [40 CFR 1508.27(b) (1)] for the following reasons:

- *Project design features* described in (EA section 2.2.2) would reduce the risk of effects to affected resources to be within RMP standards and guidelines and to be within the effects described in the RMP/EIS.
- *Vegetation and Forest Stand Characteristics* (EA section 3.2.1): No special status vascular plant species or bryophytes would be affected.

Noxious Weeds - While the number of plants may increase in the short term, any increase that does occur should be short lived because all areas with ground disturbing activities would be grass seeded with Oregon Certified (blue tagged) red fescue (*Festuca rubra*) as a rate equal to 40 pounds per acre or sown/planted with other native species as approved by the resource area botanist. Sowing disturbed soil areas allows the sown seed to become established and dominant in areas that may otherwise be suitable for noxious weeds to become established thus reducing the physical space of the potential habitat for noxious weeds to become established.

Implementation of the Marys Peak integrated non-native plant management plan ((EA # OR080-06-09) allows for early detection of non-native plant species which allows for rapid control and generally these species often persist for several years after timber harvest but soon decline as native vegetation increases within the project areas. In addition, all road construction and road maintenance areas would be monitored for Scot's broom infestations and eradicated under this proposal and as part of MP's non-native plant management plan. Other species would be eradicated as funding allows. No significant increase in populations of the noxious weed (invasive/non-native) species identified during the field surveys is expected to occur because this project would disrupt very few acres of exposed mineral soil which could provide habitat for noxious weed species. All of the proposed timber removal activities are planned and designed to remain below the cumulative level of 10 percent aerial extent of soil disturbance from the RMP (Timber harvest BMP's, 2008, FEIS, Appendix I).

Stands proposed for harvest activities are not presently functioning as late-successional old growth habitat.

- *Carbon Sequestration (Storage) and Climate Change-* The Green Peak II Density Management EA (EA OR-080-08-14) tiered to the PRMP FEIS (1994) which concluded that all alternatives analyzed in the FEIS, in their entirety including all timber harvest, would have only slight (context indicates that the effect would be too small to calculate) effect on CO₂ levels. The following show quantities of carbon in forest ecosystem vegetation¹ worldwide, in the United States, and in the Green Peak II project area.
 - Total carbon, forest ecosystem vegetation, Worldwide (Matthews et al, 2000, p. 58) = 132-457 Gt²
 - Total carbon, forest ecosystem vegetation, United States (US EPA, 2009) = 27 Gt
 - Total carbon, forest ecosystem vegetation, Pacific northwest, Coast Range 1.8-2 Gt (Hudiburg, et al. 2009).

¹ Carbon contained in both above ground and below ground parts of trees and forest vegetation, and downed wood, litter and duff. It does not include mineral carbon in soil, nor fossil fuels.

² A Giga-tonne (Gt) is one billion tonnes, or metric tons.

- Total carbon, forest ecosystem vegetation, Green Peak II Project Area = 21,000 tonnes or 0.000021 Gt. This represents .000001% of the United States total or .00001% of the Coast Range total.

The annual carbon accumulation from forest management in the United States is 191 million tonnes. Current management on BLM-managed lands in western Oregon would result in an average annual accumulation of 1.69 million tonnes over the next 100 years, or 0.9% of the current U.S. accumulation. (WOPR, p. 4-537).

Carbon emissions resulting from the proposed action would total 1,150 tonnes. Current global emissions of carbon dioxide total 25 billion tonnes of carbon dioxide (IPCC 2007, p. 513), and current U.S. emissions of carbon dioxide total 6 billion tonnes (EPA 2007, p 2-3). Therefore, the emissions from the proposed action would constitute .00000004% of current global emissions and .0000002% of current U.S. emissions.

Tree growth following harvest would offset greenhouse gases and result in net storage of 390 tonnes of carbon. The WOPR EIS (p. 4-538), which is incorporated here by reference, states that by 2106, the No Action Alternative (management under the 1995 RMP) would result in a total carbon storage of approximately 628 million tonnes, 9% higher than average historic conditions (576 million tonnes, WOPR, 3-224, as reanalyzed in November 6, 2009 memo, on file, Marys Peak Resource Area). The incremental effect of the proposed action, over time, would be net storage of carbon.

- *Hydrology; Beneficial Uses, Fisheries and Aquatic Habitat; and Soils (EA sections 3.2.2 to 3.2.4):*

Measurable impacts on stream flow, channel conditions, and water quality due to this proposal are unlikely due to the heavy armoring of the channels by larger substrate of cobbles and boulders. Research presented in 2007 for all of the DMS study areas in western Oregon did not detect any effects to stream habitat parameters due to treatment activities based on the study period of 1998 through 2004.

Increases in stream temperature as a result of this proposal are unlikely due to the implementation of the research stream buffers (25 to 220 feet of undisturbed forest) and adjacent density management thinning areas.

Due to the generally gentle topography of the study area and the patchwork type of harvest activity which includes 49 acres of leave islands and riparian buffers, increases in mass wasting and alterations in the sediment regime would continue to have a low probability. Tree removal would not occur on steep, unstable slopes where the potential for mass wasting adjacent to streams is high. Therefore, increases in sediment delivery to streams due to compaction or mass wasting are unlikely to result from this action.

- *Soils: (EA section 3.2.2).* There are no new roads planned for this entry into the study area. Existing landing areas would be re-used for this entry creating no additional disturbed area. The overall amount of soil disturbance and compaction from a shovel yarding operation on low soil moisture areas is generally less than 7 percent. The effect on overall project site productivity (from all proposed treatments) would be a 0.9 percent reduction in overall yield for the entire 248 acre project area. Ground-based yarding with crawler tractors on designated skid trails should at the most impact 2 percent of the harvest area. Existing haul road and skid trails would be used to minimize the need for new skid trails.

- *Special Status Species: (EA section 3.2.1).* The *Phaeocollybia sipei* site would be protected by reserving the adjacent conifers. This project would not affect any other bureau sensitive vascular plant, lichen, bryophyte or fungi species since there are no known sites within the project area or adjacent to the project. Although the implementation of this project would be detrimental to any bureau SS mycorrhizal fungal species occurring in the project area, the likelihood of any occurring in the stand is low because the majority of these species have no known sites within the Marys Peak Resource Area or the Northern Oregon Coast Range Mountains.
- *Wildlife (EA section 3.2.5):* The proposed action is a may affect, not likely to adversely affect marbled murrelet because treatment of the mid-seral habitat would have long-term positive affects by accelerating the time it would take for these stands to develop into suitable nesting habitat.

The proposed action is a may affect, not likely to adversely affect northern spotted owl because it would modify the structure and composition of owl dispersal habitat at the stand level but would maintain the functionality of the habitat for owl dispersal since only seven acres are expected to fall below at least 40 percent crown closure. The long-term impact of density management thinning on owls would be positive since the existing habitat would develop into suitable nesting habitat sooner than if left untreated. The treatment would also have immediate and long-term positive impacts for foraging owls by improving prey habitat due to the creation of new snags and CWD in the stands.

- *Air Quality and Fire Hazard/Risk (EA section 3.2.6):* Fuel loading, risk of a fire start and the resistance to control a fire would all increase at the sites as a result of the proposed action. Risk of a fire start in the untreated slash would be greatest during the first season following cutting. Fire risk would continue to diminish as the area "greens up" with under story vegetation, and as the fine twigs and branches in the slash begin to break off and collect on the soil surface. Past experience, in the geographic area of this proposed action, has shown that, in approximately 15 years, untreated slash would generally decompose to the point where it no longer contributes significantly to increased fire risk.

The total amount of slash debris expected to be piled for burning is estimated to be approximately 250 to 400 tons from the landings and treated areas along the roads. Burning 250 to 400 tons of dry, cured, piled fuels under favorable atmospheric conditions in the Oregon Coast Range is not expected to result in any long-term negative effects to air quality in the air shed. Burning of slash would be coordinated with Oregon Department of Forestry in accordance with the Oregon State Smoke Management Plan which serves to coordinate all forest burning activities on a regional scale to prevent cumulative negative impacts to local and regional air sheds.

Public health or safety [40 CFR 1508.27(b)(2)]: The project's effects to public health and safety would not be significant. Public safety along haul routes would be minimally affected because log truck traffic on both private and public land is common and because project design features such as warning signs near logging activities would provide for public safety (EA section 2.2.2).

2. The proposed density management thinning activities:
 - a. *Would not affect*
 - (1) unique characteristics of the geographic area [40 CFR 1508.27(b)(3)] - There are no parklands, prime farmlands, wild and scenic rivers, wilderness, or ecologically critical areas located within the project area (*EA Section 3.1, Table 3*);
 - (2) districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor would the Proposed Action cause loss or destruction of significant scientific, cultural, or historical resources [40 CFR 1508.27(b)(8)] (*EA Section 3.1, Table 3*).
 - b. *Are not unique or unusual.* The BLM has experience implementing similar actions in similar areas without highly controversial [40 CFR 1508.27(b) (4)], highly uncertain, or unique or unknown risks [40 CFR 1508.27(b) (5)].
 - c. *Do not set a precedent* for future actions that may have significant effects, nor does it represent a decision in principle about a future consideration [40 CFR 1508.27(b) (6)].

Are not expected to adversely affect Endangered or Threatened Species listed under the Endangered Species Act (ESA) of 1973 [40 CFR 1508.27(b) (9)].

U. S. Fish and Wildlife Service (USFWS)

To address concerns for effects to federally listed wildlife species and potential degradation of critical habitats, the proposed action has been consulted upon with the U.S. Fish and Wildlife Service, as required under Section 7 of the ESA. Consultation for this proposed action was facilitated by its inclusion within a programmatic Biological Assessment (BA) that analyzes all projects that may modify the habitat of listed wildlife species on federal lands within the Northern Oregon Coast Range during fiscal years 2009 and 2010. The resulting Letter of Concurrence (FWS Reference Number 13420-2008-I-0125, dated October 7, 2008) concurred with the BA, that this action was not likely to adversely affect spotted owl, marbled murrelets or their critical habitats. This proposed action has been designed to incorporate all appropriate design standards set forth in the BA which forms the basis for compliance with the Letter of Concurrence.

National Marine Fisheries Service

Protection of EFH (Essential Fish Habitat) as described by the Magnuson/Stevens Fisheries Conservation and Management Act and consultation with NMFS (National Marine Fisheries Service) is required for all projects that may adversely affect EFH of Chinook salmon and coho salmon. The proposed Green Peak II project would not affect EFH due to distance of all activities associated with the projects from occupied habitat.

A determination has been made that this proposed project would have 'no effect' on UWR (Upper Willamette River) steelhead trout, UWR Chinook salmon, Oregon chub, and Oregon Coast coho salmon. Generally, the 'no effect' determination is based on the distance upstream of project activities (approximately 4 and 24 miles downstream) from ESA listed fish habitat and project design criteria that include no harvest activity within stream protection zones and post-project leave tree densities of 25-65 trees per acre.

2. The Proposed action does not violate any known Federal, State, or local law or requirement imposed for the protection of the environment [40 CFR 1508.27(b) (10)].

Approved by: Trish Wilson
 Trish Wilson, Field Manager
 Marys Peak Resource Area

3-19-2010
 Date