North Fork Overlook Mid-Seral Enhancement

Final Decision and Decision Rationale for North Fork Overlook Mid-Seral Enhancement

Environmental Assessment Number OR080-08-08

June 29, 2011

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

Township 13 South, Range 7 West, Sections 17 and 19, Willamette Meridian
Benton County, Oregon

Responsible Agency:	USDI - Bureau of Land Management
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BLM
Salem District

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-10/004+1792

1.0 Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis for the *Upper and Lower Alsea River Watershed Restoration* projects, which is documented in the following documents that are incorporated here by reference.

Date Issued	***Document***	***Public Review Period***
7/15/2009	Upper and Lower Alsea River Watershed Restoration EA and FONSI (referred in this Decision Rationale (DR) as the 2009 EA)	7/16/2009 – 8/16/2009
4/5/2010	Upper and Lower Alsea River Watershed Restoration Revised EA and FONASI (referred in this DR as the EA)	4/05/2010 – 4/19/2010

In March 2010, the BLM updated the June 2009 EA to address comments about Carbon Sequestration and Climate Change. This became the *Revised Upper and Lower Alsea River Watershed Restoration Environmental Assessment and Finding of No Additional Significant Impact* (EA/FONASI). The 2010 EA was made available for additional public review in March, 2010. The decision for the North Fork Overlook Mid-Seral Enhancement is documented in this Final Decision and Decision Rationale (DR) document. This decision is based on site-specific analyses in the EAs, the supporting project record, public comment, and management direction.

The DR constitutes the BLM's decision to implement the North Fork Overlook project with regard to the 2010 EA, responds to comments concerning Carbon Sequestration and Climate Change received during the 2010 EA comment period, and reviews and affirms the Finding of No Additional Significant Impact (FONASI). The decision maker made the FONASI and Revised EA available for public review from April 4, 2010 to April 19, 2010. The decision maker signed the FONASI on May 17, 2010.

In this DR, the original EA will be called the 2009 EA and the Revised EA (March 2010) will be called the EA. The 2009 EA and the EA are incorporated by reference in this DR.

The Upper and Lower Alsea River Watershed Restoration Projects (EA# OR080-08-08) included three timber sales and a conifer release project. This decision is limited to the North Fork Overlook timber sale, the second of these sales.

2.0 Decision

I have decided to implement North Fork Overlook Mid-Seral Enhancement as described in the proposed action (EA pp. 11 to 22), hereafter referred to as the "selected action". The selected action is shown on the map in Appendix A . This decision is based on site-specific analysis in the Upper and Lower Alsea River Watershed Restoration EA, the supporting project record, management recommendations contained in the *North Fork Alsea River Watershed Analysis* (NFAWA), USDI BLM 1996, as well as the management direction contained in the Salem District Resource Management Plan (May 1995), which are incorporated by reference in the EA. In addition, public comments were considered and some adjustments to the project were made.

Decision Summary

The following is a summary of this decision.

- Conduct Mid-Seral Enhancement on approximately 329 acres of 67 to 70 year old stands within LSR and RR LUAs.
- Approximately 0.2 miles of road construction will occur in Unit 17B.
- The proposed road construction in Unit 17C will not occur.
- The cutting and yarding of trees will be accomplished utilizing ground-based equipment operating off the existing roadway, skyline yarding equipment, and helicopter equipment.
- Road renovation totaling approximately four miles will occur. Culvert replacement/installation on three stream crossings and/or cross drain locations will occur. Spot rock application may occur within existing roads.
- Design features and mitigation measures described in the EA (pp. 17 to 22) will be incorporated into the timber sale contract.

3.0 Alternatives Considered

The EA analyzed the effects of the proposed action and the no action alternatives. No unresolved conflicts concerning alternative uses of available resources (section 102(2) (E) of NEPA) were identified. No action alternatives were identified that will meet the purpose and need of the projects and have meaningful differences in environmental effects from the proposed action (EA Section 3.2). Complete descriptions of the "action" and "no action" alternatives and their anticipated effects are contained in the EA, pp. 47 to 112.

4.0 Decision Rationale

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the *North Fork Alsea River Watershed Analysis,* and the management direction contained in the RMP, I have decided to implement the Selected Action as described in DR section 2.0. The following is my rationale for this decision.

1. The selected action:

- Meets the purpose and need of the project (EA section 1.6), as shown in *Table 1*. Complies with the Salem District's Record of Decision and Resource Management Plan (1995 ROD/RMP).
- Will not have significant impact on the affected elements of the environment (EA FONSI pp. i to iii) beyond those already anticipated and addressed in the RMP FEIS.
- Has been adequately analyzed.

2. The No Action alternative was not selected because it does not meet the Purpose and Need directly, or delays the achievement of the Purpose and Need as shown in *Table 1*.

Table 1: Comparison of Alternatives with Regard to Purpose and Need (EA Section 2.7)

Purpose and Need (EA Section 1.6)	Alternative 1 (No Action)	Alternative 2 (Proposed Action)
Develop, accelerate, and enhance late-successional forest conditions, which	Maintains a highly dense, uniform, small diameter stand of trees with receding crown	Treatment includes variable density thinning, creation of small gaps around "open grown" trees, and retention of

Purpose and Need (EA Section 1.6)	Alternative 1 (No Action)	Alternative 2 (Proposed Action)
serve as habitat for late-successional forest species (LSRA, p. 2). Plan and implement silvicultural treatments inside Late-Successional Reserves that are beneficial to the creation of late-successional habitat (RMP p. 16). Conduct thinning operations in forest stands if needed to create and maintain late successional forest conditions (RMP p. 16).	ratios, loss of limbs and loss of growth. Understory regeneration, shrubs etc. would be lacking. The current pattern of habitat use by wildlife species within these project areas would be expected to continue unchanged. Dispersal habitat conditions for spotted owls would remain unchanged. No timber harvest would occur consequently no spatial and structural diversity would occur.	small clumps, increasing spatial and structural diversity of the stand. In the short-term, increases horizontal spatial variability within treated stands (gaps and clumps); minor reduction and disturbance to existing CWD material (snags and down logs) resulting from felling, yarding, and road construction. Reduced recruitment rate of small sized CWD would be partially offset by immediate creation of larger CWD of desirable size, and augmentation of decadence processes; retention of hardwood tree and shrub diversity. In the long-term, the gradual transition in structural characteristics of the treated stands would more closely resemble late-seral forest (larger diameter trees and limbs, sub-canopy development, greater tree species diversity, greater volume and size of hard CWD, canopy gaps); and extends persistence of hardwood tree and shrub cover diversity. Spatial and structural diversity would be increased.
Accelerate the growth of trees to restore large conifers to Riparian Reserves (RMP p.7) Enhance or restore habitat (e.g. CWD, snag habitat, in-stream large wood) for populations of native riparian-dependent plants, invertebrates, and vertebrate species (RMP p.7). Improve structural and spatial stand diversity on a site-specific and	Without treatment, stand structure would remain relatively uniform, except for gaps created by disturbance. The main input of CWD would come from density mortality, disturbance events and endemic levels of insects and disease and would result in more snags and downed logs than with treatment. In general, the quantity of mortality would be much greater than if the stands were thinned, but dead trees would be smaller in size. Relatively large, open-grown	The proposed action would retain trees which would reach larger diameters earlier compared to the no treatment option, creating natural opportunities for higher quality LWD recruitment in the long-term. Inputs resulting from harvest consist of limbs and tops, breakage and cull and incidentally felled or topped trees that would be left on site. The harvest input would likely result in a gain of 200 cubic feet per acre of CWD in skyline yarding areas and about 100 cubic feet per acre in ground-based yarding areas. In the long term, due to increased

Purpose and Need (EA Section 1.6)	Alternative 1 (No Action)	Alternative 2 (Proposed Action)
landscape level in the long-term (RMP p. 11, 26, D-6).	trees would continue to lose lower crown due to competition from surrounding trees that established subsequent to them. This alternative does not meet the objectives for speeding development of late-successional forest habitat.	diameter growth resulting from density management, larger trees would be available for recruitment for CWD. Treatment includes variable density thinning, creation of small gaps around "open grown" trees, and retention of small clumps. This would increase spatial and structural diversity of the stand.
Provide appropriate access for timber harvest and silvicultural practices used to meet the objectives above. Provide for fire vehicle and other management access. Reduce environmental effects associated with identified existing roads within the project area.	Maintain existing road densities. Maintain existing drainage and road surface conditions. Delay maintenance on feeder roads, main routes would be maintained.	Constructs 0.2 miles of new roads. Following harvest, new construction would be decommissioned. Renovates 4 miles of existing roads (includes drainage structure installation/replacement/removal on cross drains and stream crossing). enovations would improve drainage and road surface conditions, resulting in less road surface erosion into streams.

5.0 Compliance with Direction

The Salem District initiated planning and design for this project to conform and be consistent with the **1**/ *Salem District Record of Decision and Resource Management Plan***,** May 1995 (1995 RMP); **2**/ *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl*, April 1994 (the Northwest Forest Plan, or NWFP); **3**/ *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, January 2001 (2001 ROD).

The analysis in the Revised Upper and Lower Alsea River Watershed Restoration Project EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement* (RMP/FEIS), September 1994. The RMP/FEIS includes the analysis from the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl* (NWFP/FSEIS*)*, February 1994. In addition, the EA is tiered to the *Final Supplemental Environmental Impact Statement For Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (S&M FSEIS, November 2000).

Following the March 31, 2011 decision by the United States District Court for the District of Columbia in Douglas Timber Operators et al. v. Salazar, which vacated and remanded the administrative withdrawal of the Salem District's 2008 *Record of Decision and Resource Management Plan* (2008 ROD/RMP), we evaluated this project for consistency with both the 1995 RMP and the 2008 ROD/RMP. Based upon this review, the selected alternative contains some design features not mentioned specifically in the 2008 ROD/RMP. The 2008 ROD /RMP did not preclude use of these design features, and the use of these design features is clearly consistent with the goals and objectives in the 2008 ROD/ RMP. Accordingly, this project is consistent with the Salem District's 1995 RMP and 2008 ROD/RMP.

Survey and Manage Review

The North Fork Overlook Mid-Seral Enhancement is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Salem District Resource Management Plan.

On December 17, 2009, the U.S. District Court for the Western District of Washington issued an order in *Conservation Northwest, et al. v. Rey, et al.*, No. 08-1067 (W.D. Wash.) (Coughenour, J.), granting Plaintiffs' motion for partial summary judgment and finding a variety of NEPA violations in the BLM and USFS 2007 Record of Decision eliminating the Survey and Manage mitigation measure. Previously, in 2006, the District Court (Judge Pechman) had invalidated the agencies' 2004 RODs eliminating Survey and Manage due to NEPA violations. Following the District Court's 2006 ruling, parties to the litigation had entered into a stipulation exempting certain categories of activities from the Survey and Manage standard (hereinafter "Pechman exemptions").

Judge Pechman's Order from October 11, 2006 directs: "Defendants shall not authorize, allow, or permit to continue any logging or other ground-disturbing activities on projects to which the 2004 ROD applied unless such activities are in compliance with the 2001 ROD (as the 2001 ROD was amended or modified as of March 21, 2004), except that this order will not apply to:

A. Thinning projects in stands younger than 80 years old;
B. Replacing culverts on roads that are in use and part of the road system, and removing culverts if the road is temporary or to be decommissioned;
C. Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions; and
D. The portions of project involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under subparagraph a. of this paragraph."

Following the Court's December 17, 2009 ruling, the Pechman exemptions are still in place. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM from proceeding with projects (including timber sales).

Nevertheless, I have reviewed the North Fork Overlook Mid-Seral Enhancement in consideration

of both the December 17, 2009 and October 11, 2006 order. Because the North Fork Overlook Mid-Seral Enhancement entails no regeneration harvest and entails thinning only in stands less than 80 years old, I have made the determination that this project meets Exemption A of the Pechman Exemptions (October 11, 2006 Order), and therefore may still proceed even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case. The first notice for sale will appear in the *Gazette-Times* newspaper on June 29, 2011.

6.0 Public Involvement/Consultation/Coordination

Public Scoping

- A scoping letter, dated August 28, 2008, was sent to 22 potentially affected and/or interested individuals, groups, and agencies. Two responses were received during the scoping period.

- A description of the project was included in the June, September and December 2008, and March, June and November 2009, and March 2010 Salem District BLM Project Update publication to solicit comments on the proposed project.

EA and FONSI Comment Period and Comments

The BLM made the 2008 EA and FONSI available for public review from July 16, 2009 to August 16, 2009. Two comment letters/emails were received during the original EA comment period. Comments and BLM responses are located in Appendix B: Response to Public Comments Received on the Upper and Lower Alsea River Watershed Restoration Mid-Seral Enhancement (EA#OR080-08-08).

The BLM revised the Upper and Lower Alsea River Watershed Restoration EA to address climate change. The BLM made the revised EA and FONASI available for additional public comment from April 4, 2010 to April 19, 2010. Six comment letters were received during this comment period. Responses to the substantive public comments can be found in section VIII of this Decision Rationale. The scoping and EA comment letters/emails are available for review at the Salem District BLM Office, 1717 Fabry Rd SE, Salem, Oregon.

Public Involvement since the formal Comment Period

The BLM met with members of the public at the North Fork Overlook Mid-Seral Enhancement project area on August 12, 2010 to discuss concerns about the project. Concerns were primarily related to legacy tree retention, marbled murrelet habitat, and potential management options. The public proposed that the BLM consider removing two parcels from the project with greater proportions of legacy trees than the rest of the project area. I have considered the propose treatment, benefits, and public concerns, and I have decided to leave these parcels in the North Fork Overlook Mid-Seral Enhancement Project as designed.

The BLM has responded to several comments and requests for information regarding the North Fork Overlook Mid-Seral Enhancement project since the formal comment period. We have modified our selected action based on the substantive comments. Concern was raised over the planned removal of numerous trees over 20" diameter at breast height within a proposed right-of-

way to be constructed. The proposed right-of-way was located in Unit 17C, where a 19" diameter cut limit was implemented, to provide access for skyline and ground-based yarding of timber.

I have decided not to built the proposed road and have designated Unit 17C to be logged by helicopter. These changes will be in line with the 19” diameter cut limit prescription for the unit.

The correspondence is available for review at the Salem District BLM Office at the address listed above.

Consultation/Coordination

Wildlife: United States Fish and Wildlife Service (USFWS)
To address concerns for potential effects to listed wildlife species and potential modification of critical habitats, the proposed action was consulted upon with the USFWS, as required under Section 7 of the Endangered Species Act. Consultation was addressed by inclusion of the proposed action units within either of two batched Biological Assessments (BAs) that analyze 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. Project treatments have been designed to incorporate all appropriate design standards included in these BAs.

A Letter of Concurrence (#13420-2008-I-0125) and a Biological Opinion (#13420-2009-F-0012) have been received from the Service and they do not require any changes or additions to the incorporated project design standards. The Biological Opinion also concludes that the proposed action would not result in jeopardy to listed species and would not adversely modify critical habitat for either the spotted owl or marbled murrelet.

Fish: National Marine Fisheries Service (NMFS)
Consultation with National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) is required for all actions which ‘may affect’ ESA listed fish species and critical habitat under the Endangered Species Act (ESA) of 1973 as amended. The area where the proposed action is located contains tributaries to streams and rivers where Oregon Coastal (OC) coho salmon are listed as threatened under the Endangered Species Act.

A determination has been made that the proposed North Fork Overlook Mid-Seral Enhancement ‘may affect, but is not likely to adversely affect’ (NLAA) OC coho as well as its designated critical habitat. The ‘may affect’ determination is primarily due to the proximity of listed fish and critical habitat adjacent to proposed unit boundaries. Due to the Proposed Actions’ ‘NLAA' determination informal consultation with NMFS was therefore initiated in July 27, 2010. The NMFS returned a Letter of Concurrent (LOC) on September 7, 2010, completing the consultation process. The LOC is on file at the Salem District office.

Protection of Essential Fish Habitat (EFH) as described by the Magnuson/Stevens Fisheries Conservation and Management Act and consultation with NMFS is required for all projects which may adversely affect EFH of Chinook and coho salmon. The treatment project areas vary between 55 feet and over 1.5 miles from nearest habitat utilized by coho salmon (Streamnet 2007). The proposed North Fork Overlook Mid-Seral Enhancement is not expected to adversely affect EFH. The determination is based on distance of vegetation treatment activities from occupied habitat in the Upper Alsea River Watershed. Consultation with NMFS on EFH is not required for this project.

7.0 Conclusion

Review of Finding of No Additional Significant Impact

I have determined that change to the Finding of No Additional Significant Impact (FONASI – March, 2010) for the North Fork Overlook Mid-Seral Enhancement is not necessary because I have considered and concur with information in the EA and FONASI. The comments on the EA were reviewed and no information was provided in the comments that lead me to believe the analysis, data, or conclusions are in error or that the selected action needs to be altered. There are no significant new circumstances or facts relevant to the selected action or associated environmental effects that were not addressed in the EA.

Administrative Review Opportunities

Protests: In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published "in a newspaper of general circulation in the area where the lands affected by the decision are located". Protests of this sale must be filed within 15 days of the first publication of the notice. For this project, the Notice of Sale will be published in the *Gazette-Times* newspaper on or around June 29, 2011. The planned sale date is July 27, 2011.

Implementation Date

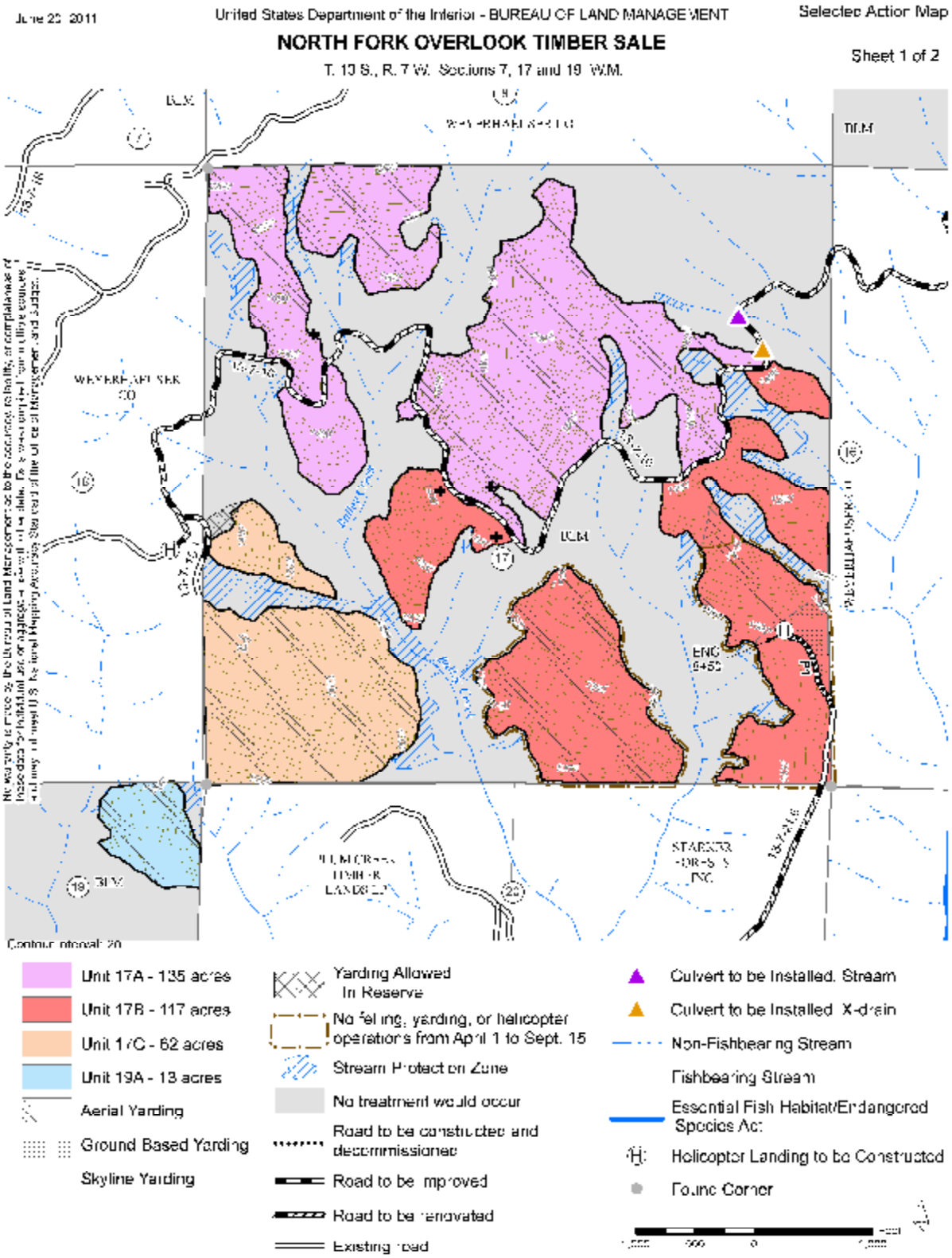
If no protest is received within 15 days after publication of this Decision Record (North Fork Overlook Mid-Seral Enhancement) this decision will become final. For additional information concerning this decision, contact Stefanie Larew (503) 375-5601, Environmental Coordinator, Marys Peak Resource Area, Salem District BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by: Patricia Wilson 6-29-11

Patricia Wilson
Marys Peak Resource Area Field Manager

Date

Appendix A: Selected Action Map



June 20, 2011

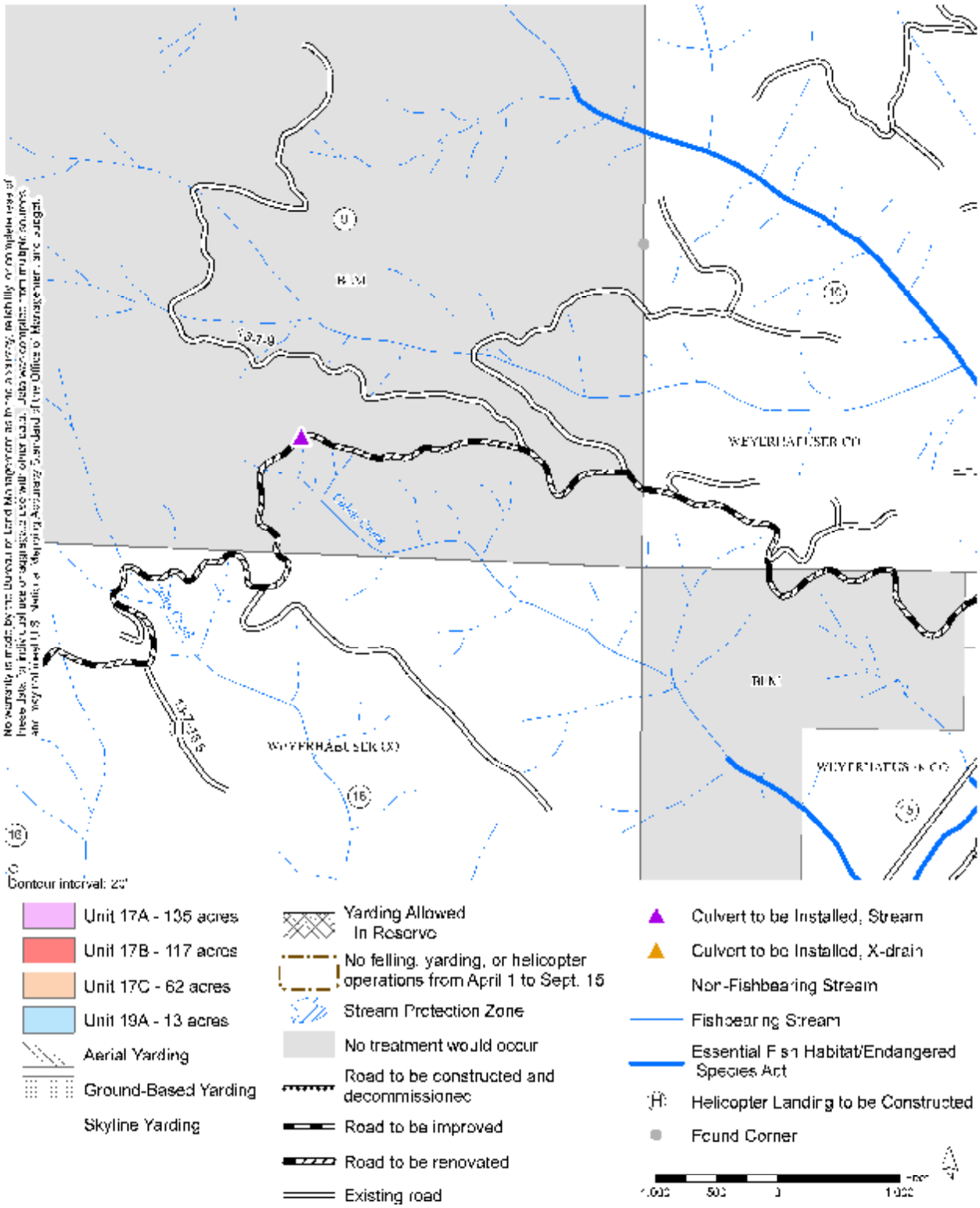
United States Department of the Interior - BUREAU OF LAND MANAGEMENT

Selected Action Map

NORTH FORK OVERLOOK TIMBER SALE

T. 13 S., R. 7 W., Section 9, 10, 15 and 16 W.M.

Sheet 2 of 2



Appendix B: Response to Public Comments Received on the Upper and Lower Alsea River Watershed Restoration Mid-Seral Enhancement (EA#OR080-08-08)

Six letters were received commenting on the Revised Upper and Lower Alsea River Watershed Restoration Environmental Assessment. The following is the response to the site specific Carbon Storage/Climate Change analysis found in the March 2010 EA. In some cases the comments have been quoted directly from commenter's responses and in some cases they have been paraphrased. Comments are in *italics*. The BLM response follows each comment.

Oregon Wild, Doug Heiken
Received April 19, 2010 and Coast Range Association, Chuck Willer Received April 19, 2009

1. **Comment:** *The EA relies on the carbon analysis in the WOPR EIS – an EIS that has been withdrawn and declared legally indefensible. This is not proper. BLM still lacks a program-level NEPA analysis of its logging program and how all that logging affects carbon and climate.*

   Response: The BLM did not tier to the 2008 FEIS (aka WOPR EIS) nor has this EIS been deemed legally indefensible. There were lawsuits associated with the Record of Decision/Resource Management Plan and associated EIS, however, there was never an opinion declaring the EIS "legally indefensible" or otherwise invalid. The new Secretary of the Interior chose to withdraw the 2008 Record of Decision, due to BLM's failure to complete section 7 consultation under the Endangered Species Act. The 2008 Final EIS was not withdrawn and remains available for use.

   The BLM used the carbon methodology described in the 2008 FEIS because that is the best analysis and methodology available to BLM at this time. The EA used numbers associated with the No Action Alternative in the 2008 FEIS, which by definition is management under the 1995 ROD and the Northwest Forest Plan, including the cumulative effects analysis. Therefore the commenter has not demonstrated why using the carbon analysis as it pertains to the parcels managed under the 1995 RMP and the Northwest Forest Plan is improper.

2. **Comment:** *BLM cannot ignore the local incremental causes of climate change because all of the causes are both spatially dispersed and incremental in nature, and the cumulative effect of all these individual local decisions results in a problem of global proportions. This indicates the need for an EIS because the problem is significant and BLM is contributing to it and has no other NEPA analysis that it can tier to.*

   Response: BLM has addressed the potential local impact of the project on greenhouse gas levels that may result in net emissions or net storage of greenhouse gases (EA p. 104). The EA also addresses the cumulative impact of the projects carbon release and sequestration and presents the incremental effect of the proposed action on greenhouse gas levels within the context of effects of past, present, and reasonably foreseeable future actions at multiple spatial scales on page 106. While anthropogenic-caused greenhouse gases contribute to climate change, it is beyond the scope of existing science to identify this project's greenhouse gas emissions as a measurable cause of specific climate impacts as outlined by the U.S. Geological Survey in its report described on page100 of this EA.

3. **Comment:** *The logged forest will not have caught up to the amount of carbon stored in the forest in 2060 if it is left unlogged.*

   Response: We agree with this comment. EA Table 17 shows that the no action alternative stores more carbon than the action alternatives at year 2060. Table 17 also shows that for the action alternative, there is a net increase in carbon storage at year 2060. Although carbon has been removed, carbon storage still continues in the stands thinned by the selected action.

4. **Comment:** *BLM cannot limit the temporal scope of the analysis by saying that the carbon losses and climate impacts of logging will be erased in 50 years because the extra carbon in the atmosphere will be contributing to adverse climate impacts over the 50 years and the unlogged forest will store far more carbon at the end of 50 years. For every year that logging results in extra carbon in the atmosphere, there needs to be mitigation.*

   Response: As described in the EA (P. 104), the analysis quantifies the project's carbon net emissions as temporary and small. Moreover the commenter cites no scientific opinion, report or otherwise to support the viewpoint that could connect carbon emissions from this project to a measurable adverse impact to climate. Instead, the EA articulated how the U.S. Geological Survey described how, although scientific information on greenhouse gases are extremely likely to have exerted a substantial effect on global climate, it is beyond the scope of existing science to identify how a project's greenhouse gas emissions as a measurable cause of specific climate impacts (EA, page 100). Therefore, as described in the EA (p.106), the BLM identified the greenhouse gas emissions and storage associated with this project, but this project in and of itself or cumulatively could not measurably affect climate change.

   There is no legal, regulatory or policy basis to provide for carbon above other ecosystem services including timber. Commenter offers no specifics regarding potential mitigation to which the agency can respond. Mitigation measures are not required where impacts are not significant. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 359 (1989).

5. **Comment:** *Logging causes very long-term climate impacts that should be considered significant in a NEPA context and trigger an EIS.*

   Response: As described in the EA (p. 106), the incremental effect of the proposed action on greenhouse gas levels within the context of effects of past, present, and reasonably foreseeable future actions at multiple spatial scales, the analysis has evidenced that the project's carbon release contribution is very small (emissions from the proposed action will constitute .00000004% of current global emissions and .0000016% of current U.S. emissions). The incremental effect of the proposed action and similar actions, over time, will be net storage of carbon. At this time, there is no science available to analyze how the carbon release associated with this project will have a measurable effect on climate change (EA, p 100).

6. **Comment:** *The proper scale of comparison is 350ppm. The EA compares carbon emission from logging Upper and Lower Alsea River Restoration project to the current annual global emissions of CO2 from all sources. These are a misleading comparisons which serve to minimize the significance of the amount of carbon in the stands in this project and the amount of GHG emissions caused by logging.*

   Response: Commenter asserts that experts (with none cited) contend that the atmosphere has a

threshold 350 ppm and that the current level is 390 ppm. These numbers are global numbers. There is no difference between the comparison BLM has used or making a comparison against the asserted global parts per million. The fact remains that the emissions from the Upper and Lower Alsea River Restoration projects are very small to the point of being undetectable. Implementing the Upper and Lower Alsea River Restoration projects will not raise the assumed 390 ppm any detectable amount. The BLM agrees that emissions under the proposed action, though they are offset by tree growth on the project area within five years, are greater than the no action alternative.

7. **Comment:** *BLM must do all it can to mitigate and reverse climate change in order to meet its legal obligations.*

   Response: There is no legal mandate for BLM to avoid or minimize emissions, store more carbon, or "mitigate and reverse climate change."

8. **Comment:** *The EA should at least disclose that there is strong physical science basis for thinking that thinning would be likely to increase the decay rate of dead wood.*

   Response: There are a suite of indirect effects that result from thinning that could effect carbon sequestration. However, relative to the elements included in the analysis, they have much less quantitative effect on results. The accumulation and decay of dead wood, as well as the development of understory trees are specifically excluded from the analysis.

9. **Comment:** *Certain stands in the matrix should be removed from the timber base to offset the loss of carbon storage in the current proposal.*

   Response: Changes in land use allocations are part of the Resource Management Planning process. Considering changes in land use allocations is outside the scope of this project.

10. **Comment:** *BLM must use the best available science.*

    Response: BLM has fully considered the best available science (EA pg 99). BLM has considered the sources utilized in the carbon/climate analysis for the WOPR analysis, sources presented by commenter, and others. Commenter does not point to any "available science" that BLM did not consider.

11. **Comment:** *Climate change is expected to increase winter/spring flooding and summer drought and in conjunction with nearby clear cutting in the next 5-10 years, stream temperatures and sediment can be expected to change even if BLM takes the "no action" alternative.*

    Response: Future changes in flooding and drought patterns and private land harvesting patterns from global warming are speculative and commenter offers no basis upon which to conclude otherwise, but their own personal conjecture. BLM has applied best management practices to mitigate impacts from the project.

12. **Comment:** *The FONSI is in error. The FONSI (p iii) says that forest growth following logging would offset greenhouse gas emissions and would, over time, result in net storage of*

carbon. In fact, the logging alternative never offsets all the climate consequences caused by emissions from logging.

Response: The EA articulated how the U.S. Geological Survey described how, although scientific information on greenhouse gases are extremely likely to have exerted a substantial effect on global climate, it is beyond the scope of existing science to identify how a project's greenhouse gas emissions as a measurable cause of specific climate impacts (EA, page 100). Emissions resulting from logging and from emissions from the harvested wood within 50 years of harvest are offset by tree growth within five years. The climate consequences of any project, especially an emission as small and temporary as this are not measurable.

13. **Comment:** *The EA fails to disclose the true cost of logging in terms of the warming caused by the extra CO_2 in the atmosphere caused by logging. EA Table 17 on page 104 does not show the cumulative effects of the extra carbon in the atmosphere. The EA must disclose the unmitigated warming effects caused by the extra carbon in the atmosphere over time, and must show the "time-value of carbon" whereby future forest growth is unable to make up for the extra carbon in the atmosphere in earlier time periods.*

    Response: See Response to #12. The commenter identifies no established analysis process to evaluate the concept of the "time value" of the carbon. Emissions from logging itself are offset by live tree carbon within one growing season. Emissions from 2010 to 2060 from the wood harvested at Upper and Lower Alsea River Restoration project are offset by tree growth there by 2015, so net positive emissions are limited to the first year or two.

14. **Comment:** *The fossil fuel component of wood products is not fully disclosed. Wood products require fossil fuel use for harvesting and transportation to the mill, milling operations, transportation of the milled lumber, manufacturing operations, marketing and transportation of the final products, transportation of the waste products, plus the mining, smelting, milling, and manufacturing processes required to manufacture all the equipment used to harvest trees and make wood products. All these emissions serve to reduce any alleged contribution toward carbon storage in wood products, so to get an accurate picture of the real carbon storage in wood products, these emissions must be accounted for.*

    Response: The emissions resulting from harvest and transportation of harvested wood at Upper and Lower Alsea River Restoration project are analyzed. Emissions resulting from all further industrial and commercial activity associated with the wood products and by-products obtained will not be properly ascribed to this project. This project will neither cause nor prevent the ongoing industrial and commercial activity associated with the wood products industry.

15. **Comment:** *We question the assertion on EA page 103 that 69% of forest carbon would remain stored in wood products after 50 years. That does not seem to be consistent with the decay rates found in the literature.*

    Response: The reference for this portion of the analysis is Smith, et al, 2006. The total stored carbon from harvested wood is from products still in use, stored in landfills (not fully decayed) or emitted with energy capture (thereby offsetting fossil fuels). Since the commenter does not cite specific literature, no comparison with it is possible.

Reed Wilson Received April 19, 2010

1. **Comment:** *It appears the EA includes climate change and carbon sequestrian discussion on a global scale. Local decisions can set framework and create precedent for national policies on climate change. On that note, this proposal reduces net carbon storage by 92,000 tonnes, pollutes air by burning an estimated 140,000 gallons of fuel and releases 550 tonnes of carbon through fuel consumption and slash burning.*

   Response: The U.S. Geological Survey, in a May 14, 2008 memorandum to the U.S. Fish and Wildlife Service, summarized the latest science on greenhouse gases and concluded that it is currently beyond the scope of existing science to identify a specific source of greenhouse gas emissions or sequestration and designate it as the cause of specific climate impacts at a specific location. This defines the spatial scale for analysis as global, not local, regional or continental. That memorandum is incorporated here by reference. Based on the BLM's review of statutes, regulations, policy, plans and literature, the BLM accepts the conclusions above as appropriate context for a reasoned choice among alternatives (EA p. 100).

   EA Table 17 shows that the no action alternative stores more carbon than the action alternative at year 2060. Table 17 also shows that for the action alternative, there is a net increase in carbon storage at year 2060. Although carbon has been removed, carbon storage still continues in the stands thinned by the selected action.