

## Potter Elk Timber Sale

### Final Decision and Decision Rationale

McFall/Potter Creek Density Management and Aquatic Habitat Restoration  
Environmental Assessment EA # OR-080-06-12

Upper Siletz River Watershed Enhancement Environmental Assessment EA #  
DOI-BLM-OR-S050-2009-0002

May 24, 2012

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

Township 8 South, Range 8 West, Sections 25 and 35, Willamette Meridian  
Polk County, Oregon

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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.

## 1.0 Introduction

The Bureau of Land Management (BLM) conducted an environmental analysis for the Potter Elk timber sale, which is documented in the *McFall/Potter Creek Density Management and Aquatic Habitat Restoration Environmental Assessment* (McFall/Potter Creek EA, # OR-080-06-12), the *Upper Siletz River Watershed Enhancement Environmental Assessment* (Upper Siletz River EA, # DOI-BLM-OR-S050-2009-0002), and the associated project files.

The Potter portion (Unit 35A) was described and analyzed in the McFall/Potter Creek EA and is comprised of 126 acres of three forest stands ranging in age from 73 to 78 years. The Elk portion (Units 25A and 25C) was described and analyzed in the Upper Siletz River EA and is comprised of 151 acres of one forest stand 79 years of age.

The Interdisciplinary Team (IDT) determined that neither portion would stand alone as a viable, economic timber sale. Given their proximity, the decision maker decided to offer the two portions together under one timber sale, Potter Elk. The proposal is to perform density management on approximately 277 acres of 73 to 79 year-old stands<sup>1</sup> within Adaptive Management Area (AMA) and Riparian Reserve (RR) Land Use Allocations (LUAs).

The table below displays the current attributes of the stands that comprise the Potter Elk timber sale.

**Table 1. Potter Elk Stand Attributes**

Stand	Age	Acres
<b>Potter portion</b>		
35A <sup>2</sup> (Unit 8)	73	17
35A (Unit 7)	73	55
35A (Units 5 and 6)	78	54
<b>Potter total</b>		<b>126</b>
<b>Elk portion</b>		
25A/25C (All units, 1-4)	79	151
<b>Elk total</b>		<b>151</b>

The decision maker made the McFall/Potter Creek EA and Finding of No Significant Impact (FONSI) available for public review from November 28, 2007 to December 27, 2007. The decision maker signed the McFall/Potter Creek FONSI on November 20, 2007. The decision maker made the Upper Siletz River EA/FONSI available for public review from August 4, 2010 to September 6, 2010. The decision maker signed the Upper Siletz FONSI on March 8, 2012.

The decision documented in this Decision Record (DR) is based on the analysis documented in the EAs. This decision authorizes the implementation of only those activities directly related to and

<sup>1</sup> The BLM collected stand data in 2005 (Potter stands) and 2008 (Elk stands). Stand ages presented in this DR are current at time of this Decision, May 2012.

<sup>2</sup> Units 25A, 25C, and 35A are unit identifiers used in the EA analysis. Units 1-8 refer to unit identifiers in Exhibit A of the timber sale contract package, in which the EA units are broken down into timber sale units. The Exhibit A can be obtained at the Salem District Office.

included within the Potter Elk timber sale.

## 2.0 Decision

I have decided to implement the Potter Elk timber sale as described in the proposed action of the McFall/Potter Creek EA (pp. 47 to 51) and the Upper Siletz River EA (pp. 14 to 18), hereafter referred to as the “selected action.” The selected action is shown on the maps in Section 3.0 of this DR. This decision is based on site-specific analysis in the McFall/Potter Creek EA, the Upper Siletz River EA, the supporting project records, management recommendations contained in the *Upper Siletz River Watershed Analysis*, 1996, as well as the management direction contained in the *Salem District Resource Management Plan* (May 1995), which are incorporated by reference in the EAs.

### Changes to the Proposed Action

Since the signing of the FONSI, the Interdisciplinary Team has determined that additional roads in the project area are in need of renovation. Approximately 1.6 miles of the 8-8-35.1 and Forest Capital 860 roads, as shown on the Selected Action maps, will be renovated to reduce the potential negative impacts to soil and water resources from project-related road use. Impacts to resources are not anticipated to increase beyond those analyzed in the EAs.

### Decision Summary

The following is a summary of this decision:

- Density management on approximately 277 acres of 73 to 79 year old stands within AMA and RR LUAs.
- Road construction totaling approximately 1.8 miles will occur. Following harvest all of the construction will be decommissioned.
- Road renovation totaling approximately 3.9 miles will occur. Within existing roads spot rock application will occur.
- Road reconstruction totaling less than 0.1 miles will occur.
- Timber will be harvested by aerial, ground-based, and skyline methods (approximate acreages):
  - Aerial yarding – 131 acres
  - Ground-Based yarding – 69 acres
  - Skyline yarding – 77 acres
- Post-harvest treatments to reduce fuel loading
- Project Design Features, Best Management Practices, and mitigation measures described in the McFall/Potter Creek EA (pp. 48 to 51) and the Upper Siletz River EA (pp. 14 to 18) will be incorporated into the timber sale contract.

### 3.0 Selected Action Maps

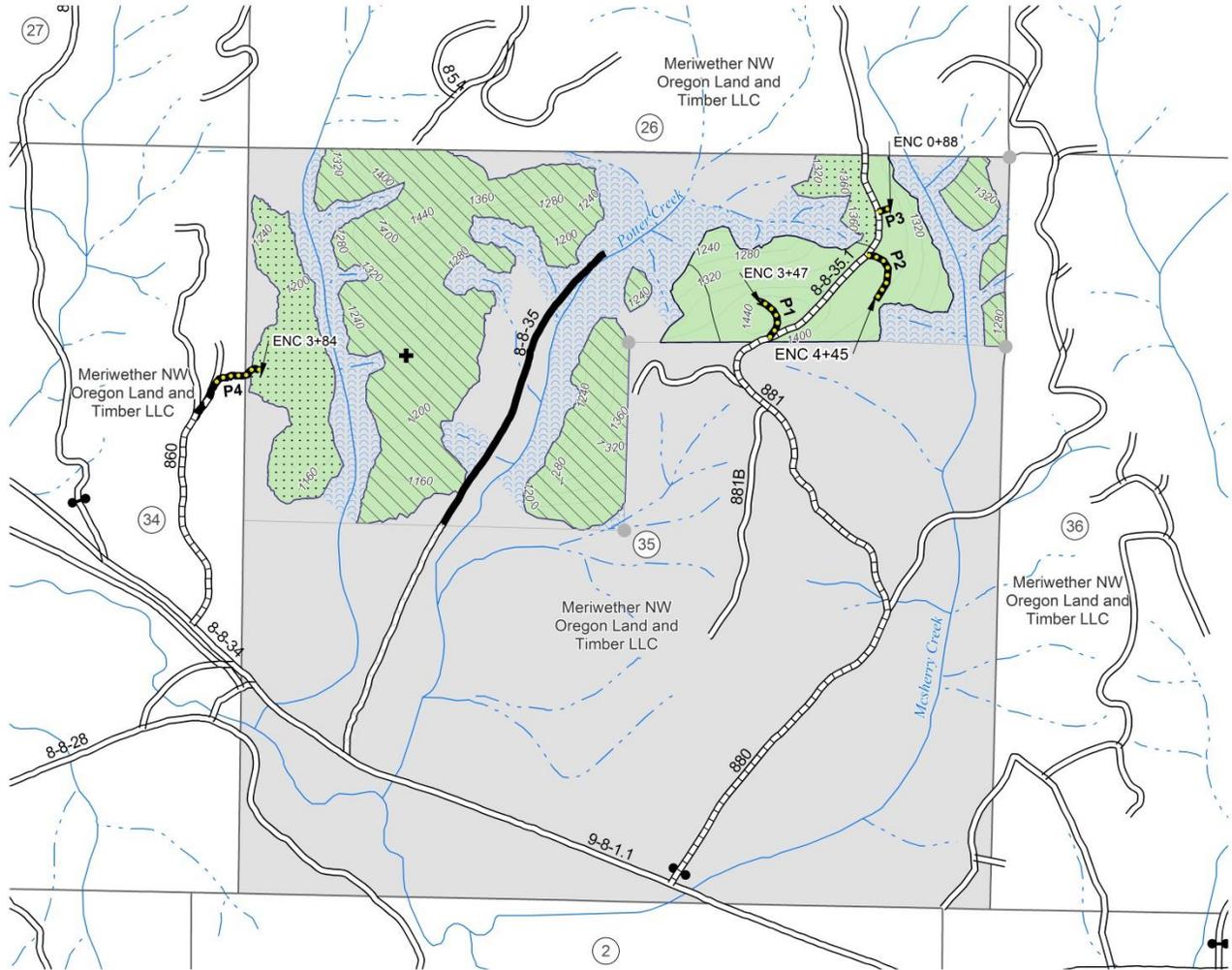
United States Department of the Interior - BUREAU OF LAND MANAGEMENT

#### POTTER ELK TIMBER SALE

T. 8 S., R. 8 W., Section 35, W. M. - SALEM DISTRICT - OREGON

**Selected Action**

Sheet 1 of 2



Contour interval: 40 ft.

- |   |                         |                        |
|---|-------------------------|------------------------|
| Road to be constructed and decommissioned               | Unit 35A - 126 acres    | Non-Fishbearing stream |
| Road to be renovated                                    | Aerial Yarding          | Fishbearing stream     |
| Road to be reconstructed                                | Ground-Based Yarding    | Plus Tree              |
| Overgrown road to be decommissioned (natural processes) | Skyline Yarding         | Found Corner           |
| Existing road   | Stream Protection Zone  | Gate                   |
| Overgrown or impassable road                            | No treatment will occur |                        |

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Data was compiled from multiple sources and may not meet U.S. National Mapping Accuracy Standard of the Office of Management and Budget.

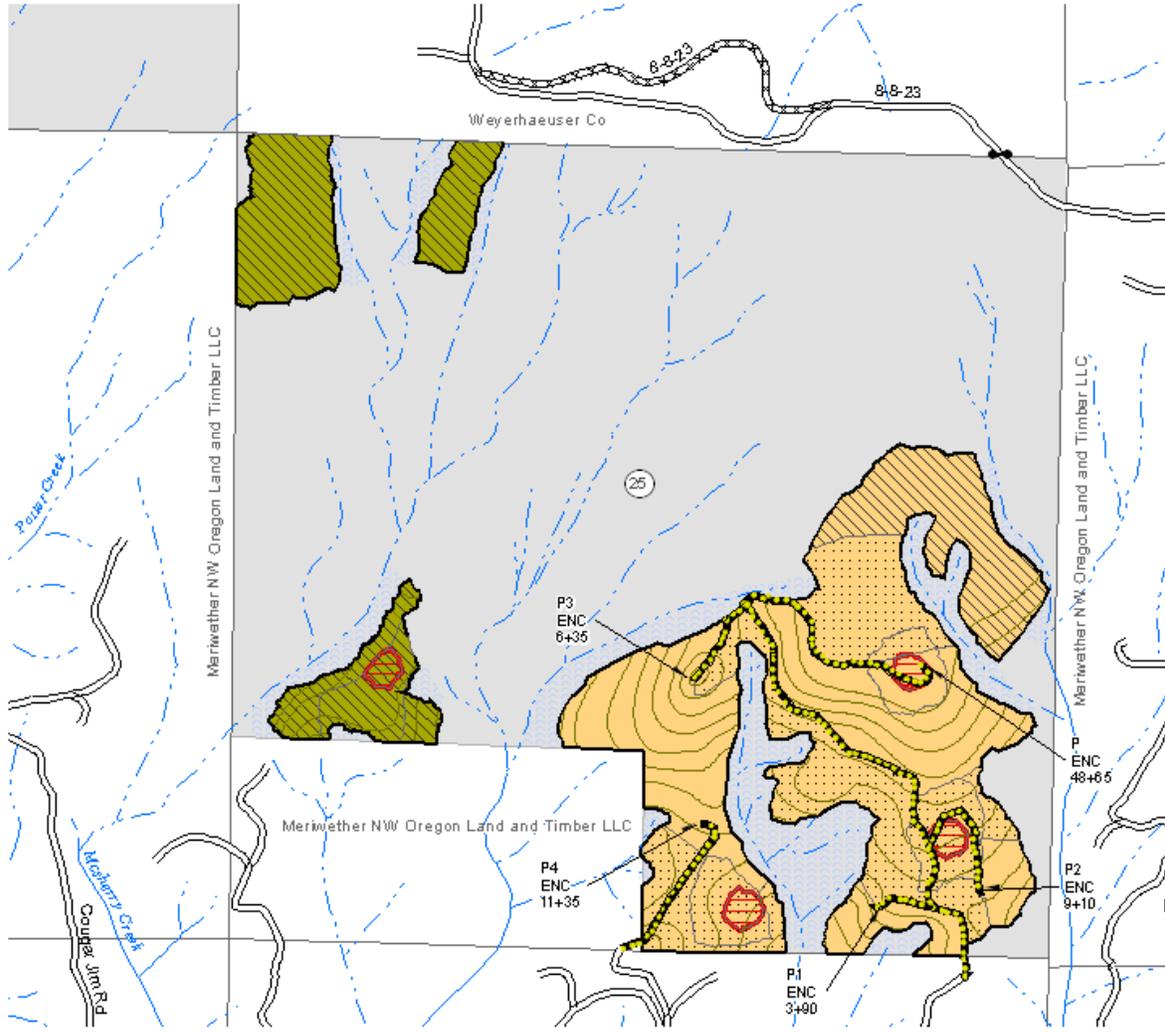


May 23, 2012

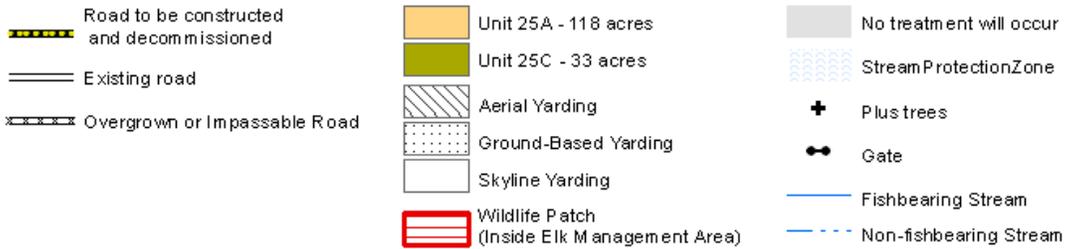
1,000 500 0 1,000 Feet

United States Department of the Interior - BUREAU OF LAND MANAGEMENT  
**POTTER ELK TIMBER SALE**

T. 8 S., R. 8 W., Section 25, W.M. - SALEM DISTRICT - OREGON



Contour interval: 40 ft.



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Data was compiled from multiple sources and may not meet U.S. National Mapping Accuracy Standard of the Office of Management and Budget.



## 4.0 Alternatives Considered

The McFall/Potter Creek EA analyzed the effects of the no action and proposed action alternatives. Complete descriptions of the alternatives and their anticipated effects are contained in the EA, Chapter 4.0.

The Upper Siletz River EA analyzed the effects of the no action, proposed action, and limited road construction alternatives. Complete descriptions of the alternatives and their anticipated effects are contained in the EA, Chapters 2 and 3.

The BLM considered, but did not fully analyze, a no-new-road construction alternative in the Upper Siletz River EA. Without new road construction, Potter Elk (T.8 S., R. 8 W., section 25) would require 100 percent helicopter logging with long flight distances to nearby landing locations. This would result in an economically unviable timber sale.

## 5.0 Decision Rationale

Considering public comment, the content of the EAs and supporting project records, the management recommendations contained in the *Upper Siletz River Watershed Analysis*, and the management direction contained in the RMP, I have decided to implement Alternative 2 in the Upper Siletz River Watershed Enhancement EA and McFall/Potter Creek EA as described above. The following is my rationale for this decision.

1. The Selected Action:
  - Meets the Purpose and Need of the project as stated in the Upper Siletz River EA (section 1.6), and McFall/Potter Creek EA (section 4.1) as shown in Table 2 and Table 3.
  - 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 (McFall/Potter Creek FONSI, Upper Siletz River EA FONSI) 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 2 and Table 3.

Table 2, below, shows the comparison of the alternatives with regard to Purpose and Need for the Potter portion of the timber sale (Unit 35A), as discussed in Section 4.5 of the McFall/Potter Creek EA.

**Table 2. Comparison of the Alternatives with Regard to Purpose and Need – Potter portion**

<b>Purpose and Need (EA section 4.1)</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Proposed Action</b>
<b>Late-successional forest conditions, which serve as habitat for late-successional forest species, can be developed, accelerated, and enhanced (NCAMA, p. 2).</b>	Does not meet this purpose and need. Creates high level of small size CWD for the next decade or two in all stands within the project area.	Retains existing limbs on open grown trees through selective cutting of trees. Larger diameter trees felled for safety or operational reasons would be retained for CWD. Increases the quality and value of wildlife habitat.
<b>Increase structural diversity in relatively uniform conifer stands.</b>	Does not meet purpose and need. Maintains highly dense, uniform, small diameter stands of trees with receding crown ratios and loss of limbs and growth, lacking understory regeneration and shrubs.	Reduces tree densities to increase diameter growth and more open stand conditions to preserve limbs and high crown ratios. Increases species diversity and understory regeneration, shrubs, forbs etc.
<b>Offer a marketable density management sale.</b>	Does not meet this purpose and need. No timber would be offered for sale.	Offers approximately 126 acres of timber for sale.
<b>Provides appropriate access for timber harvest and Silvicultural practices used to meet the objectives above, while minimizing increases in road densities.</b>	No change. Maintains existing road densities in current maintained state.	Renovates approximately 2 miles, reconstructs approximately 265 feet, and constructs 0.3 mile of new road.

Table 3, below, shows the comparison of the alternatives with regard to Purpose and Need for the Elk portion of the timber sale (Units 25A and 25C), as discussed in Section 2.6 of the Upper Siletz River EA.

**Table 3. Comparison of the Alternatives with Regard to Purpose and Need – Elk Portion**

<b>Purpose and Need (EA Section 1.6)</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Proposed Action</b>	<b>Alternative 3 Limited Road Construction</b>
<p><b>Restore and maintain late-successional forest conditions which serve as habitat for late-successional forest species, which can be consistent with marbled murrelet guidelines (RMP p. 19)</b></p>	<p>Understory regeneration, shrubs etc. would be lacking.</p> <p>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.</p> <p>No timber harvest would occur consequently no spatial and structural diversity would occur.</p>	<p>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.</p> <p>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.</p>	<p>Same as in Alternative 2 except approximately fewer acres and areas would receive treatment through mid-seral enhancement.</p> <p>The northwest portion of section 25 (33 acres of Unit 25C in Alternative 2) was dropped from this alternative because of the economic infeasibility associated with aerial logging. This area would not receive treatment to enhance or accelerate the development of late-successional forest conditions.</p>
<p><b>Provide a stable timber supply (RMP p. 9)</b></p>	<p>Would not offer timber for sale.</p>	<p>Offers approximately 151 acres of timber for sale. (173 acres were analyzed for potential inclusion in the EA.)</p> <p>Timber would be harvested by ground-based, skyline, and aerial methods:</p> <p>Approximately 52 acres (34%) would be aerial-harvested, 48 acres (32%) would be</p>	<p>Analyzed up to 150 acres of timber to offer for sale.</p> <p>Timber would be harvested by ground-based and aerial methods:</p> <p>Approximately 122 acres (81%) would be yarded by aerial methods and 28 acres (19%) would be yarded</p>

		ground-based harvested, and 51 acres (33%) would be skyline harvested.	by ground-based methods.  Overall value of timber is lower because of the high logging costs associated with the increased aerial yarding over alternative 2.
<b>Accelerate growth of trees to restore large conifers to Riparian Reserves (RMP p. 7)</b>	Without treatment, stand structure would remain relatively uniform, except for gaps created by disturbance.	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.	Same as in Alternative 2 except fewer acres would incur conifer tree growth acceleration within Riparian Reserves.
<b>Enhance or restore habitat (e.g. CWD, snag habitat, instream large wood) for populations of native riparian-dependent species (RMP p. 7).</b>	Does not meet purpose and need. Maintains existing forest conditions which lack CWD and snags, particularly in decay class 1 and 2.	Increases snags and CWD, providing habitat for amphibians, small mammals, invertebrates, bryophytes and fungi.	Same as in Alternative 2 except fewer acres would acquire desired vegetation characteristics.
<b>Provide appropriate access for timber harvest and silvicultural practices used to meet the objectives above.</b>	No change. Existing road densities would be maintained.	Constructs approximately 1.5 miles of new roads. New roads would be decommissioned after harvest. Renovates 1.9 miles of existing roads. Renovations would improve drainage and road surface conditions, resulting in less road surface erosion into streams.	Constructs 0.3 miles of new road, which would be decommissioned following harvest. Road renovation remains the same as Alternative 2.

## 6.0 Compliance with Direction

The Potter Elk timber sale has been designed to conform to the following documents, which direct and provide the legal framework for management of BLM lands within the Salem District:

- *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) as amended: The RMP has been reviewed and it has been determined that the proposed thinning activities conform to the land use plan terms and conditions (e.g. complies with management goals, objectives, direction, standards and guidelines) as required by 43 CFR 1610.5 (BLM Handbook H1790-1).
- *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);
- *Record of Decision and Standards and Guidelines for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, January 2001 (2001 ROD).

The analyses in the McFall/Potter Creek EA and Upper Siletz River EA are site-specific and supplement 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).

### Survey and Manage Review

The Potter Elk timber sale is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Salem District RMP.

On December 17, 2009, the U.S. District Court for the Western District of Washington issued an order in *Conservation Northwest, et al. v. Sherman, et al.*, No. 08-1067-JCC (W.D. Wash.), granting Plaintiffs' motion for partial summary judgment and finding NEPA violations in the *Final Supplemental to the 2004 Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (USDA and USDI, June 2007). In response, parties entered into settlement negotiations in April 2010, and the Court filed approval of the resulting Settlement Agreement on July 6, 2011. Projects that are within the range of the northern spotted owl are subject to the survey and management standards and guidelines in the 2001 ROD, as modified by the 2011 Settlement Agreement.

The Potter Elk timber sale is consistent with the Salem District Resource Management Plan/Forest Land and Resource Management Plan as amended by the 2001 *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (2001 ROD), as modified by the 2011 Settlement Agreement.

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."

Per the 2011 Settlement Agreement, the 2006 Pechman Exemptions remain in force:

*"The provisions stipulated to by the parties and ordered by the court in Northwest Ecosystem Alliance v. Rey, No. 04-844-MJP (W.D. Wash. Oct. 10, 2006), shall remain in force. None of the following terms or conditions in this Settlement Agreement modifies in any way the October 2006 provisions stipulated to by the parties and ordered by the court in Northwest Ecosystem Alliance v. Rey, No. 04-844-MJP (W.D. Wash. Oct. 10, 2006)."*

The Potter Elk timber sale meets Pechman Exemption A, because it entails no regeneration harvest and entails only thinning in stands less than 80 years old (McFall/Potter Creek EA, p. 46; Upper Siletz River EA, p. 6).

The entire sale area, then, qualifies for Pechman Exemption A. At the time of the analysis, though, the future of the Survey and Manage program was somewhat unclear. For the older stands in this sale (79 years old), the Upper Siletz River EA contains important disclosures related to survey and habitat analysis. For red tree voles, the BLM determined that the current mid-seral stands did not contain suitable habitat for the species and that no known red tree vole nests or sites were in or adjacent to the project areas (Upper Siletz River EA, p. 47). The BLM conducted surveys for two Survey and Manage mollusk species (Upper Siletz River EA, p. 47). For botany Survey and Manage species, the BLM did not locate any known sites within the project area (Upper Siletz River EA, p. 36). Lastly, the BLM included a number of mitigation measures that may be applied if Survey and Manage species are found during project implementation (Upper Siletz River EA, pp. 16-17). Likewise, the McFall/Potter EA, which analyzes the Potter portion of the timber sale, includes Survey and Manage disclosures that remain relevant (McFall/Potter Creek EA, pp. 4, 42, 51).

## **Northern Spotted Owl (NSO) Status Review**

The following information was considered in the analysis of the Potter Elk timber sale activities: a/ *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute,

Courtney et al. 2004); b/ *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony et al. 2004); c/ *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and *Northwest Forest Plan – The First Ten Years (1994-2003)*: d/ *Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005).

The Salem District analyzed reports regarding the status of the northern spotted owl and although the agencies anticipated a decline of NSO populations under land and resource management plans during the past decade, the reports identified greater than expected NSO population declines in Washington and northern portions of Oregon, and more stationary populations in southern Oregon and northern California.

The reports did not find a direct correlation between habitat conditions and changes in NSO populations, and they were inconclusive as to the cause of the declines. Lag effects from prior harvest of suitable habitat, competition with barred owls, and habitat loss due to wildfire were identified as current threats. West Nile Virus and Sudden Oak Death were identified as potential new threats. Complex interactions are likely among the various factors. This information has not been found to be in conflict with the NWFP or the RMP (Evaluation of the Salem District Resource Management Plan Relative to Four Northern Spotted Owl Reports, September 6, 2005).

## **7.0 Public Involvement, Consultation, and Coordination**

### **Public Scoping**

#### *McFall/Potter Creek EA*

A scoping letter, dated June 29, 2006, was sent to 42 potentially affected and/or interested individuals, groups, and agencies. Two responses were received during the scoping period and are addressed in EA section 10.2. A description of the project was included in the quarterly BLM publication “Project Update” since 2007 publication to solicit comments on the proposed projects.

#### *Upper Siletz River EA*

A scoping letter, dated September 23, 2009, was sent to 22 potentially affected or interested individuals, groups, and agencies. A description of the project was included in the quarterly BLM publication “Project Update” since 2009. Three responses were received during the scoping period. The BLM responded to scoping comments in section 8.2 of the EA.

### **EA and FONSI Comment Period and Comments**

#### *McFall/Potter Creek EA*

The BLM made the EA/FONSI available for public review November 28, 2007 to December 27, 2007. The notice for public comment was published in a legal notice by the Polk County *Itemizer Observer* newspaper. Two comment letters and one e-mail message were received. Responses to the substantive public comments can be found in Appendix A of this Decision Record.

## *Upper Siletz River EA*

The BLM made the EA/FONSI available for public review from August 9, 2010 to September 7, 2010. One (1) comment email was received during the EA comment period. Responses to the substantive comments can be found in Appendix A of this DR. The scoping and EA comment letters and emails are available for review at the Salem District BLM Office, 1717 Fabry Rd SE, Salem, Oregon 97306.

## **Consultation and Coordination**

### **Wildlife: United States Fish and Wildlife Service (USFWS)**

#### *McFall/Potter Creek Density Management and Aquatic Habitat Restoration EA*

To address concerns for 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 for this proposed action was facilitated by its inclusion within the *Biological Assessment, Fiscal years 2007/2008 Habitat Modification Activities in the North Coast Province Which Might Affect Bald Eagles, Northern Spotted Owls or Marble Murrelets* (August 1, 2006). A letter of concurrence was issued by the USFWS based upon the information provided in the Biological Assessment (FWS reference #1-7-06-I-0190). The resulting Biological Opinion concluded that this action would not result in jeopardy to listed species and would not adversely modify critical habitat for any species. This selected action has been designed to incorporate all appropriate design standards set forth in the Biological Assessment (BA) to ensure compliance with the Terms and Conditions included within the Biological Opinion.

#### *Upper Siletz River EA*

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 facilitated by its inclusion within a programmatic BA that analyzed all projects that may modify the habitat of listed wildlife species on federal lands within the Northern Oregon Coast Range during fiscal years 2011 and 2012. The selected action has been designed to incorporate all appropriate design standards set forth in the BA. This action would be considered a “may affect, not likely to adversely affect” northern spotted owl dispersal habitat and northern spotted owl and marbled murrelet critical habitats. In the resulting Letter of Concurrence (FWS Reference Number 13420-2010-I-0105), after reviewing the effects of the proposed action on the spotted owl and its critical habitat, and the marbled murrelet and its critical habitat, the USFWS concurred with BLM that the activities, as proposed, are not likely to adversely affect spotted owls or marbled murrelets and are not likely to adversely affect critical habitat for either species.

### **Fish: National Marine Fisheries Service (NMFS)**

Consultation with NMFS is required for all actions which “may affect” ESA listed fish species and critical habitat. Oregon Coast (OC) Coho Salmon are listed as threatened under the ESA, as amended, and are known to occur in the Siletz River system. Upper Willamette River (UWR) Winter Steelhead and UWR Spring Chinook are listed as threatened under the ESA, as amended, and are known to occur within the Luckiamute River and South Yamhill River systems.

Based on project location and project activities the proposed Potter Elk timber sale is considered 'no effect' to OC coho salmon. This determination is primarily due to distance of project activities (more than 9.5 miles) from listed fish habitat. Consultation with NMFS is not required for OC coho salmon for this project.

The selected action would have “no effect” to UWR Spring Chinook salmon and Oregon chub. Generally, the ‘no effect’ determination is based on the distance upstream of project activities (approximately 25 miles) from ESA listed Chinook salmon critical habitat and historic habitat for Oregon chub. Consultation with NMFS is not required for UWR Spring Chinook salmon or with USFWS for Oregon chub for this project.

Based on project location and project activities, the Potter Elk timber sale is considered “no effect” to UWR winter steelhead. Project activities (except hauling) occur within the Siletz River watershed and are unconnected to UWR winter steelhead habitat. Proposed hauling occurs within the Luckiamute River watershed where listed steelhead reside. The no effect determination is primarily due to distance of project activities from listed fish habitat (at least 1/3 mile overland and 1.5 miles from the nearest stream crossing) and design features which would prevent impacts to listed fish from occurring. Consultation with NMFS is not required for UWR winter steelhead for this timber sale.

Actions which 'may affect' listed species and are not addressed under existing consultations, including *Aquatic Restoration Biological Opinion (ESA Section 7 Formal Programmatic Consultation and Magnuson-Stevens Fishery Conservation and Management Act-Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-2012)* would require additional ESA consultation coverage.

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 Potter Elk timber sale is not expected to adversely affect EFH due to distance of all activities associated with the project from occupied habitat. Consultation with NMFS on EFH is not required for this project

## **8.0 Conclusion**

### **Review of Finding of No Significant Impacts**

I have determined that changes to the FONSI – November 2007 and March 2012 are not necessary because I have considered and concur with information in the EAs and FONSI. Comments on the EAs were reviewed and no information was provided that leads 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**

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management Regulations at 43 CFR 5003, protests of this decision may be made within 15 days of the publication of a notice of decision in a newspaper of general circulation. This notice of decision will be published in the *Gazette-Times* newspaper on or Decision Record for the Potter Elk timber sale  
EA #: OR-080-06-12 and DOI-BLM-OR-S050-2009-0002



## Appendix A: Response to Public Comments

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.

### Comments received on the McFall/Potter Creek EA (EA#OR080-06-12)

One comment letter was received on the Potter Creek density management portion of the McFall/Potter Creek EA.

#### **American Forest Resource Council (AFRC), Jacob Groves**

Received December 27, 2007

1. **Comment:** *“The AFRC would like to see all timber sales be economically viable. We are concerned that the current proportions of each harvesting system may make this project difficult to sell in a down market.”*

**Response:** Economic feasibility is one of the many factors taken into account when offering a timber sale. Road work costs, yarding costs and other incidental costs versus the acreage and volume taken are calculated and an Interdisciplinary Team of specialists come to a consensus on what alternative to pursue for analysis.

2. **Comment:** *Seasonal, recreational, and wildlife restrictions often make timber sales extremely difficult to complete within the contract timelines. Fire season restrictions on top of that...have a cost to the purchaser and results in a lower bid for the stumpage.*

The Potter Elk timber sale units could be harvested at anytime within the contract period. Other restrictions are in place to comply with the Endangered Species Act along with various policies the BLM must follow as a federal entity.

3. **Comment:** *The AFRC would like to encourage BLM offer sales that allow winter harvesting on improved roads or allow for roads and spurs to be improved so winter harvesting can be accomplished. The loggers need winter work and the mills need winter wood, this is a big bidding issue for purchasers.*

**Response:** The Potter Elk timber sale will provide for year round hauling since the effects of hauling will result in no adverse effects to ESA fish or EFH.

4. **Comment:** *A more flexible operating season would make the helicopter logging jobs much more attractive to purchasers, as well as more efficient to operate. When helicopter yarding is required, a hard look should be given to allow mechanical harvesting and pre-bunching of processed logs where possible. This will make all phases of the helicopter logging considerably more economical and will also treat the slash at the same time.*

**Response:** The project design features will include a design feature that would allow ground

based equipment to operate on slopes less than 45 percent within the skyline and aerial yarding areas. The equipment would be allowed to cut, process, and deck logs only. No yarding of logs with ground based equipment would be allowed on slopes greater than 35 percent.

5. **Comment:** *The AFRC would like to see flexibility for fuels treatments. Rather than specifying a specific method, the BLM should identify some specific objectives and limitations to resource disturbance. The purchaser could identify the method to accomplish the objectives utilizing their particular equipment and employees.*

**Response:** The objectives of the fuels treatment are several: 1.) To reduce the amount of material along roads and landings that may interfere with future management of the timber stand or maintenance of the roads. 2.) To reduce the risk of a fire starting by removing fuel concentrations from areas easily accessed by humans. Heavy accumulations of slash are always treated for these reasons.

Piling and burning slash concentrations is a proven, cost effective way to decrease fire risk and severity. Leaving fuel concentrations untreated along the roads that are to remain open to vehicular traffic is not a satisfactory alternative. The project will allow for and the Purchaser is encouraged to find off site alternative uses for slash located on or within 30 feet of the landings and roads in the project area. For example, chipping and hauling the chips to the co-generation plant in Lyons, Oregon is becoming a viable alternative to piling and burning. This alternative should be considered, and with adequate pre-planning to maximize efficient material handling, may prove to be the most cost effect treatment. Chipping and spreading the chips on the contract area may be considered as an alternative to either of the previous two treatments but is probably the least economically attractive.

6. **Comment:** *The AFRC would like to voice support for thinning treatments in the riparian areas. By prescribing small no cut buffers (25-60 feet) to maintain stream temperatures and thinning the remaining acres inside the riparian reserves you can achieve the management objective of moving them into late seral habitat faster while harvesting more volume thus reducing unit cost.*

**Response:** The majority of units have a 50-60 foot SPZs, which falls into the desired range you indicated you would like to see thinning occur. With implementation of design features, temperature increases and sediment delivery will be minimized. Stream protection zone widths above 55 feet are to meet design criteria for shade sufficiency to reduce potential increases in water temperature.

### **Comments Received on the Upper Siletz River EA (EA# DOI-BLM-OR-S050-2009-0002)**

One comment letter was received during the comment period for the Upper Siletz River EA.

**Oregon Wild, Doug Heiken  
Received September 3, 2010**

7. **Comment:** *Avoid road construction because it detracts from habitat restoration objectives and can cause adverse effects on soil, water, weeds, wildlife habitat, and carbon. We prefer Alt 3 that includes less road construction and more untreated skips where many aspects of late successional forests can develop such as snags and dead wood.*

**Response:** The IDT analyzed the potential impacts of road construction in the EAs. The RMP (p. 62) provides direction to “develop and maintain a transportation system that serves the needs of users in an environmentally sound manner.” The IDT analyzed the potential impacts of road construction on resources in the EAs to ensure the proposed road construction was consistent with RMP guidance. Roads to be constructed would be located primarily on ridge tops, with no stream crossings, and would be decommissioned after use (Upper Siletz River EA section 2.3). The EA concluded that the construction and use of roads would be unlikely to negatively impact the aforementioned resources (Upper Siletz River EA, Chapter 3). The road construction, when completed according to Project Design Features and applicable BMPs, would allow more acres to be treated to meet LSR objectives under the Proposed Action alternative than under the Limited Road Construction alternative.

Further, economic feasibility is one of the many factors taken into account when offering a timber sale. Road work costs, yarding costs and other incidental costs versus the acreage and volume taken are calculated and an IDT of specialists come to a consensus on what alternative to pursue for analysis. The substantially higher cost of helicopter yarding areas that are accessible to road construction and conventional harvest methods were considered in determining which alternative to implement.

8. **Comment:** *In regards to dead wood recruitment, BLM must consider more ways of mitigating the adverse effects of logging on dead wood recruitment by planning more untreated skips within stands.*

**Response:** Thinning dense stands would capture some density-dependent suppression mortality; however, the recruitment of dead wood within treated stands and adjacent untreated habitat (over 400 acres of BLM in section 25) is an ongoing and age-independent natural process involving biotic and abiotic forces. Biotic mechanisms, in addition to density-dependent suppression mortality, include disease, insects, and animal damage. Abiotic processes include fire, wind, ice glazing, snow loading, flooding, landslides, debris torrents, and crushing (trees falling on trees). Abiotic processes, unrestricted by tree densities, provide a constant supply of dead wood by damaging or destroying individual trees, patches of trees within stands, stands within watersheds, and entire watersheds themselves (Bauhus et al., 2009).

Damage, the presence of dead wood in live trees, is not uncommon; damage to the bole and/or branches can be found throughout all vertical layers within any stand. Tree mortality, like damage, can be a slow process taking years, or it can happen very quickly. In a study of early-seral conifer stands (14-38 years) in western Oregon, Lutz and Halpern (2006) examined 22 years of tree growth and mortality data and found that density-dependent suppression mortality in Douglas-fir killed more than 3 times as many trees as abiotic mortality, however, the total mass of dead wood created by abiotic agents was more than 4 times greater than the total mass of dead fir wood created by density-dependent suppression mortality regardless of stand age. The abiotic process plays a far greater role in dead wood recruitment (both quantity and quality of dead wood) and

mitigates the loss of density-dependent dead wood at all landscape levels.

- 9. Comment:** *Conduct a stand simulation model to show whether the untreated areas are sufficient to recruit snags that will mitigate for the loss of large tree recruitment in the thinned areas and the landscape as whole will meet DecAID 50-80% tolerance targets. The EA over-emphasizes on the “quality” of future snags and LWD while virtually ignoring the “quantity” of future recruitment.*

**Response:** There would not be a significant loss of large tree recruitment in the thinned stands because the great majority of large trees become snags through abiotic processes (see response to Comment 2) and few large snags are the result of density-dependent suppression mortality. All of the 12,215 acres of BLM-managed lands in the Upper Siletz River watershed are being managed for LSOG (late-seral/old-growth) habitat. Once these stands reach 80 (for LSR) or 110 (for AMR) years old they are left to develop naturally, where ongoing biotic and abiotic processes create an abundance of dead wood. There are 2,325 acres of LSOG and an additional 1,886 acres (or 34% of all BLM acres in the watershed) of no-entry riparian buffers (SPZs) that are currently producing large snags through natural processes which would meet the DecAID targets and mitigate for the loss of any future density-dependent suppression mortality snags captured through thinning 277 acres (or 2% of all BLM acres in the watershed).

- 10. Comment:** *The EA says that “several areas would remain untreated” but the EA never discloses the vegetation condition in those untreated areas or what their future management might be. Thinning to restore late successional habitat characteristics must include a mixed mosaic of treated and untreated areas that provide: in thinned areas (larger trees, vegetation diversity) and in unthinned areas (dense cover and dead wood). By focusing almost exclusively on the thinned part of the equation it is impossible to know if this is a sound restoration effort because it looks like too much of the area is being thinned and not enough left unthinned for dead wood habitat development.*

**Response:** More than half of the 560 BLM-managed acres in section 25 will be left untreated. Under the Upper Siletz Watershed EA, approximately 205 acres in section 25 have been analyzed for treatment within the Potter Elk and Fanno Lookout timber sales. Areas were removed from consideration for inclusion within conventional timber sales for various reasons. The section is largely dominated by Douglas-fir stands between 50 and 75 years of age, but there is variability in stocking levels, species mix (some areas had a substantial hardwood component), and site conditions. Areas were also removed due to logging infeasibility or other resource concerns.

The Potter Elk timber sale is part of a much larger watershed enhancement action in the Upper Siletz River basin. All three projects within the enhancement action are designed to accelerate the development of late-seral forest conditions within existing managed mid-seral forests. The action area consists of the 12,215 acres of BLM-managed lands in the watershed. The current vegetation conditions are described in the table below (EA section 3.1.2).

**Table 4. Current acres of terrestrial wildlife habitat types at the landscape-level (Upper Siletz River watershed)**

Management / Ownership	Early-seral Habitat (0-39 yrs)	Mid-seral Habitat (40-79 yrs)	Late-seral Habitat (80-199 yrs)	Old-growth Habitat (200+ yrs)	Hardwoods & Nonforest Habitats	Stream Protection Zone <sup>1</sup>	Total
BLM (%)	767 (6)	7,049 (58)	1,245 (10)	1,080 (9)	188 (2)	1,886 (15)	12,215 (27)
Private <sup>2</sup> (%)	22,586 (70)	9,679 (30)	0	0	0	0	32,265 (73)
<b>Total (%)</b>	<b>23,353 (53)</b>	<b>16,728 (38)</b>	<b>1,245 (3)</b>	<b>1,080 (2)</b>	<b>188</b>	<b>1,886 (4)</b>	<b>44,480</b>

<sup>1</sup>Represents the acres within a no-entry buffer on both sides of perennial streams; includes all habitat types

<sup>2</sup>Private land early and mid-seral acre estimates are based on current rotation-ages of 40-50 years and review of 2009 aerial photos; private acres in all other habitat types in the table may occur as small, scattered patches across the landscape, but are too difficult to estimate and are not significant to this evaluation

**11. Comment:** *Don't do 5 acre patch-cuts or mini-clearcuts, instead do heavy thinning in 3 acre patches. Be sure to retain structure in big game forage areas. Don't manage for single-resources like big game. Don't "permanently maintain" these early seral patches. Extend the life of the heavily thinned foraging areas by not replanting them with trees. The 5 acres "gaps" should retain far more snags both in the central clearcut and in the surrounding heavily thinned area.*

**Response:** The term "patch" used in the wildlife sections of the EA refers to a Landscape Ecology 'spatial element' parameter (Forman, 1995). Matrix habitat is the dominant cover type at a defined spatial scale, it is relatively homogeneous, has high connectivity, and plays a major role in ecosystem dynamics. Patch habitat differs from the matrix cover type, is relatively homogeneous, and is nonlinear in shape.

The proposed wildlife patches are not just for big game, but would be created to improve forage and nesting habitat for migratory birds and other species that use early-seral openings within mature forest habitat (Upper Siletz River EA, p. 49). An effort would be made to maintain the one-acre treeless opening because the size and duration of grass-forb-shrub patches in managed conifer forest landscapes in the Oregon Coast Range have decreased significantly when compared to unmanaged conifer forests (Swanson et al., 2010). All existing snags and CWD would be retained and four snags (which would also provide future CWD) at least 15+ inches in diameter and clumped along the northern edge of the 1-acre patch-center would be created.

The South Fork Siletz River watershed provides critical elk wintering habitat for several local herds and falls within the Luckiamute Cooperative Travel Management Area (LCTMA); administered by Oregon Dept. of Fish and Wildlife, with BLM and private landowners as partners). The quality and quantity of elk forage is limiting herd productivity within the LCTMA. Management of the public lands in the resource area is directed by the Salem District RMP, which includes the habitat management of important elk areas in the District.

**12. Comment:** *Don't "capture mortality" by logging in riparian reserves which need more wood to meet ACS objectives, not less. BLM needs to carefully explain the rationale for logging in riparian reserves and show that there are aquatic benefits that outweigh these adverse effects of*

*recruitment of dead wood. The adverse effects of logging in riparian reserves can be mitigated by retaining more trees in riparian reserves with wider no-treat buffers and/or prescribing thinning that retains more trees per acre.*

**Response:** The proposed no-harvest buffers would provide places where competition related mortality would continue and natural LWD recruitment processes would be maintained. The effects on wood recruitment of thinning adjacent to no-treatment zones and compliance with ACS objectives were discussed in the Upper Siletz River EA (sections 3.1.1, 3.1.5, 5.0). The project area streams are primarily small first and second order streams. Channels widths are typically small for these stream types. The project area channels would be buffered with at least 55 to 60 feet no-treatment zones where the existing stand would remain untreated. Wood recruitment studies conducted in the Pacific Northwest have shown the majority of woody debris recruitment occurs within 18 to 20 meters (59 to 65 feet) of the stream edge (McDade et al. 1990, Van Sickle and Gregory 1990, Meleason et al. 2002). The proposed SPZ width, which accounts for 85 percent of this woody debris recruitment zone, is anticipated to maintain wood recruitment rates (Upper Siletz River EA, section 3.1.5.2).

For the Upper Siletz project the small pool forming size pieces of wood of concern would largely be unaffected by proposed actions as the trees of sufficient height to span the stream would necessarily be small trees adjacent to the small streams. With the incorporation of no-entry buffers these small pool forming trees would largely be protected. Therefore, the proposed actions are not expected to cause any negative short-term effects to aquatic habitat at the site or downstream. Larger pieces of coarse wood located further away from the stream (greater than 55 to 60 feet) that may be impacted due to harvest were addressed in the EA and are further discussed below.

Proposed thinning in the riparian treatment areas is anticipated to increase the average growth of the remaining trees between 52 to 85 percent over 30 years compared to not treating the stands (Upper Siletz River EA, p. 63). As indicated on page 37 of the Upper Siletz River EA, modeling 30 years on the untreated stand indicated trees succumbing to density mortality would average 12 inch DBH, while treated stands would average 16 inch DBH.

Log scale regression analysis of timber harvested in the Marys Peak Resource Area indicates that a 12 inch DBH Douglas fir tree has an average height of 56 feet to a 6 inch diameter top. The SPZs are equal to or greater than 56 feet, thus over the next 30 years the proposed buffer is expected to protect the recruitment of functional wood from the SPZ. The minimum diameter for functional instream wood which may form a pool was assumed to be approximately 6 inches (per Beechie et al. 2000).

Smaller diameter Douglas fir and western hemlock (12 inches DBH or less) would be recruited from areas within the 55 foot SPZ. Outside of the SPZ the treatment is anticipated to accelerate growth rates of the stand resulting in trees of larger diameter which could be recruited to the stream due to density mortality or from stochastic events (disease, wind, slides, etc.). These larger diameter wood (modeling indicated an average of 16 inch DBH, EA p. 37) would begin to be recruited from farther up the slopes as the treated stands reach greater heights. Log scale regression analysis indicates that an average 16 inch DBH Douglas fir tree is an average height of 87 feet to a 6 inch diameter top. These trees would be large enough to contribute functional wood to channels from outside the 55 to 60 foot minimum buffers. Therefore, while thinning may reduce mortality in the treated stands, and reduce the total number of trees that may die, affects to

LWD recruitment to nearby fish streams are not expected to occur. Wood with a larger range of sizes would potentially be recruited into streams over the long-term from the treated stands more rapidly than not treating.

As short-term recruitment of the existing CWD is expected to be maintained by SPZs (Upper Siletz River EA, sections 3.1.1.2 and 3.1.5.2), the proposed actions are not expected to cause short-term changes to fish habitat at the site or downstream. In the long-term, the increase in the size of trees in the RR LUA could benefit LWD recruitment to the stream channel, thus potentially improving the quality/complexity of aquatic habitat adjacent to the treatment areas in the future.

- 13. Comment:** *Think not only about existing snags but more importantly about the processes that recruit snags, including: a large pool of green trees from which to recruit snags and the existence of competition and other mortality processes. This is especially critical in previously logged uplands that are already short of snags and in riparian areas where recruitment of large wood is important to stream structure. It is often asserted that thinning grows big trees faster and therefore results in more rapid recruitment of large snags, but FVS and other tools show this NOT to be true.*

**Response:** Thinning dense stands would capture and remove some density-dependent suppression mortality that could be recruited to streams. However, as described in the BLM response above, this impact can largely be mitigated by implementing no-harvest buffers. The effects to recruitment of pool forming wood described by Beechie et al. (2000) should be considered carefully because they did not include a provision for no-harvest buffers in their modeling. Recruitment of wood from the untreated buffers as a result of both biotic and abiotic forces will continue to be an ongoing process.

Density-dependent suppression mortality is just one of the biotic mechanisms that can kill trees. Other biotic mechanisms include disease, insects and animal damage. Abiotic processes such as fire, wind, ice and snow loading, breakage as a result of falling trees, landslides, and tree fall as a result of channel migration and flooding are density-independent process that provide a constant supply of wood to streams. While density-dependent mortality is a dominant factor in young stands, abiotic factors become more important agents of mortality as stands mature (Franklin et al. 2002) and fewer large snags are the result of density-dependent suppression mortality. Most wood recruitment models, including Beechie et al. (2000) include only one process, density-dependent suppression mortality, because of the difficulties in modeling stochastic events such as disease, fire, and blowdown. The wood delivery model developed by BLM for its WOPR analysis modeled suppression mortality along with channel migration and landslide processes and incorporated 30 to 60-foot no-harvest buffers along streams. This modeling exercise found little or no difference in the recruitment of either functional wood (as described by Beechie et al., 2000) or large key pieces of wood as a result of thinning in riparian areas adjacent to the no-harvest buffers.

- 14. Comment:** *Use projects as an opportunity to learn by conducting monitoring and research on the effects of thinning. There are many information gaps that need filling. Every project should generate useful information to inform future projects.*

**Response:** It is beyond the workload capacity of the Marys Peak Resource Area to conduct

extensive monitoring and research on each completed project. However, the MPRA utilizes information from the Density Management Study conducted by Oregon State University College of Forestry, Pacific Northwest Research Station, and other relevant research publications to inform and develop future projects.

- 15. Comment:** *Consider NOAA/NMFS July 23, 2010 Position Paper to Support the February 23, 2010 Elevation of Two Northwest Forest Plan Issues to the Regional Executives.*

**Response:** We are aware of the referenced document and agree that wood of all sizes is ecologically important for the continued proper functioning of aquatic systems. The BLM, FS and NMFS currently disagree on the identification and interpretation of the best available science to guide riparian management and for determining the potential effects of riparian thinning on ESA-listed salmonids. The document was developed at the request of the regional executive leadership consistent with the Streamlined Consultation Procedures for Section 7 of the Endangered Species Act (1999) guidance on dispute resolution. The USFWS, NMFS, FS, and BLM regional leadership is currently working together to develop a process for reviewing the pertinent science in an effort to reach consensus on the identification and interpretation of the best available science to guide riparian management.

Treatments proposed in Riparian Reserves are designed to improve or maintain aquatic conditions, including those functions provided by wood recruited to the stream channel. As described in the BLM response above (Response to Comment 7, see also EA pp. 76-77), impacts to large wood recruitment have been effectively mitigated by implementing no-harvest buffers. In the short-term, little change is expected in the recruitment of all sizes of LWD to streams in the project area because the majority of the wood recruitment is expected to come from the no-harvest buffers and nearby untreated Riparian Reserves where natural processes will continue to provide wood in a range of sizes. In the long-term, smaller sized wood will continue to be recruited from stands adjacent to the streams and trees within the untreated buffers will continue to grow and provide a source for larger sized pieces of wood. The light to moderate riparian thinning proposed outside of the buffers is designed to promote habitat for a variety of riparian-dependent species, as well as for aquatic species. While thinning will remove some of the density-dependent suppression mortality it will also accelerate the development of larger diameter trees over the following 20-30 years, which will then be available for recruitment to nearby streams when stochastic events occur. The accelerated recruitment of large wood, which is more stable and long lasting than small wood pieces (Spence et al., 1996; Harmon et al., 1986; McHenry et al., 1998; Rosenfeld and Huato, 2003), as a critical need for aquatic ecosystems in the Northwest (FEMAT, 1993).