

# C-9 Timber Sale

## Decision Record

Rickreall Creek Watershed Enhancement Environmental Assessment  
DOI-BLM-OR-S050-2010-0004

April 2014

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

Township 8 South, Range 7 West, Section 9, Willamette Meridian  
Polk County, Oregon

Responsible Agency: USDI – Bureau of Land Management

Responsible Official: Rich Hatfield, Field Manager  
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## 1.0 Introduction

The Bureau of Land Management (BLM) conducted an environmental analysis for the C-9 Timber Sale, which is documented in the *Rickreall Creek Watershed Enhancement Environmental Assessment* (Rickreall Creek EA) (EA# DOI-BLM-OR-S050-2010-0004) and the associated project file. This EA analyzed the effects of six timber sales: C-9, Cedar Ridge, Gilmore, Rick-Line, Robb Mill Loader, and Waymire. This decision authorizes the implementation of only those activities directly related to and included within the C-9 Timber Sale. This sale is located within the Adaptive Management Area (AMA) and Riparian Reserves land use allocations in the Rickreall Creek fifth-field watershed in Polk County, Oregon.

## 2.0 Decision

I have decided to implement the C-9 Timber Sale as described in the Proposed Action (EA pp. 15 to 26), hereafter referred to as the “selected action.” The selected action is shown on the maps included in this Decision Record (DR). This decision is based on site-specific analysis in the Rickreall Creek Watershed Enhancement EA, the supporting project record, management recommendations contained in the *Mill Creek, Rickreall Creek, Rowell Creek, Luckiamute River Watershed Analysis* (1998), as well as the management direction contained in the *Salem District Resource Management Plan* (RMP) (May 1995), which are incorporated by reference in the EA.

### Decision Summary

The following is a summary of this decision:

#### Density Management

- Variable density thinning on approximately 125<sup>1</sup> acres of 86-92 year old forest<sup>2</sup> within AMA and Riparian Reserves.
  - Within the AMA – 73 acres
  - Within the RR – 52 acres
- Of the 126 acres, approximately two acres of clearing for road construction (described below).
- Approximately 5,165 MBF of timber will be harvested.

#### Timber Yarding Methods

- Ground-based yarding – 42 acres (33 percent)
- Skyline yarding – 83 acres (67 percent)

#### Fuels

- Post-harvest fuel hazard surveys and recommendations for treatments to reduce fuel loading.

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<sup>1</sup> The BLM manages 311 acres in this section. The C-9 Timber Sale will treat 40 percent of these lands in the section.

<sup>2</sup> 2014 ages. Stands naturally regenerated over several years after harvest in the 1920s. A few areas with trees remain from the original stand. Such trees are often referred to as “legacy” trees.

## Roads

- Construction of three temporary roads totaling 0.42 miles (2,223 feet):
  - Within the AMA: 2,223 feet
  - Within the Riparian Reserves: No road construction
  - All newly constructed roads will be decommissioned after harvest.
- Renovation of approximately 4.22 miles of existing road. Within existing roads spot rock application, blading, and brushing may occur.
- Following harvest, decommissioning will occur on all newly constructed roads (0.42 miles) and on the renovated 8-7-9 road (0.44 miles), for a total of 0.86 miles. Decommissioning entails installing waterbars or other shaping of roads for drainage, placing woody debris, and/or seeding with native species. Earth and debris berms, large boulders, stumps and rootwads, or other methods determined to be effective for each site may be used to block these roads.

## Project Design Features

- Design features and mitigation measures described in the EA (pp. 36-43) will be incorporated into the timber sale contract.

## Refinements to the Project since the EA was published

**Project boundaries and acreage:** The EA analyzed 147 acres for the C-9 Timber Sale: 76 in the AMA and 71 in the Riparian Reserves. These draft boundaries and fixed-width buffers provided an area for analysis for the IDT. Throughout the planning process, the boundaries were refined to reflect and address on-the-ground conditions, logging feasibility, and resource needs. The final project area was calculated using GPS and Geographic Information Systems data in 2013. The final timber sale unit area amounted to 125 acres. The 22 acre reduction occurred primarily within the Riparian Reserves (reduced by 19 acres), where no-harvest buffer widths often greatly exceeded the 70 foot average requirement.

**Red tree vole protection areas:** Trees with active red tree vole nests were found in two areas originally within the boundaries analyzed for treatment under the C-9 Timber Sale. The BLM completed protocol surveys at C-9 in the spring and early summer of 2012. Climbing was completed in the first two weeks of July to inspect potential nest structures and to further explore several legacy trees that had the highest likelihood of having hidden nests. Of the 24 trees marked for climbing, 21 of these trees were legacy trees of interest that had no visible nests and 3 trees had a visible nest structure. Four trees were found to have “active” presence, one had “inactive” presence, and the rest had no red tree vole presence.

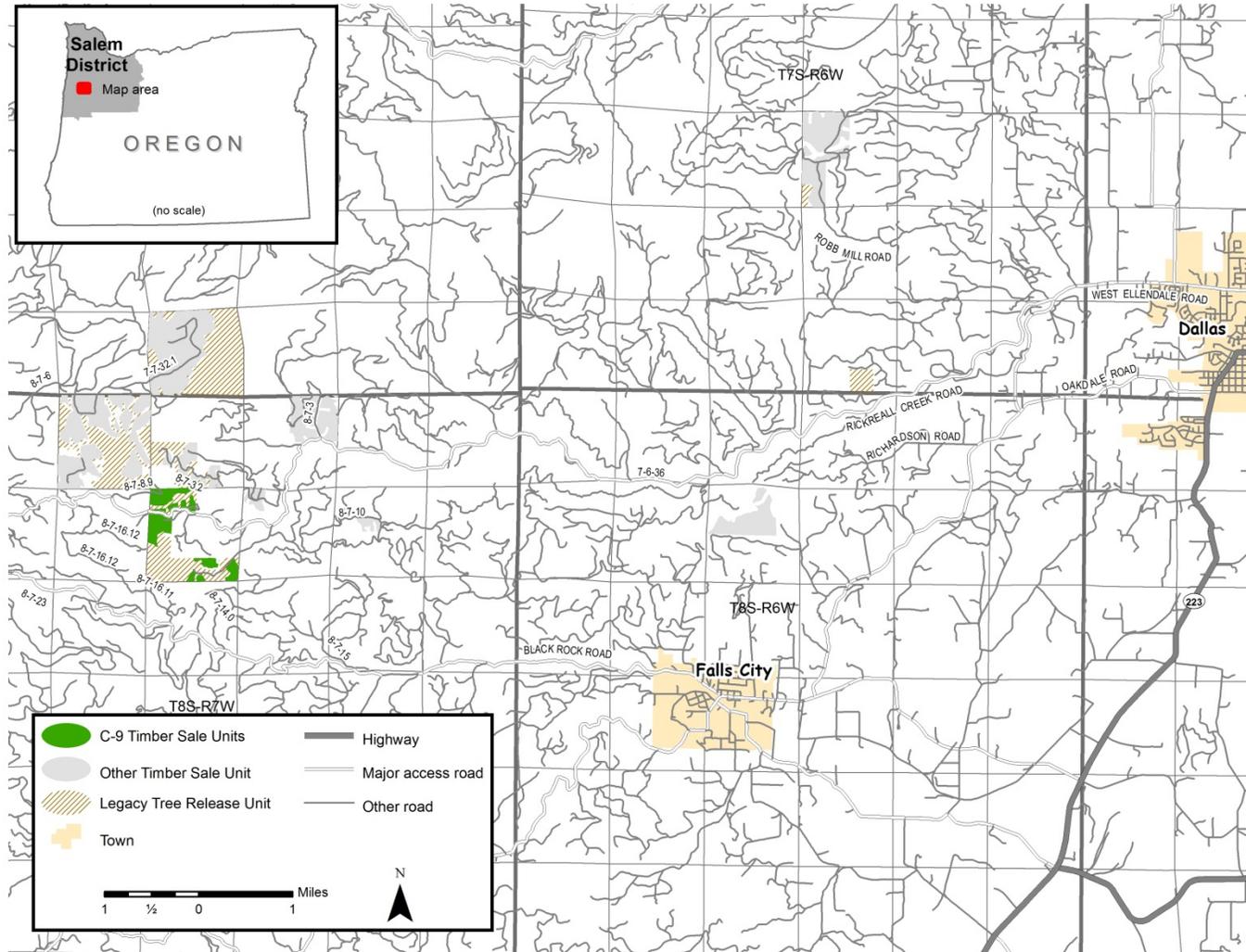
Based on these results, the stand age and habitat conditions within the C-9 Timber Sale, the BLM created two habitat areas, 21 acres and 31 acres in size, for red tree vole conservation in compliance with the 2001 Survey and Manage ROD. Approximately six acres within the C-9 Timber Sale units have been dropped from the sale to be included in the buffer. The buffers are shown on the Selected Action map in this DR.

Location and Selected Action maps appear on the following pages.

### 3.0 Location and Selected Action Maps

The map below shows the location of the C-9 Timber Sale in relation to neighboring communities and other projects analyzed in the Rickreall Creek Watershed Enhancement EA.

Map 1. Location Map



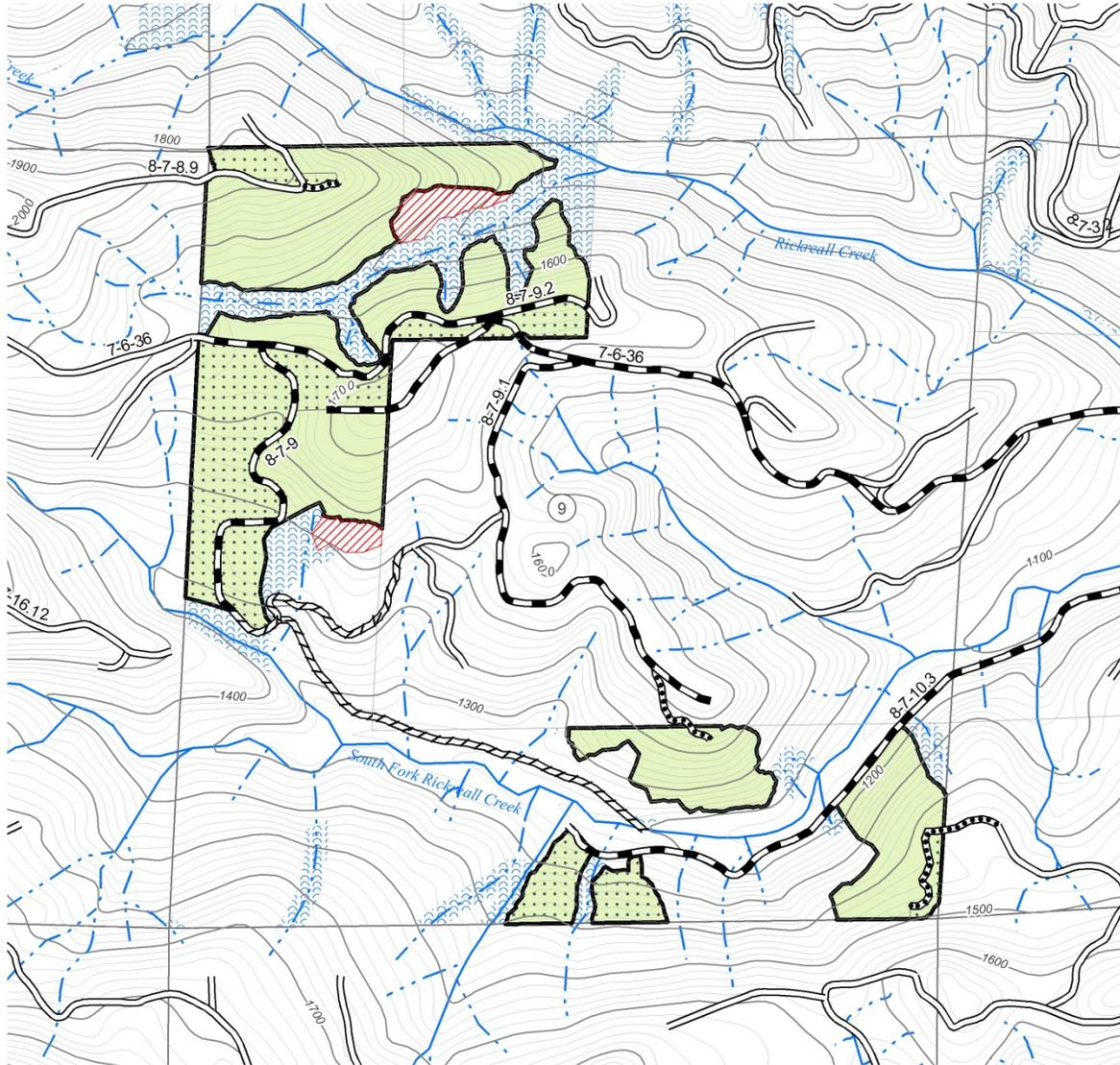
# Map 2. Selected Action

United States Department of the Interior - BUREAU OF LAND MANAGEMENT

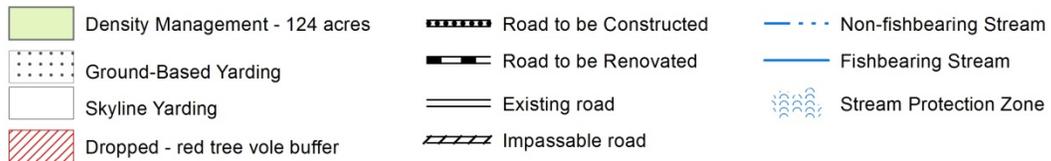
## C-9 TIMBER SALE

T. 8 S., R. 7 W., Section 9

Selected Action  
Sheet 1 of 1



Contour interval: 20 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 EA analyzed the effects of the No Action, Proposed Action, and No New Road Construction alternatives. No unresolved conflicts concerning alternative uses of available resources (section 102(2)(E) of NEPA) were identified. No alternatives were considered, but not analyzed in detail for the C-9 Timber Sale. Complete descriptions of the three alternatives are contained in the EA, pp. 15 to 36.

## 5.0 Decision Rationale

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the *Mill Creek, Rickreall Creek, Rowell Creek, Luckiamute River Watershed Analysis*, and the management direction contained in the RMP, I have decided to implement Alternative 2, the selected action, as described in section 2.0 of this DR. The following is my rationale for this decision.

The Selected Action:

- Best 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 (2012 FONSI) beyond those already anticipated and addressed in the RMP FEIS.
- Is economically viable. This sale will produce revenue for the Federal Government and provide jobs for Oregonians.
- Meets Aquatic Conservation Strategy Objectives (EA pp. 128-138).
- Has been adequately analyzed.

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 on the following pages.

Alternative 2 and 3 are fairly similar; the primary difference is that Alternative 3 does not include new road construction and treats 50 fewer acres<sup>3</sup>. Alternative 2 includes 0.42 miles of new, temporary road construction. I carefully reviewed the effects analysis for these roads in the soils, hydrology, and fisheries section of the EA (pp. 66, 69-71, 82, and 89). In my reading, the effects of these new, temporary roads are fairly minimal and negligible. In balancing the additional acres that can be treated by building these roads with the effects of the roads, I clearly see Alternative 2 as the preferred option for accomplishing project objectives.

Also, I have received some public comment in the last year requesting additional buffers within the C-9 project area. Generally, the buffers are requested around legacy trees within the harvest units. According to the commenter, these buffers will serve as additional habitat for red tree voles and may provide corridor linkages between habitat areas.

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<sup>3</sup> Comparison of acres analyzed in the EA.  
*C-9 Timber Sale Decision Record*  
EA # DOI-BLM-OR-S050-2010-0004

I do not believe that these additional buffers are necessary to protect the species. Legacy trees in the project area are already reserved from harvest.<sup>4</sup> The BLM conducted the appropriate surveys for red tree voles and created a red tree vole management area that included the trees with active nests. Existing buffers (riparian and red tree vole habitat areas) already provide a corridor and some continuity for red tree voles in the area. Additional buffers may create logging system logistical challenges. Overall, I am unconvinced as to the utility of these additional red tree vole buffers—particularly when surveys did not find any active nests.

The existing red tree vole buffers protect the known active sites and ensure that project activities will not contribute to the need to list the species. In addition, thinning around the legacy trees outside the red tree buffers will have the added benefit of minimizing competition around these trees. Legacy trees provide a plethora of ecosystem value. Minimizing vegetative competition increases their chance of continued survival.

Further, the habitat areas within the C-9 Timber Sale are not the only areas in which the BLM is protecting red tree voles. The BLM proposed the 103 acre Waymire timber sale in the Rickreall Creek Watershed Enhancement EA (the same EA in which C-9 was analyzed), which is located approximately six air miles due east of C-9 and has similar habitat conditions. While slightly younger than the stands at C-9, Waymire (stands age 63-79 years old) contains a scattered component of 110 year old legacy trees.

The BLM completed the first round of protocol surveys for the red tree vole in 2013 and found widely scattered active presence throughout the proposed sale area. The BLM wildlife biologist who was analyzing the project believed that additional surveys would find additional red tree vole nests. Ultimately, I decided that dropping the sale would best serve our requirements to protect the species.

In selecting the Proposed Action, I also considered the land use allocation for this area. The Adaptive Management Area (AMA) land use allocation calls for a “testing of technical and social approaches to achieving desired ecological, economic, and other social objectives” (Northwest Forest Plan Standards and Guideline, p. C-21). The C-9 project area is within the North Coast AMA. This AMA emphasizes developing old forest habitat, restoring and maintaining fisheries and biological diversity, and providing stable income to local communities<sup>5</sup>. I believe the selected action best meets this balance by both advancing late successional objectives and providing timber products to the local communities.

As stated earlier, the BLM manages 311 acres in Section 9. Harvest units in C-9 Timber Sale include 125 acres (about 40 percent of the total BLM acres in the 624 acre section). The remaining acres in the section will not be treated for a number of reasons: they are included in no-cut riparian buffers, red tree vole buffers, or the stands do not need treatment to meet management objectives. Therefore, more than half of the BLM-managed acres in this section will not be harvested and will continue to move on a natural trajectory. The remaining acres will be harvested and provide economic benefits while also moving the stand on a path towards late successional forest conditions.

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<sup>4</sup> In November 2013, I visited the C-9 Timber Sale with Scott Hopkins, Marys Peak wildlife biologist. I looked at a number of the legacy trees in the sale. The majority of the legacy trees were already included in a buffer – either riparian or a red tree vole buffer. I did not see the value in buffering additional legacy trees. Indeed, some of the legacy trees would benefit from a thinning around them to minimize competing vegetation. See Rickreall EA pp. 10-12, 109, and 114.

<sup>5</sup> <http://www.fsl.orst.edu/ncama/intro.htm>, retrieved April 11, 2014.

**Table 1. Comparison of the Alternatives with Regard to the Purpose of and Need for Action**

Purpose and Need (EA Section 1.6)	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3 Limited Road Construction
<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. 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>Short-term, increases horizontal spatial variability (gaps and clumps), minor reduction and disturbance to existing CWD material (snags and down logs) from project activities. 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>Long-term, the gradual transition in structural characteristics 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>Similar to Alternative 2 except fewer acres would receive treatment in the AMA.</p>
<p><b>Accelerate growth of trees to restore large conifers to RR (RMP p. 7).</b></p>	<p>Without treatment stand structure would remain relatively uniform, except for gaps created by disturbance.</p>	<p>Retains 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.</p>	<p>Similar to Alternative 2, but would occur on 19 fewer acres of Riparian Reserve.</p>
<p><b>Enhance or restore habitat for populations of native riparian-dependent plants, invertebrates, and vertebrate species (RMP p. 7).</b></p>	<p>Maintains existing forest conditions which are lacking CWD and snags, particularly in decay class 1 and 2.</p>	<p>Increases snags and CWD; providing habitat for amphibians, small mammals, invertebrates, bryophytes and fungi.</p>	<p>Similar to Alternative 2, though fewer acres would acquire desired vegetation characteristics.</p>
<p><b>Provide appropriate access for timber harvest and silvicultural practices used to meet the objectives above.</b></p>	<p>No change. Maintains existing road densities.</p>	<p>Constructs 0.42 mile of new roads and renovates 4.22 miles of existing roads. Following harvest, the new construction and the renovated 8-7-9 road would be decommissioned. Renovations would improve drainage and road surface conditions, resulting in less road surface erosion into streams.</p>	<p>Constructs no new road. Renovation work and benefits would be comparable to Alternative 2.</p>

## 6.0 Compliance with Direction

The C-9 Timber Sale has been designed to conform to the following documents, which direct and provide the legal framework for management of BLM-managed lands within the Salem District:

- *Salem District Record of Decision and Resource Management Plan (RMP)*, May 1995: The RMP has been reviewed and it has been determined that the C-9 Timber Sale conforms to the land use plan terms and conditions (i.e.: complies with management goals, objectives, direction, standards and guidelines) as required by 43 CFR 1610.5 (BLM Handbook H1790-1). Implementing the RMP is the reason for doing this project (RMP p.1-3);
- *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* (the Northwest Forest Plan, or NWFP), April 1994;
- *Record of Decision and Standards and Guidelines for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (S&M ROD, January 2001).

The analysis in the Rickreall Creek 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).

### Survey and Manage Review

The C-9 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.

In December 2009, the District Court for the Western District of Washington issued an order on partial summary judgment in favor of the Plaintiffs finding inadequacies in the National Environmental Policy Act (NEPA) analysis supporting the “Record of Decision to Remove the Survey and Manage Mitigation Measure Standards and Guidelines from Bureau of Land Management Resource Management Plans Within the Range of the Northern Spotted Owl” (BLM et al. 2007)(2007 ROD). The District Court did not issue a remedy or injunction at that time.

Plaintiffs and Defendants entered into settlement negotiations that resulted in the 2011 Survey and Manage Settlement Agreement adopted by the District Court on July 6, 2011.

The Defendant-Intervenor subsequently appealed the 2011 Settlement Agreement to the Ninth Circuit Court of Appeals. The April 25, 2013, ruling in favor of the Defendant-Intervener remanded the case back to the District Court.

On February 18, 2014, the District Court vacated the 2007 RODs. Vacatur of the 2007 RODs resulted in returning the BLM to the status quo in existence prior to the 2007 RODs, which includes the use of the 2006 “Pechman” exemptions.

The District Court and all parties agreed that projects begun in reliance on the Settlement Agreement should not be halted. The District Court order allowed for the Forest Service (FS) and Bureau of Land Management (BLM) to continue developing and implementing projects that met the 2011 Settlement Agreement exemptions or species list as long as certain criteria were met. These criteria include:

- (1) projects in which any Survey and Manage pre-disturbance survey has been initiated (defined as at least one occurrence of actual in-the-field surveying undertaken according to applicable protocol) in reliance upon the Settlement Agreement on or before April 25, 2013;
- (2) projects, at any stage of project planning, in which any known site (as defined by the 2001 Record of Decision) has been identified and has had known site-management recommendations for that particular species applied to the project in reliance upon the Settlement Agreement on or before April 25, 2013; and
- (3) projects, at any stage of project planning, that the BLM and FS designed to be consistent with one or more of the new exemptions contained in the Settlement Agreement on or before April 25, 2013.

This project is consistent with Criteria 1 and 2 above, because surveys for Survey and Manage species (red tree voles and fungal species) we initiated prior to April 25, 2013 using the 2011 Settlement Agreement (Criteria 1), and known site buffers for red tree voles were established prior to April 25, 2013 (Criteria 2).

### **Compliance with the Aquatic Conservation Strategy**

This BLM reviewed the No Action and Proposed Action alternatives against the ACS objectives at the project scale. The no action alternative does not retard or prevent the attainment of any of the nine ACS objectives because this alternative would maintain current conditions (EA pp. 130-138). The Proposed Actions do not retard or prevent the attainment of any of the nine ACS objectives.

Over the long-term, this project would aid in meeting ACS objectives by speeding the development of older forest characteristics in the Riparian Reserves. In addition, more open stands would allow for the growth of important riparian species in the understory. The C-9 Timber Sale promotes stand diversity, provides more light to accelerate growth of conifers, and promotes species diversity. The creation of snags and CWD will restore watershed conditions by providing a gradual transition in structural characteristics of the treated stands that more closely resembles a late-seral forest (EA p. 138).

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

### **Public Scoping**

The BLM mailed a scoping letter, dated August 19, 2010, to 19 potentially affected or interested individuals, groups, and agencies. The BLM received two responses during the scoping period and utilized comments in the responses to develop issues and refine the action alternatives (EA pp. 7-8).

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

The BLM made the EA and FONSI available for public review from March 8, 2012 to April 6, 2012. Three comment letters were received during the EA comment period. Responses to the substantive public comments relevant to the C-9 Timber Sale can be found in Appendix A of this Decision Record. The scoping and EA comment letters and emails are available for review at the Salem District BLM Office.

In May 2012, the BLM hosted a field trip with interested members of the public to the Rickreall Creek project area. Timber sale units in the C-9 and Gilmore sales were reviewed and discussed.

## **Consultation and Coordination**

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

Due to potential effects to spotted owls, marbled murrelets and their designated critical habitat, Section 7(a) of the Endangered Species Act requires that this proposed action receive consultation with the U.S. Fish and Wildlife Service. Consultation has been addressed by inclusion of the proposed action within a batched Biological Assessment (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 2013 and 2014. All projects of the proposed action have been designed to incorporate all appropriate design standards included in the BA. A Letter of Concurrence (#01EOFW00-2012-I-0124, dated July 17, 2012) was received from the Service that concurred that the proposed action was not likely to adversely affect any listed species or their designated critical habitat.

The original BA included an analysis of impacts to the proposed revised critical habitat for spotted owls which was included to meet the requirements for conferencing. Following the publication of the final rule for revised critical habitat for the spotted owl (Federal Register, vol. 77, 71875-72068), the BLM requested that the Service provide confirmation that their conferencing opinion meets the requirements for consultation as addressed in the final rule. On January 3, 2013, the Service provided formal concurrence that the proposed actions (including the C-9 Timber Sale) which were covered by the Letter of Concurrence would not likely adversely affect the revised critical habitat for the spotted owl.

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

Consultation with USFWS or NMFS is required for all actions which “may affect” ESA listed fish species and critical habitat.

The proposed actions 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 eight 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 these projects.

Upper Willamette River (UWR) Winter Steelhead is listed as threatened under the ESA, as

amended, and is known to occur within the Rickreall Creek system. The BLM determined the project 'may affect but was not likely to adversely affect' (NLAA) listed UWR winter steelhead. The proposed action was informally consulted upon with National Marine Fisheries Service (NMFS), as required under Section 7 of the Endangered Species Act. Informal consultation on C9 Timber Sale was completed by receipt of a 'Letter of Concurrence' from NMFS on December 20, 2012 (NMFS No: NWR-2012-9319).

Protection of 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 area is over 200 feet upstream from nearest habitat utilized by coho salmon. Portions of the unpaved haul route, and stream crossings on the haul route, are adjacent to EFH. Proposed haul route adjacent to EFH will be seasonally restricted to dry conditions. The proposed project is not expected to adversely affect EFH. The determination is based on distance of vegetation treatment activities from occupied habitat and the dry season of use for hauling on unpaved roads in the Rickreall Creek Watershed. Consultation with NMFS on EFH is not required for this project.

## **8.0 Conclusion**

### **Review of Finding of No Significant Impact**

I have determined that change to the Finding of No Significant Impact (FONSI, April 2012) for the C-9 Timber Sale is not necessary because I have considered and concur with information in the EA and FONSI. I reviewed the comments on the EA and no information was provided in the comments 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. The notice of decision will be published in the Polk County Itemizer-Observer newspaper on April 23, 2014.

To protest this decision a person must submit a written protest to Rich Hatfield, Marys Peak Field Manager, 1717 Fabry Rd SE, Salem, Oregon 97306 by the close of business (4:30 p.m.) on May 7, 2014. A written protest electronically transmitted (e.g., email, facsimile, or social media) will not be accepted as a protest. A written protest must be on paper.

The protest must clearly and concisely state the reasons why the decision is believed to be in error. Any objection to the project design or my decision to go forward with this project must be filed at this time in accordance with the protest process outlined above. If a timely protest is received, this decision will be reconsidered in light of the statements of reasons for the protest and other pertinent information available and the BLM shall serve a decision in writing on the protesting party (43 CFR 5003.3).

## Implementation

If no protest is received within 15 days after publication of this Decision Record (C-9 Timber Sale) this decision will become final. The planned sale date is May 21, 2014. For additional information, contact Stefanie Larew (503) 375-5601, Marys Peak Resource Area, Salem BLM, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by:     /s/ Rich Hatfield      
Rich Hatfield  
Marys Peak Field Manager

    4/21/14      
Date

## Appendix A: Response to Public Comments Received on the Rickreall Creek Watershed Enhancement (EA# DOI-BLM-OR-S050-2010-0004)

The BLM received three comment letters during the comment period for the Rickreall Creek EA. It is the BLM's intent in this DR to respond to substantive comments directly related to the C-9 Timber Sale. Many of the comments are opinions, generic in nature, or do not pertain to the C-9 Timber Sale. The BLM will address project-specific comments in their respective DRs. 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.

- 1. Comment:** *"It appears all of the proposed timber sales are within the LSR. Therefore, stands within the LSR that are over 80 years of age cannot be logged in any fashion...Road construction in Late-Successional Reserves for silvicultural, salvage, and other activities generally is not recommended unless potential benefits exceed the costs of habitat impairment."*

**Response:** You are correct that timber harvest is restricted in LSRs over 80 years of age. However, no timber sales are proposed within the Late-Successional Reserves. As stated on page 17 of the EA, the six timber sales are located within the Adaptive Management Area (AMA) and Riparian Reserves. A portion of the AMA is "designated as Late-Successional Reserves within the Adaptive Management Area" (RMP, p. 19), referred to in the EA as Adaptive Management Reserves (AMR). Within the AMR, timber harvest may occur up to the 110 year age class (106 – 115 years) to meet LSR objectives.

The stands at C-9 are 85 to 91 years of age and are within the AMA and Riparian Reserves land use allocations. No road construction is proposed within the LSR. Approximately 0.42 miles (2,223 feet) of road construction will occur within the AMA and Riparian Reserves. All new road construction and the renovated 8-7-9 road will be decommissioned following harvest activities.

The BLM thoroughly analyzed the proposed actions and their potential impacts in the Rickreall Creek Watershed Enhancement EA. The BLM disagrees that the effects of logging are adverse and has instead determined that the treatments designed for the C-9 Timber Sale will result in long-term benefits and accelerate the development of late-successional forest conditions.

- 2. Comment:** *Logging in the Riparian Reserves isn't needed. Logging captures mortality and will reduce recruitment of snags and large wood over a long period of time. Without logging more wood will be available over time for recruitment as snags, dead wood, and instream woody structure.*

**Response:** Approximately 52 acres (or 42 percent) of the C-9 Timber Sale is within the Riparian Reserves. The BLM developed the purpose and need for the Riparian Reserves portion of the sale based on guidance in the Salem RMP, NWFP, and the applicable watershed analyses (EA section 1.6). The BLM is directed to apply silvicultural practices to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics for attaining ACS objectives (RMP, p. 11).

Desired vegetation characteristics required for proper Riparian Reserve function includes large trees, abundant and well-distributed mature and understory conifers, diverse shrub species, and

large woody debris in stream channels and on floodplains. The Riparian Reserves stands in the proposed project area lack many of these characteristics (C-9 prescription, p. 2). The planned variable density thinning will address these deficiencies. A moderate-intensity thinning within the Riparian Reserves (but outside the minimum 70 foot no-cut buffer on streams) will allow more light to the understory, which will stimulate the growth of a diversity of understory shrub and tree species.

The density management is a “thin from below” treatment in which trees in the smaller diameter classes are cut and the larger, more vigorous trees are left standing. This type of thinning captures smaller, suppressed trees that would likely succumb to density mortality at some point in the future, though the timing is hard to predict. Density management would delay the input of small diameter CWD; however, to prevent a future shortage of CWD, the project includes provisions for monitoring and future activities to create downed logs and snags to meet ACS objectives (C-9 prescription, p. 9).

The BLM found that the implementation of project design features would be adequate for protecting future wood recruitment. 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) (EA p. 70). The no-harvest buffers along streams within the timber sale were designed to be a minimum of 70 to 75 feet wide on each side of the stream. The SPZ widths of C9 are greater than this woody debris recruitment zone, and would be anticipated to maintain instream wood recruitment rates (Rickreall EA pp. 71, 134, 136).

3. **Comment:** *Because this project involves thinning in stands over 80 years old, this is not a project within the purview of the Pechman exemption and every individual sale involved needs to be surveyed and discovered sites managed when required by the 2001 ROD.*

**Response:** The C-9 Timber Sale is in compliance with Survey and Manage. As stated in section 2.0 of this DR, the BLM completed protocol surveys for the red tree vole, a Category C species. The BLM, encountered two sites with red tree vole presence and, in conformance with management recommendations, applied a habitat buffer to protect these sites (as shown on the map included in this DR). Creation of the protection buffers resulted in dropping two small portions of the planned harvest units (3.5 and 2.0 acres) to be included in the two reserved habitat buffers that are approximately 23.7 and 28.6 acres.

As described in Section 6.0 of this DR, the February 18, 2014 District Court decision and subsequent court order, provided for BLM to utilize the 2011 Settlement Agreement concerning the management of Survey and Manage species. Surveys for two Survey and Manage mollusk species were initiated in May of 2013 and finalized in November 2013. One mollusk site (warty jumping slug) was discovered and buffered from harvest. While BLM will retain this protection buffer in the selected action, the mollusk species encountered is very common and was not listed on the 2011 Settlement Agreement species list.

No T&E or bureau special status botanical or fungal species were located within the C-9 project during surveys and none were known prior to surveys. Two Survey and Manage pin lichen species were located within the C-9 project area during surveys, *Chaenotheca chrysocephala* and *Chaenotheca furfuracea*. *Cheonotheca chrysocephala* is a category “B”

species and *C. furfuracea* is a category F species. Category F species do not require any protection. *Chaenotheca chrysocephala* was found in approximately 6 sites in the original C-9 units and are included in riparian buffers or in areas dropped or on trees reserved from cutting and are protected. Thinning dense stands of conifers would provide for additional habitat to these pin lichens which are mostly found on larger than stand mean diameter sized trees with an open canopy surrounding the host tree. Thinning around the large diameter trees would likely be beneficial to pin lichen species by creating additional sunlight to the base of these trees. All trees providing potential habitat for these two pin lichen species have been reserved due to their larger diameter. *Chaenotheca chrysocephala* has over 225 known sites in Oregon with over 75 known sites on Salem BLM lands and 68 of those known sites in the Oregon Coastal Mountain ecosystem (Geobob database).

4. **Comment:** *We believe that logging would adversely affect marbled murrelet habitat and the northern spotted owl.*

**Response:** The BLM consulted with the USFWS on the projects analyzed in the Rickreall Creek Watershed Enhancement EA. As stated in section 7.0 of this DR, the BLM received a Letter of Concurrence (#01EOFW00-2012-I-0124, dated July 17, 2012) from the USFWS that concurred that the proposed action was not likely to adversely affect any listed species or their designated critical habitat. Project actions are likely to maintain habitat conditions for both the northern spotted owl and the marbled murrelet.

The stands within the C-9 Timber Sale do not currently contain suitable habitat for the marbled murrelet, but they do contain about 90 acres of critical habitat for the northern spotted owl. As presented in the EA (page 111), surveys for marbled murrelets were conducted on a small patch of suitable habitat adjacent to the proposed sale units in 2009 and 2010. These surveys had no murrelet detections, and we have no known murrelet occupancy at any stands within the Rickreall watershed. Also there are no known current or historic spotted owl sites within this project area. Density management harvest was designed to accelerate the development of late-successional forest conditions such that the area would provide for late-successional habitat dependent species such as the marbled murrelet and northern spotted owl in the future.

5. **Comment:** *“You state that a growing body of literature supports the fact that this gap creation ensures the survival of legacy trees. NEPA requires you reveal and discuss this literature.”*

**Response:** By clearing around legacy trees, we are applying, in some degree, basic forestry textbook concepts. Thinning around dominant and co-dominant trees reduces competition for resources (e.g., light, soil moisture, growing space) thereby increasing the residual trees' vigor, diameter, crown size, and height to diameter ratio (windfirmness), extending the life of the larger trees. If competition was not removed from around the larger trees, their diameters will not increase as much, they will lose their lower branches from shade (reduce crown size), and potentially increase their chance of windthrow. Trees with less competition maintain deeper live crowns, maintaining a lower center of gravity and decreasing their height/diameter ratios, reducing susceptibility to wind damage. Latham and Tappeiner (2002) concluded that the old-growth trees responded positively to a range of density reduction treatments. Their results showed even small reductions in density improved growth and vigor. Crown ratios are predicted to fall to an average of .20 within 30 years without treatment, but remain higher, at a ratio of .34 in treated stands. Research indicates (Poage 2001) that windfirmness and individual

tree stability are factors in a tree reaching age 300 and over. With treatment, the ratio of height to diameter on remaining trees would be maintained or increased, such that stability and windfirmness would improve over time. Epicormic branching often develops on large Douglas-fir trees after removal of competition increasing the crown length over time.

Tappeiner et al. (1997) concluded that thinning 40- to 100-year-old Douglas-fir stands in the Coast and Cascade ranges of western Oregon promotes tree regeneration, shrub growth, and multi-storied stand development, and thinning that incorporates retention of large remnant trees, snags, and down wood, and hardwoods accelerate the development of old-growth characteristics.

- 6. Comment:** *We urge BLM to avoid new road construction, especially in reserves. The adverse effects of road construction offset any restoration benefits.*

**Response:** Approximately 2,223 feet of new construction will occur within the Adaptive Management Area. No road construction will occur within the Riparian Reserves. Approximately 900 feet of existing road will be renovated and decommissioned within the Riparian Reserves. All new road construction and the 8-7-9 road will be decommissioned following harvest activities.

The IDT determined that the road construction is necessary for an economically viable timber sale that will meet the purpose and need to accelerate the development of late-successional forest conditions. The BLM analyzed the project activities and determined that Aquatic Conservation Strategy objectives would be met (EA pp. 128-138). Application of Project Design Features and Best Management Practices will reduce the potentially negative effects associated with road construction.

- 7. Comment:** *We urge the BLM to find the optimal mix of treated and untreated stands. In order to achieve all the objectives for optimal late successional forest conditions, restoration projects must contain both thinned and unthinned patches.*

**Response:** Scoping comments on the Rickreall EA encouraged the inclusion of gaps and clumps within the harvest units: “gaps should not be clearcut but rather should retain some residual structure in the form of live or dead trees...even small clumps and patches of trees are desirable.” The BLM agreed and included both clumps and gaps within the design of the C-9 Timber Sale. Clumps and gaps, at up to one-half acre in size, may occur at a rate of 1 per 5 or 1 per 10 acres. Within the 125 acre timber sale, that equates to up to 16 acres (8 acres of gaps and 8 acres of clumps).

C-9 Timber Sale Prescription (p. 24):

*“Retain unthinned clumps: leave one un-thinned clump per approximately 5 acres within the project area. Each clump will consist of 15-25 trees, approx 40' radius, and may be sited adjacent to snags or other natural features, or randomly located.*

*Create gaps and clumps of approximately .5 acre (80' radius): In C9, unit 9A create one clump and one gap per 10 acres. In all other C9 units*

*create one clump and one gap per 5 acres. Leave only largest 5 conifer trees per acre, and all hardwood. Do not site gap within 100 feet of SPZ (stream buffer).”*

In addition to the clumps and gaps that occur within the C-9 boundaries, approximately 175 acres of BLM managed lands in the section will remain untreated (as addressed further in response to comment #9).

The C-9 Timber Sale, as designed with variable density harvest and gap and clump creation, will meet the purpose and need to accelerate the development of late-successional forest conditions.

- 8. Comment:** *Thinning captures mortality and results in a long-term reduction in recruitment of functional down wood. The BLM needs to provide a more rigorous analysis to prove that the harvest activities will not harm future CWD and LWD recruitment. Don't discount the value of large quantities of small-diameter wood. BLM must account for the effects of logging on both the quantity and the quality of wood.*

**Response:** The C-9 Timber Sale will not result in long-term negative impacts to down wood. The BLM has addressed the “quality vs. quantity” issue as it relates to CWD. The EA directly states that with treatment there would be a reduction in the *quantity* of available future CWD. The BLM did not state nor imply that this volume would be offset by growth of remaining conifers; however, the future wood available for CWD would be of higher *quality*.

Thinning dense stands would capture some density-dependent suppression mortality; however, the recruitment of dead wood within treated stands and adjacent untreated habitat 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).

Of the 320 acres of BLM land in section 9, 125 will be treated within the C-9 Timber Sale. Approximately 175 acres, over half of BLM's ownership in the section, will be left untreated. Many of these acres are within the no-harvest buffers along streams. These acres are not aggregated in one area; rather, they are distributed across section, injecting into and bisecting the unit. The no-harvest buffers, greater than 70 feet on each side of the stream, provide places where competition-related mortality will continue and natural LWD recruitment processes will be maintained.

The effects on wood recruitment of thinning adjacent to no-treatment zones and compliance with ACS objectives were discussed in the Rickreall EA (pp. 128-138). 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 SPZ widths in C9 are greater than this woody debris recruitment zone, and would be anticipated to maintain instream wood

recruitment rates (Rickreall EA pp. 71, 134, 136).

Additionally, the silviculturist prescribed unthinned clumps (up to one-half acre in size) within the timber sale units at a rate of 1 clump per 20 acres. Within C-9, this equates to an additional three acres of untreated area. These untreated acres will allow for continued biotic and abiotic processes that provide all sizes of CWD and LWD independent of active management intervention.

9. **Comment:** *The BLM does not disclose that the No Action alternative will provide continued diameter growth on far more stems and greater total future recruitment of large wood compared to the logging alternatives.*

**Response:** See response to Comment 7, above. Over half of BLM's ownership in section will be left untreated and will continue to provide for uninterrupted biotic and abiotic processes that produce CWD and LWD of all sizes (including much of the smaller diameter material that succumbs to density mortality).

The C-9 Silviculture Prescription, which was incorporated by reference into the Rickreall EA, provided a description of the affected environment and the predicted effects of selecting the No Action alternative (C-9 prescription, pp. 8-9). The prescription (p. 8) indeed discloses the predicted effects of the No Action alternative:

*“Without treatment, density mortality would continue and increase...quantity of trees dying are expected to be greater than if the stands were thinned...density mortality is hard to predict.”*

The BLM adequately analyzed and disclosed the predicted effects of the No Action alternative and determined it does not meet the purpose and need to accelerate the development of late-successional forest conditions. The BLM determined that the benefits of density management, which include stimulation of understory development, increased health, stability, and vigor of remaining trees, and immediate creation of CWD, outweigh the loss of small-diameter CWD associated with harvest.