Gordon Creek Thinning II Timber Sale

Final Decision and Decision Rationale

Environmental Assessment Number (EA) # OR080-07-05

May 2010

United States Department of the Interior
Bureau of Land Management, Oregon State Office
Salem District, Cascades Resource Area
Gordon Creek 6th field Watershed.
Multnomah County Oregon

Willamette Meridian,
T. 1 S. R. 5 E.,
Section 3, SE¼ SW¼, SW¼ SE¼;
Section 9, NW¼ NW¼;
Section 11

Responsible Agency:  USDI - Bureau of Land Management

Responsible Official: Cindy Enstrom, Field Manager
Cascades Resource Area
1717 Fabry Road SE
Salem, OR 97306
(503) 375-5969

For further information, contact: Keith Walton
Cascades Resource Area
1717 Fabry Road SE
Salem, OR 97306
(503) 375-5676
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.

Table of Contents

1.0 Introduction.............................................................................................................................................................................3
2.0 Decision ......................................................................................................................................................................................3
  2.1 Timber Harvest ........................................................................................................................................................................4
  2.2 Logging Systems ......................................................................................................................................................................4
  2.3 Road Work and Haul ............................................................................................................................................................4
  2.4 Fuels Treatments ....................................................................................................................................................................4
  2.5 Controlling Public Access ....................................................................................................................................................5
  2.6 Special Forest Products .........................................................................................................................................................5
  2.7 Design Features ......................................................................................................................................................................5
3.0 Alternatives Considered ..........................................................................................................................................................5
4.0 Decision Rationale ..................................................................................................................................................................6
5.0 Compliance with Direction .......................................................................................................................................................9
6.0 Public Involvement/Consultation/Coordination ..................................................................................................................10
  6.1 Scoping ..................................................................................................................................................................................10
  6.2 EA Comment Periods and Comments ..............................................................................................................................10
  6.3 ESA Section 7 Consultation ...............................................................................................................................................11
7.0 Conclusion ..............................................................................................................................................................................12
  7.1 Review of Finding of No Significant Impact ..................................................................................................................12
8.0 Selected Action by Section ....................................................................................................................................................14
9.0 Maps ......................................................................................................................................................................................14
10.0 Response to EA Comments ................................................................................................................................................18
  10.1 BLM Land Use Allocations ..............................................................................................................................................18
  10.2 Water Quality (EA Issues 1 and 3) .................................................................................................................................19
  10.3 Facilities Protection and Security of Corbett Water District Water Treatment and Delivery Facilities (EA Issue 1) 19
  10.4 Road Densities/Road Construction (EA Issue 1) ................................................................................................................20
  10.5 ESA Listed Species-Fish (EA Issue 1) ...............................................................................................................................20
  10.6 Cumulative Effects Analysis (EA Issue 2) ........................................................................................................................21
  10.7 Riparian Management and Aquatic Conservation Strategy (EA Issue 3) ........................................................................21
  10.8 Late – Successional Forest/Dead Trees/ Old Growth / Variable Density Thinning (EA Issues 3 and 4) .....................22
  10.9 ESA Listed Species-Northern Spotted Owl (NSO) (EA Issue 4) .....................................................................................23
  10.10 Special Status Species (excluding ESA threatened / endangered species) (EA Issue 4) ........................................24
  10.11 Windthrow .......................................................................................................................................................................25
  10.12 Economic Viability of Timber Sale (EA Issue 5) ............................................................................................................25
  10.13 Invasive Non-Native Plants (EA Issue 6) ........................................................................................................................26
  10.14 Carbon Storage/Climate Change ..................................................................................................................................26
  10.15 Access to Stands during Comment Period ..................................................................................................................28
  10.16 Spotted Owl Recovery Plan/WOPR ..............................................................................................................................29
  10.17 Range of Alternatives ......................................................................................................................................................29

BLM/OR/WA/AE-10/057+1792
1.0 Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis for the Gordon Creek thinning project, which is documented in the following Gordon Creek NEPA documents, which are incorporated here by reference.

<table>
<thead>
<tr>
<th>Date Issued</th>
<th>Document</th>
<th>Public Review Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/17/2009</td>
<td>Gordon Creek Thinning Revised EA and FONSI (referred in this DR as 03/2009 Revised EA)</td>
<td>03/18/2009-04/06/2009</td>
</tr>
</tbody>
</table>

1 The 03/2009 Revised EA incorporated and revised the 2007 EA clarifying the proposed action and the associated effects of the proposed action.
2 The 12/2009 Revised EA incorporated and republished the 03/2009 Revised EA replacing the analysis on carbon and climate change with an updated site specific analysis on carbon storage and climate change.

In December 2009, BLM updated the 03/2009 Revised EA to address comments about Carbon Sequestration and Climate Change. The 12/2009 EA was made available for additional public review December 2, 2009. The decision for the Gordon Creek Thinning II timber sale is documented in this Final Decision and Decision Rationale document (DR). This decision is based on site-specific analyses in the 12/2009 Revised EA, the 03/2009 Revised EA, the 2007 EA, the supporting project record, public comment, and management direction (DR sections 5.0, 6.0 and 7.1). The DR responds to comments received concerning the Gordon Creek II timber sale, and reviews and affirms the latest Finding of No Additional Significant Impact documented in the 12/2009 revised EA, signed November 25, 2009.

Unless otherwise specified, EA page numbers are from the 12/2009 Revised EA.

The Gordon Creek Thinning project has been divided into three timber sales. Gordon Creek Thinning II is the second of these timber sales. This decision is limited to the Gordon Creek Thinning II timber sale, which is located in the T. 1 S. R. 5 E., Section 3, SE¼ SW¼, SW¼ SE¼; Section 9, NW¼ NW¼; and Section 11, W.M.

2.0 Decision

I have decided to implement the Gordon Creek Thinning II as a timber sale consisting of six of the fourteen units of the proposed action described in the EA (EA pp. 12-31). The units I will implement in the Gordon Creek Thinning II timber sale are 3A, 3B, 9A, 11A, 11B and 11D (DR Table 2). The following is a summary of the decision, hereafter referred to as the “selected action” in this DR. The selected action will:

1 DR Table 2 and Maps 1 and 2 (DR section 9.0) show the selected action by section and the crossover between EA and Timber sale units.
2.1 Timber Harvest

Harvest approximately 387 acres (DR section 8.0, DR Table 2). This harvest includes:

- Thinning 382 acres within the following RMP Land Use Allocations (LUA)
  - 269 acres within the General Forest Management Area (GFMA) portion of the Matrix LUA,
  - 118 acres within the Riparian Reserve LUA.
- Clearing 5 acres of vegetation within the road rights-of-way accessing sections 3, 9 and 11 (DR Table 2).

2.2 Logging Systems

- Harvest approximately 344 acres of thinning (all units) plus 5 acres Right-of-Way (described above) using ground-based yarding.
- Harvest approximately 38 acres of thinning (Units 5, 6 and 7) using special yarding, which includes skyline, winching and shovel swing intermixed within the small areas shown on the attached maps (DR Section 9.0).

2.3 Road Work and Haul

- Construct approximately 1.8 miles of new road to accommodate skyline logging equipment and log transport.
- Improve approximately 1.0 mile of road to the minimum standard necessary for hauling, including spot rocking, blading, and brushing, curve alignment, and tree removal.
- Block and stabilize all newly constructed and improved natural surface roads. Stabilizing entails installing water-bars or other shaping of roads for drainage, placing woody debris, and/or seeding. Earth and debris berms will be used to block these roads.
- Seed and fertilize approximately 5 acres of natural surface roads adjacent to harvest units.
- Renovate and maintain approximately 4 miles of existing road. Renovation may include blading and shaping of roadway and ditches, small slide/slump repairs, clearing brush from cut and fill slopes, cleaning or replacing culverts, and applying rock surfacing material to depleted surfaces.
- Install one new cross-drain culvert.

2.4 Fuels Treatments

- A total of 83 acres in units 1, 2, 3, 4, 5 and 7 will have treatment of the thinning slash following harvest. Treatment includes up to 24 acres of lop and scatter and up to 59 acres of mechanical slash mastication. The areas to be treated are located within the unit area, generally along roads and property lines.
- Within 30 feet of the edge of each landing all tops, broken pieces, limbs and debris over 1 inch in diameter and longer than 3 feet will be piled and covered. Piles will be a minimum of 20 feet away from residual trees. Piles will be burned in compliance with the Oregon Smoke Management Plan after thinning operations have been completed and fall rains have begun.
2.5 Controlling Public Access

The Gordon Creek Thinning II Timber Sale contract will require the purchaser through contract obligation to secure the area while timber sale operations are active by locking or controlling access at the existing gate system that currently secures the area. When operations are not active in sections 3 or 11, BLM will cooperate with the Corbett Water District and private landowners to ensure the gates that control access to the Corbett water treatment facility and water intakes and to private property are secured to prevent unauthorized access (EA pp. viii, 119, 122, 126, 127, 131).

2.6 Special Forest Products

The BLM will sell permits for collecting Special Forest Products (SFP) (RMP p. 49) from the harvest units if there is a demand for the products, and collection would not interfere with proposed project operations. Special Forest Products are salable natural products that can be found in the forest and may include: edible mushrooms, firewood, posts and poles, and transplants of native plants. Access to the area will be controlled through the Special Forest Product permit requirements.

2.7 Design Features

Project Design Features described in EA section 2.3.4 (EA pp. 20-31) will be addressed in the timber sale contract.

3.0 Alternatives Considered

1. No Action (EA p. 34): No commercial timber management actions would occur. Only normal administrative activities and other uses (e.g. road use, programmed road maintenance, harvest of special forest products on public land) would continue on BLM land within the project area.

2. Original Proposed Action (2007 EA pp. 16-23; EA pp. 32-33, 36-39): The original proposed action was for the BLM to commercially thin 1805 acres including: 1800 acres of 50 to 72 year-old timber stands; and one 5 acre stand, 115 years old. Approximately 1305 of these acres are in the GFMA portion of the Matrix LUA, and 500 acres in the Riparian Reserve LUA. EA Sections 2.6 (Tables 4 and 5, EA p. 33), and 2.9 (EA p. 35-38) show the changes in the proposed action from the 2007 EA.

3. Proposed Action (EA pp. 12-31, 32-33): This is a revision of the original proposed action described above. The BLM proposes to commercially thin 1724 acres of overstocked 52-74 year old forest stands. Approximately 1324 of these acres are in the GFMA portion of the Matrix LUA, and 400 acres in the Riparian Reserve LUA. EA Sections 2.6 (Tables 4 and 5, EA p. 33), and 2.9 (EA p. 35-38) show the changes in the proposed action from the 2007 EA.
4. Alternative 2 (2007 EA p. 23; EA pp. 32-33): The silvicultural prescription is the same as the original proposed Action and Alternative 3, but considers helicopter logging instead of skyline and ground based logging on approximately 575 acres to minimize road construction and renovation compared to the original Proposed Action (EA p. 33).

5. Alternative 3 (2007 EA p. 24; EA pp. 32-33): The silvicultural prescription is the same as the original Proposed Action and Alternative 2, but considers helicopter logging instead of skyline and ground based logging on approximately 200 acres to reduce road construction and renovation compared to the original Proposed Action (EA p. 33).

6. Alternatives considered but not analyzed in detail (EA pp.34-35): Alternatives were considered for: regeneration harvest in some or all units; skyline yarding across Gordon Creek and other live streams to reduce road construction; variable density thinning in Matrix; and prohibiting winter hauling in section 12.

7. Selected Action (DR sections 2.0, 8.0, DR Table 2): EA units 3A, 3B, 9A, 11A, 11B and 11D of the Proposed Action, #3, above have been selected to form the Gordon Creek Thinning II timber sale. This timber sale is a proposal to thin approximately 387 acres of 52-74 year old mixed conifer stands.

4.0 Decision Rationale

I used the following factors in selecting the alternative that best meets the purpose and need and decision factors described in EA sections 1.2 (EA pp. 1-4) and DR Table 1. This section compares the alternatives with regard to the Decision Factors described in EA section 1.2.3 and the project objectives in EA section 1.2.2.

Table 1: Comparison of the Alternatives by Decision Factors and Project Objectives

<table>
<thead>
<tr>
<th>Decision Factors and Project Objectives</th>
<th>Comparison of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Provide timber resources and revenue to the government from the sale of those resources (objectives 1 and 2);</td>
<td>The No Action Alternative would not meet this factor since no timber sale would take place. All action alternatives would provide timber resources to the market. Alternative 2 would be the least cost effective, providing the least revenue, with the most logging costs. Alternative 3 would fall between the other action alternatives. The difference between the alternatives is the economic viability of helicopter logging systems compared to skyline and ground based logging systems. (Table 5, EA p. 33). The Proposed Action would be the most cost effective alternative, providing the greatest revenue with the least logging costs. The selected action consists of units 3A, 3B, 9A, 11A, 11B, and 11D of the proposed action.</td>
</tr>
<tr>
<td>b. Reduce the costs both short-term and long-term of managing the lands in the project area objectives 1 and 2); and</td>
<td></td>
</tr>
<tr>
<td>c. Provides safe, cost-effective access for logging operations, fuels management and fire suppression (objectives 2, 6, and 7)</td>
<td></td>
</tr>
<tr>
<td>d. Reduce competition-related mortality and wildfire risk, and increase tree vigor and growth (objectives 1 and 7)</td>
<td>The No Action Alternative would not meet this decision factor. All action alternatives would meet this factor. (EA pp. 46, 48-51, 61, 116, 119, 125, 127, 148).</td>
</tr>
</tbody>
</table>
### Decision Factors and Project Objectives

<table>
<thead>
<tr>
<th>Decision Factors and Project Objectives</th>
<th>Comparison of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. Protect the community of Corbett’s water supply (objective 3)</td>
<td>All alternatives would meet this criterion. The units in the selected action are outside the area affecting the community of Corbett’s water supply intake and watershed. Under the action alternatives, road use requirements would prevent damage to pipelines and the treatment facility. (EA pp. vii, 30-31, 130, 132, 147)</td>
</tr>
<tr>
<td>f. Reduce erosion and subsequent sedimentation from roads (objectives 3 and 6)</td>
<td>All alternatives meet this criterion. Under the action alternatives, roads would be maintained, reducing the risk of erosion and sedimentation associated with the existing road system. New road construction and improvement would not cause sedimentation. (EA pp. vi, 3, 21-27, 70-77, 78-80)</td>
</tr>
<tr>
<td>g. Provide for the establishment and growth of conifer species while retaining structural and habitat components, such as large trees, snags, and coarse woody debris (objectives 4 and 5);</td>
<td>All Action Alternatives would meet Decision Factors g and h. Stand health and tree growth rates would be maintained as trees are released from competition. The alternatives retain the elements described under “no action” on untreated areas of the stands in the project area and encourage development of larger diameter trees and more open stand conditions in treated areas. These conditions add an element of diversity to the landscape not provided on BLM lands under the No Action alternative. (EA pp. vii, viii, 13-16, 27-28, 36-38, 53-55, 56-60, 109-111, 115, 116-117, 117, 119, 142-146).</td>
</tr>
<tr>
<td>h. Promote the development of healthy late-successional characteristics in the Riparian Reserve LUA (objective 4)</td>
<td>Under the No action alternative, stand health and tree growth rates would decline if stands are not thinned. Competition would result in mortality of smaller trees and some co-dominant trees in the stands. This alternative retains existing elements, but does not enhance conditions to provide these elements for the future stand. Trees would continue to grow slowly until reaching suitable size for large woody debris, snags and late successional habitat</td>
</tr>
<tr>
<td>i. Establish a defensible area for use during extended fire suppression activities and possibly reduce the overall size and intensity of a wildfire (objective 7).</td>
<td>All alternatives meet Decision Factors i and j. However, under the No Action Alternative, dense forest stands with high crown densities are more susceptible to a high intensity, stand replacement wildfire that escapes initial attack and could threaten the public and other resources. Under the Action Alternatives, managed, thinned forest stands are less prone to catastrophic wildfires. Fires that do start tend to be easier to control in managed stands. (EA pp. viii, 18-19, 29-30, 125-126, 148).</td>
</tr>
<tr>
<td>j. Reduce potential human sources of wildfire ignition by controlling access (objective 7).</td>
<td></td>
</tr>
</tbody>
</table>

Considering public comment, the content of the Gordon Creek EAs, the supporting project record, and the management direction contained in the RMP, I have decided to implement the selected action as described in DR section 2.0. The following is my rationale for this decision.

1. No Action Alternative: This alternative was not selected because it does not meet the project objectives or delays the achievement of the project objectives described in EA section 1.2 (EA pp. 2-4) and DR Table 1 (DR section 4.0).
2. The Original Proposed Action: The original Gordon Creek proposed action was not selected because further field work and public comment resulted in changes to this alternative. See the description of the proposed action, above (DR section 3.0, # 3).

3. Proposed Action:
   - Units in sections 13 and 15, and unit 11 E were not selected because I implemented them in the Gordon Creek Thinning I timber sale which has been documented in separate Decision Rationale documents (04/2009 DR signed on 4/28/2009, and 02/2010 revised DR signed on 2/22/2010).
   - Units in Section 1 were not selected because I plan to implement them in the Gordon Creek Thinning III timber sale, which will be documented in separate Decision Rationale documents at a later time.
   - EA units 3A, 3B, 9A, 11A, 11B, and 11D have been selected as the Gordon Creek Thinning II timber sale, documented in the selected action.

4. Alternative 2: Alternative 2 was not selected because this alternative would be the least cost effective, providing the least revenue, with the most logging costs compared with the other action alternatives (EA pp. 33).

5. Alternative 3: Alternative 3 was not selected because this alternative would be less cost effective, providing less revenue, with more logging costs than the Proposed Action or the Selected Action (EA pp. 32).

6. Selected Action: The selected action implements the Gordon Creek Thinning II Timber Sale described in the DR section 2.0. The Selected Action
   - Meets the purpose and need of the project Gordon Creek EA section 1.2 (EA pp. 2-4), and all decision factors as shown in DR Table 1 (DR section 4.0).
   - Is consistent with the Salem District Record of Decision and Resource Management Plan and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 4-8, DR sections 5.0, 7.1.1).
   - Is responsive to concerns for an economically efficient project (DR section 10.12).
   - Is responsive to public input (DR sections 10.8, 10.12).
   - Decreases potential for stand replacement fires and improves fire suppression opportunities by treating slash along open roads and providing controlled access for fire suppression with gated roads (EA p. vii, 29, 30, 124-127).
   - Incorporates new information on the northern spotted owl (EA pp. 7-8).
   - Would not contribute to the expansion of invasive/nonnative weed populations (EA pp. vi, 28, 55).
   - Would not have a significant impact on the affected elements of the environment beyond those already anticipated and addressed in the RMP EIS (EA FONASI, pp. v-ix).
   - Uses the minimum transportation system to facilitate implementation of the project (DR section 2.3).
   - Would have no effects on ESA listed fish or their occupied habitat (DR section 6.3).
5.0 Compliance with Direction

The proposed commercial thinning activities in the project area have been designed to conform to the following documents, which direct and provide the legal framework for management of BLM lands within the Salem District: 1/ Salem District Record of Decision and Resource Management Plan, May 1995 (RMP); 2/ Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl, April 1994 (the Northwest Forest Plan, or NWFP); 3/ Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, January 2001 (2001 ROD); 4/ National Fire Plan (NFP), August 2000.

As stated in the 12/2009 Revised EA section 1.3, the analysis in the Gordon Creek Thinning Revised EA is site-specific, and supplements and tiers to analyses found in the Salem District Proposed Resource Management Plan/Final Environmental Impact Statement, September 1994 (RMP/FEIS). 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, February 1994 (NWFP/FSEIS). The RMP/FEIS is amended by the Final Supplemental Environmental Impact Statement for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, November 2000.

Survey and Manage

The Gordon Creek Thinning II project is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Salem District Resource Management Plan.

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

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

a. Thinning projects in stands younger than 80 years old (emphasis added):

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 of large wood, channel and floodplain reconstruction, or removal of channel diversions; and
d. The portions of projects involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under subparagraph a. of this paragraph.”

Following the Court’s December 17, 2009 ruling, the Pechman exemptions are still in place. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM from proceeding with projects. Nevertheless, I have reviewed the Gordon Creek Thinning II project in consideration of both the December 17, 2009 and October 11, 2006 order.

Because the Gordon Creek Thinning II project entails no regeneration harvest and entails thinning only in stands less than 80 years old, I have made the determination that this project meets Exemption A of the Pechman Exemptions (October 11, 2006 Order). Therefore this project may still proceed even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case.

6.0 Public Involvement/Consultation/Coordination

6.1 Scoping

The Gordon Creek project (along with the Beeline and McDowell projects) was included in the 2007 Timber Sale thinning scoping letter sent out to federal, state and municipal government agencies, nearby landowners, tribal authorities, and interested parties on the Cascades Resource Area mailing list on September 29, 2006. Twenty-six (26) comment letters/emails/postcards were received during the scoping period. The BLM also conducted one field trip with Corbett Water Bureau on June 4, 2007. Field trip attendees included members of the Corbett Water District staff, Corbett Water Board, Corbett Community Association, and Oregon Wild.

6.2 EA Comment Periods and Comments

BLM made the 2007 EA and FONSI (Finding Of No Significant Impacts) available for public review from September 26, 2007 to October 26, 2007. The decision maker extended the comment period to November 16, 2007 in order to incorporate comments received at the Gordon Creek open house, held in Corbett, OR on November 7, 2007. Eleven people attended the open house, including representatives of the Corbett Water District, Corbett Water Board, and the Corbett Community Association.

One hundred eighty-two (182) comment letters/emails/postcards were received during the original EA comment period. Based on the comments, the BLM revised the Gordon Creek EA. Sections 1.4.2 and 1.4.3 (EA pp. 8-11) of the revised EA (March 2009) to address the topics raised in the original comments.
The BLM made the revised EA and FONASI (Finding Of No Significant Additional Impacts) available for additional public comment from March 18, 2009 to April 6, 2009. Five comment letters were received during this comment period. Responses to the public comments can be found in section 10.0 of this Decision Rationale.

The BLM revised the EA a second time and made the 12/2009 Revised EA and FONASI available for additional public comment from December 2, 2009 to December 19, 2009. Five comment letters were received during this comment period. Responses to the public comments can be found in section 10.0 of this Decision Rationale.

The scoping and EA comment letters/emails/postcards are available for review at the Salem District BLM Office, 1717 Fabry Rd SE, Salem, Oregon.

6.3 ESA Section 7 Consultation

1. U.S. Fish and Wildlife Service

The BLM submitted the Gordon Creek Thinning Project, which includes all three timber sales, for informal consultation with U.S. Fish and Wildlife Service (USFWS) as provided in Section 7 of the Endangered Species Act (ESA) of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended) during the FY2009/2010 consultation process.

The Biological Assessment of NLAA Projects with the Potential to Modify the Habitat of Northern Spotted Owls Willamette Planning Province - FY 2009-2010 (BA) was submitted by the BLM in August 2008. Using effect determination guidelines, the BA concluded that the Gordon Creek Thinning project, may affect, but is not likely to adversely affect the northern spotted owl due to the modification of dispersal habitat (BA, pp. 21-23). The Letter of Concurrence Regarding the Effects of Habitat Modification Activities within the Willamette Province, FY2009-2010 (LOC) associated with the Gordon Creek Project was issued by the USFW in October 2008 (reference # 13420-2008-I-0140).

The LOC concurred that the habitat modification activities described in the BA, including the Gordon Creek Thinning project is not likely to adversely affect spotted owls and are not likely to adversely affect spotted owl Critical Habitat (LOC, p. 31). This applies to the Gordon Creek Thinning II timber sale as well as the other two timber sales that constitute the EA proposed action. Furthermore, the proposed action is not likely to diminish the effectiveness of the conservation program established under the NWFP to protect the spotted owl and its habitat on federal lands within its range including designated spotted owl critical habitat (LOC, p. 31).

The selected action, described in this DR (DR section 2.0), has incorporated the applicable General Standards that were described in the BA (p. 6-7) and LOC (LOC, pp. 12-14). This includes a seasonal restriction within disruption distance of known spotted owl sites during the critical nesting season, and monitoring/reporting on the implementation of this project to the U.S. Fish and Wildlife Service.
2. NOAA Fisheries (NMFS)

The selected action (Gordon Creek Thinning II timber sale) would have “no effect” on Lower Columbia River (LCR) coho salmon, LCR Chinook salmon, or LCR Steelhead trout. As a result, consultation with NOAA Fisheries on the project effects is not required. The determination of “no effect” is based on the distances from proposed project units (≥ 2.5 miles) to ESA listed fish habitat and on the factors stated above that would prevent increases in sediment input, stream turbidity, temperature, and changes in LWD supplies to stream reaches potentially occupied by ESA listed fish species (EA pp. 70-72, 82, 86-88).

Potential effects of the project on listed fish species are related to changes in stream shade and large woody debris (LWD) levels from tree thinning, and sediment inputs associated with road construction/decommissioning, and timber haul.

Two design features of the project would prevent any decrease in stream shade on perennial streams so that there would be no increase in stream temperature from increased sun exposure: 1) the stream protection zones (where no cutting or logging would take place) are a minimum of 60 feet wide on each side of perennial streams to protect the primary shade zone, and 2) maintaining 50-60% canopy closure in the remainder of the Riparian Reserve (220-440 feet each side of streams) which includes the secondary shade zone of these streams (EA, pp. 70, 86). LWD recruitment to project area streams is expected to improve long term as a result of accelerated tree growth resulting from reducing tree density in Riparian Reserves (EA, p. 86). However, LWD would be unlikely to move downstream to listed fish habitat because of the small size of project area streams and distance to listed fish habitat (EA, pp. 81-82).

The selected action incorporates road construction on flat to gently sloping ground with no hydrologic connectivity to streams, and no stream crossings. Thus, no pathway would exist for delivery of sediment to streams generated by road construction or use (EA, p. 71). Upon project completion these roads would be closed, stabilized, and revegetated. Site specific monitoring would be used to suspend log hauling whenever conditions would potentially introduce sediment into streams, therefore log hauling would not impact listed fish habitat (EA, pp. 72, 87-88).

7.0 Conclusion

7.1 Review of Finding of No Significant Impact

I have reviewed the information in the 12/2009 Revised EA and FONASI, the 12/2009 EA public comments, and this DR. I have determined that change to the Findings of No Additional Significant Impact (EA #OR080-07-05 12/2009 FONASI – pp. v-x) covering the Gordon Creek Thinning projects, including the Gordon Creek Thinning II timber sale, is not necessary for the following reasons.

There is no significant new information in the 12/2009 Revised EA or public comments on the 12/2009 EA that leads me to believe the analysis, data or conclusions related to environmental effects of the proposed action are in error or that the selected action needs to be altered. My response to the 12/2009 EA comments can be found in DR section 10.0.
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 for this decision will appear in the *Sandy Post* newspaper on May 26, 2010. The planned sale date is June 23, 2010.

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 Date

If no protest is received within 15 days after publication of this Decision Record (Gordon Creek Thinning II Timber Sale DR) this decision will become final. For additional information, contact Keith Walton (503) 375-5676, Cascades Resource Area, Salem BLM, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by: Cindy Enstrom
Cascades Resource Area Field Manager

Date: 5/25/2010

Cindy Enstrom
Cascades Resource Area Field Manager
### 8.0 Selected Action by Section

Table 2: Selected Action by section, unit, LUA and yarding method

<table>
<thead>
<tr>
<th>EA Unit</th>
<th>EA Unit Acres</th>
<th>Timber Sale Unit</th>
<th>Timber Sale Unit Acres</th>
<th>Acres by Harvest Method and Land Use Allocation (LUA)</th>
<th>Thinning by LUA</th>
<th>Clearing Road R-O-W (Ground Based Yarding)</th>
<th>Timber Sale Acres by Section</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Riparian Reserve</td>
<td>Matrix</td>
<td>Riparian Reserve</td>
<td>Matrix</td>
<td>Riparian Reserve</td>
</tr>
<tr>
<td>3A</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0+</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3B</td>
<td>22</td>
<td>3</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>9A</td>
<td>40</td>
<td>1</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>11A</td>
<td>39</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>30</td>
<td>7</td>
<td>0</td>
<td>9</td>
<td>13</td>
<td>0+</td>
</tr>
<tr>
<td>11B</td>
<td>96</td>
<td>6</td>
<td>91</td>
<td>21</td>
<td>2</td>
<td>20</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>11D</td>
<td>196</td>
<td>7</td>
<td>200</td>
<td>8</td>
<td>0</td>
<td>47</td>
<td>144</td>
<td>0</td>
</tr>
<tr>
<td>Total Acers</td>
<td>395</td>
<td></td>
<td>387</td>
<td>36</td>
<td>2</td>
<td>81</td>
<td>263</td>
<td>1</td>
</tr>
</tbody>
</table>

**Remarks**
- Dropped 1000 ft. road after logging systems analysis of final layout.

*0+ indicates less than 0.5 acre. 0.5 acre is rounded to 1.*

### 9.0 Maps

Maps - Sections 3, 9 and 11 - following three pages.
10.0 Response to EA Comments

After reviewing the comments I received following the EA comment period (September 26-
November 16, 2007), I revised the Gordon Creek EA (DR sections 2.0 and 6.0) and provided an
additional two week review period (March 18 – April 6, 2009) to which I received additional
comments. After the completion of the December 2009 EA, I provided an additional comment
period on the Carbon Storage/Climate Change analysis found in the 12/2009 Revised EA. All
references to EA page numbers in this section (10.0) refer to the 12/2009 Revised EA, which
contains the 3/2009 Revised EA in its entirety and supersedes the 2007 EA.

The Gordon Creek Thinning II timber sale consists of a portion of the area that was analyzed in the
EA (EA units 3A, 3B, 9A, 11A, 11B and 11D). My response to comments will address only those
comments that pertain to the Gordon Creek Thinning II timber sale. Having reviewed all of the
comments I have summarized them into the following categories: 1/BLM Land Use Allocations,
2/Water Quality, 3/Facilities Protection and Security of the water supply for the community of
Corbett, 4/Road Densities/Road Construction, 5/ESA Listed Species-Fish, 6/ Cumulative Effects
Analysis 7/ Riparian Management and Aquatic Conservation Strategy, 8/ Late –Successional
Forest/Dead Trees/ Old Growth / Variable Density Thinning, 9/ ESA Listed Species-Northern
spotted Owl, 10/Special Status Species (excluding ESA threatened/endangered species), 11/
Windthrow, 12/ Economic Viability of timber sale, 13/ Access to Stands during Comment Period, 16/Spotted Owl Recovery
Plan/WOPR, 17/ Range of Alternatives.

10.1 BLM Land Use Allocations

I received comments expressing disagreement with BLM management objectives for Matrix and
Riparian Reserve Land Use Allocations. Specific comments and recommended alternatives to
the Proposed Action and Action Alternatives were often based in the commenters’ preferred
management objectives. Land use objectives and alternatives proposed include: protect areas
that remain intact, restore areas that have been degraded, conservation of carbon, focus on
restoration not commodity extraction, defer logging instead of producing an even flow of timber,
manage for decadence, manage to develop old growth characteristics, and manage for owl habitat
and prey species.

Changing land use allocations is outside the scope of this project and is an RMP level decision
process. The project is in compliance with the RMP, and all applicable laws, regulations and
policies. 1995 RMP objectives applicable to this project are described in EA section 1.2.2 (EA
pp. 2-3). Conformance with land use plan, statutes, regulations and other plans is described in
EA section 1.3 (EA pp. 4-5).

Relevant statutes and authorities are listed and described in EA sections 1.3.5 (EA p. 8) and 3.1
(Table 6, EA pp. 39-41). The project has been designed to implement both long and short term
timber management objectives while providing for water quality and habitat in the Matrix LUA
and to enhance wildlife habitat characteristics while protecting water quality in the Riparian
Reserve. Riparian Reserve treatments will be accomplished by logging according to the terms of
the contract.
10.2 Water Quality (EA Issues 1 and 3)

I received comments that expressed concern about impacts to the area’s water quality. I have broken out the specific concerns affecting water quality and will address them separately. Water quality was identified as Issue 1 in the EA, while Riparian Management and ACS objectives were identified in Issue 3 (EA p. 9).

**Water Quality:** The EA described project design features that would retain or enhance the existing shade component on all streams in adjacent to harvest units in sections 3, 9 and 11. During final on-the-ground layout I applied buffers that met or exceeded the minimums required for retaining existing shade. The risk of stream sedimentation is low because the terrain is generally flat to gently sloping (less than 35 percent, not exceeding 60 percent\(^2\)) resulting in little to no risk for soil movement or erosion. Undisturbed soil and vegetation in the stream protection zones (SPZ) will filter any potential sediment before it reaches any streams. Runoff from existing roads will be diverted away from streams or sediment will be trapped. Project design features include a contract requirement prohibiting operations when they would generate sediment that could enter streams. The new road construction has no connectivity to live stream sources. (EA pp. vi, 3, 8, 20-32, 62-80)

**Thinning in the Riparian Reserve LUA and ACS objectives:** I received comments expressing concern that the project may not meet ACS objectives. This concern was addressed as Issue 3 in the EA. The EA addressed how the project would meet ACS objectives. Some commenter’s disagreed with BLM’s assessment but did not present evidence that BLM was in error. See response 10.7.

I received comments regarding potential damage to the water supply for the community of Corbett and surrounding areas connected to the community of Corbett water system. No part of the Gordon Creek Thinning II project is upstream of either of the Corbett intakes, so water quality would not be affected by harvest operations. Protection of community of Corbett water system facilities and infrastructure is addressed in response 10.3.

In addition to the above references, these topics are also addressed in the following EA sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>Alternatives and Project Design Features</td>
</tr>
<tr>
<td></td>
<td>pp. 11-12, 21-27, 31; 35-38</td>
</tr>
<tr>
<td>3.2</td>
<td>General Setting</td>
</tr>
<tr>
<td></td>
<td>pp. 42-46</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Hydrology</td>
</tr>
<tr>
<td></td>
<td>61-80</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Fisheries</td>
</tr>
<tr>
<td></td>
<td>pp. 80-92</td>
</tr>
<tr>
<td>3.3.4</td>
<td>Soils</td>
</tr>
<tr>
<td></td>
<td>pp. 92-100</td>
</tr>
<tr>
<td>3.3.7</td>
<td>Rural Interface, including public safety</td>
</tr>
<tr>
<td></td>
<td>pp. 128-133</td>
</tr>
</tbody>
</table>

10.3 Facilities Protection and Security of Corbett Water District Water Treatment and Delivery Facilities (EA Issue 1)

I received comments expressing concern regarding the potential for damage to Corbett Water District water treatment facilities and water delivery systems by logging and log hauling operations and/or by potential unauthorized access vandalism. (EA Issue 1, p. 9). The Corbett water treatment facility is located on BLM land in section 3 under a permit issued to the Corbett Water District by the BLM. Access to the general vicinity of the Gordon Creek Thinning II project area is controlled by privately owned gates. Access on the road leading to the water treatment facility is controlled by a gate which is jointly managed by BLM and the Corbett Water

---

\(^2\) Less than 5% of the sale area is between 35% and 65% slope (Table 8, EA pp. 94) based on GIS data. No areas steeper than 60% were found in field observations during sale preparation.
District. An additional gate into the water treatment facility compound is under the exclusive control of the Corbett Water District.

The Gordon Creek Thinning II Timber Sale contract requires the purchaser through contract obligation to secure the area by locking or controlling access at the existing gate system that currently secures the area. When operations are not active in sections 3 and/or 11, BLM will cooperate with the community of Corbett to ensure the gates that control access to the water treatment facility and the water intakes upstream of the sale area are secured to prevent unauthorized access (DR section 2.5). In addition to the terms and conditions of the permit for the water treatment facility and related infrastructure, the BLM has entered into a Memorandum of Understanding (MOU) with the Corbett Water District to protect the water delivery infrastructure.

10.4 Road Densities/Road Construction (EA Issue 1)

Commenters expressed concern that new road construction in addition to the existing roads would have adverse effects on water quality. The EA addressed the impacts of the new road construction on sediment movement, water quality and peak flows (EA pp. 61-80). The BLM designed the proposed road system for the Gordon Creek Thinning II timber sale to balance management (purposes for the LUA as described in the RMP), environmental (protection of resources), operational (safe and feasible logging) and economic (successful timber sale and value of timber at harvest) objectives. Three action alternatives were analyzed. The analysis of the Proposed Action demonstrated that all objectives will be achieved with the road system designed to use the most economical logging system of the three Action Alternatives.

Preventing erosion and the resulting sedimentation into streams is a critical element in BLM’s design and use of roads. Locations and road designs are selected to prevent potential erosion. In addition to location and design, the BLM employs a variety of erosion and sediment control measures, including rock, mulch, debris, seeding, sediment traps, waterbars and potentially other methods designed specifically for individual sites to ensure that the project meets or exceeds ODEQ standards and the Clean Water Act.

The private road in section 12 which was analyzed for potential winter hauling to support helicopter logging (Alternatives 2 and 3) will not be used for winter hauling for the Gordon Creek Thinning II project. Contract restrictions on ground based logging operations and on use of the BLM's natural surface road that feeds into this private road prohibit wet season use that would result in wet season hauling on the private road in section 12. (EA pp. 85, 91) Some fall and early winter (October - February) hauling may be done on existing rocked or paved roads. The amount of timber that may be hauled on these roads in the winter will be limited by seasonal restrictions on logging operations and use of natural surface roads that feed into the rocked/paved roads. (EA pp. 23-25, 73)

Newly constructed roads will be closed, stabilized and revegetated. The terrain in the Gordon Creek Thinning II project area is generally flat to gently sloping and new roads are located away from the areas with moderate slopes. New roads are located away from streams and potentially unstable slopes and have no connectivity to live stream courses (EA pp. vi, 3, 8, 20-32, 70-77, 78-80).
Existing roads will only be used, including renovated roads, where they are stable and on stable ground. Existing natural surface roads will also be closed, stabilized and revegetated.

Also, see response 10.2, Water Quality, including EA references.

10.5 ESA Listed Species-Fish (EA Issue 1)

Concerns were raised that the project could have adverse effects to Endangered Species Act (ESA) Listed fish species particularly coho salmon and steelhead. Concerns regarding listed fish species were identified as Issue 1 in the EA. The EA analyzed the potential effects to all fish species in the streams affected by the Gordon Creek II project.

The proposed action has been determined to be "no effect" to listed fish. No actions are proposed within the channels, or that would directly affect the channels of any stream reaches which may be inhabited by listed fish. No thinning in the Riparian Reserve LUA is closer than 0.75 mile from occupied listed fish habitat.

All intermittent channels are located 0.75 - 2 miles upstream of listed fish habitat. Perennial streams will have 60 feet wide stream protection zone (SPZ) buffers where no cutting or logging operations are allowed and intermittent channels will have SPZs of 30 feet or more, thereby preventing changes to stream temperature and sediment delivery. 50-60 percent canopy cover will be retained in the remainder of the Riparian Reserve (220-440 feet each side of streams), providing shade to prevent changes to stream temperature. Stream crossings associated with the haul route are at least 1.0 mile upstream from listed fish habitat. Hauling will be monitored and suspended whenever conditions would potentially introduce sediment into streams. Any sediment moving off the road is unlikely to be detectable (as elevated turbidity) more than 0.5 mile downstream of the road crossing.

LWD supplies will improve long term on project area streams as the result of accelerated tree growth in Riparian Reserves. However, LWD from thinned areas is unlikely to move to listed fish habitat because of the small size of project area streams where stream protection zones are narrow (30 ft.) and because trees that fall from the thinned area would have >60 feet of the largest portion of the bole anchoring the tree in the forest to prevent it from washing downstream to listed fish habitat (≥ 0.75 miles downstream). See DR sections 6.3 and 10.1 and 10.2, including EA references. In addition to the above references, this topic is also addressed in the following EA sections: 2.0 (Alternatives and Project Design Features) - pp. 11-12, 21-27, 31; 35-38, 3.2 (General Setting) - pp. 42-46; 3.3.2 (Hydrology) – 61-80; 3.3.3 (Fisheries) – pp. 80-92; 3.3.4 (Soils) - pp. 92-100.

10.6 Cumulative Effects Analysis (EA Issue 2)

Some commenters expressed concern about the adequacy of certain aspects of the cumulative effects analysis. Specifically, concerns were raised regarding the scale utilized to assess impacts to spotted owls, retention of late successional forest at the watershed scale and the use of roads by private landowners concurrent with activities on BLM land during all seasons of activity. The EA addressed the potential for cumulative impacts (EA pp. ix, 9, 39-41, 60, 78-80, 91, 99, 116-118, 126, 133). Concerning retention of late-successional forest at the watershed scale, the Gordon Creek Thinning II timber sale does not propose to treat any late-successional stands, therefore there will be no direct or cumulative impact on the acres of late-successional forest type.
in the watershed (EA pp. vi, 10, 37). In regards to activities on private land utilizing the area’s road system concurrently with activities on BLM, I do not anticipate any adverse cumulative impacts. BLM staff will be monitoring on site conditions for potential negative impacts such as sediment entering waterways during implementation of the Gordon Creek Thinning II timber sale.

If the potential adverse impacts were the result of road use singularly due to BLM activities or cumulatively due to road use by other entities, BLM would suspend operations on BLM land, implement mitigation measures or both. (EA pp. 23-25, 70-73)

10.7 Riparian Management and Aquatic Conservation Strategy (EA Issue 3)

Commenters have voiced doubts as to whether thinning in the Riparian Reserve LUA will support the attainment of Aquatic Conservation Strategy objectives. BLM has revised the EA to include an expanded discussion of the proposed action relative to ACS Objectives. One commenter asserts that science does not support the conclusion that thinning does result in larger diameter trees sooner than would develop in unthinned stands and/or that larger diameter trees do not provide the resources for larger size snags and down logs when they die. This is not supported by information presented in the comments. The EA documents the rationale that thinning does contribute to meeting ACS Objectives (EA pp. 135-139). The BLM is only treating 42 percent of the Riparian Reserve in the Gordon Creek Thinning project area, 58 percent of the Riparian Reserve will not be treated.

In addition to the above references, these topics are also addressed in the following EA sections: 1.2 (Purpose and Need) pp. 2-4, 2.0 (Alternatives and Project Design Features) - pp. 12-15, 27-27-29, 31; 35-38, 3.2 (General Setting) - pp. 42-46; 3.3.1 (Vegetation) – pp. 46-61; 3.3.2 (Hydrology) – 61-80; 3.3.3 (Fisheries) – pp. 80-92; 3.3.4 (Soils) - pp. 92-100, 3.3.5 (Wildlife) – pp. 100-119, 3.4 (Compliance with the Aquatic Conservation Strategy) - pp.142-146.

10.8 Late – Successional Forest/Dead Trees/ Old Growth / Variable Density Thinning (EA Issues 3 and 4)

Changing Land Use Allocations: Commenters suggest that BLM manage the Gordon Creek Thinning II area to develop old growth characteristics for old growth dependant species including greater numbers of dead trees and some suggest using variable density thinning or no management action. BLM’s land management is directed by the O&C Act, FLPMA and the Salem District RMP. The RMP specifies land use allocations with associated objectives (EA pp. 2-5, 8, 9-10.)


Protection of Old Growth, Snags and Down Wood: The project has been designed to protect all legacy features (old growth trees, large snags, large CWD) as long as they do not pose a safety hazard under OSHA regulations. Any old growth trees, large snags and large trees cut for safety would be retained on site as CWD.
BLM does not disagree that thinning “captures future mortality”. The majority of this future mortality would consist of the smaller suppressed trees that the project is targeting for removal (EA pp. 12-15). The EA analyzed the effects of thinning on dead wood. Science has demonstrated that the larger snags receive greater wildlife use (EA, page 104, Table 10). The project identified a shortage of large diameter snags (greater than 20” dbh) in Riparian Reserve LUA.

Therefore, based on the purpose and need I have decided it is important to accelerate the development of larger trees in a shorter period of time in the portions of the Riparian Reserve LUA that are designated for treatment.

**Variable Density Thinning:** I received conflicting comments concerning variable density treatments.

Some comments advocated for applying variable density thinning treatments while other comments suggested that variable density thinning treatments were not appropriate. The original project design called for implementing 6 canopy “gaps” of 2.5 acres each in Matrix. As a result of public comment and to be more consistent with RMP objectives for GFMA I have decided not to implement creation of the canopy gaps in the Matrix LUA (EA p. 35). Numerous low density canopy gaps (≤1.0 acre each, comprising 5-15 percent of the treated Riparian Reserve) were proposed in the Riparian Reserve in the original proposed action (2007 EA). As a result of public comment, I have decided not to implement creation of any low-density canopy gaps in the Gordon Creek II timber sale. (EA pp. 36, 51, 56-61, 109-110, 114-115, 146).

These topics are also addressed in the following EA sections: **FONASI (Stand Characteristics and Wildlife)** pp. vi and vii; **1.2 (Purpose and Need)** pp. 2-4; **1.3 (Conformance with Land Use Plan, Statutes, Regulations, and other Plans)** pp. 4-8; **2.3 (Alternatives 1)** - pp. 13-16, 27-28; **2.7 (No Action Alternative)** p. 34; **2.8 (Alternatives Considered)** pp. 34-35; **2.9 (Changes Made in Response to Comments)** pp. 36-38; **3.2 (General Assumptions, Methodology and Setting)** - pp. 42-46; **3.3.1 (Vegetation)** – pp. 46-61; **3.3.5 (Wildlife)** – pp. 101-120.

**10.9 ESA Listed Species-Northern Spotted Owl (NSO) (EA Issue 4)**

I received comments suggesting that the entire area must be or should be managed for spotted owl habitat and that the proposed Gordon Creek Thinning II timber sale will be detrimental to spotted owls. A comment also suggested that additional land be set aside to provide adequate habitat for spotted owls and barred owls to coexist.

The project area contains no critical NSO habitat. It currently serves as dispersal habitat and will continue to do so after the project is implemented. Additionally, the area will continue to provide habitat for spotted owl forage species such as red tree voles in GFMA and Riparian Reserve LUAs, the project will provide for a dead wood component by retaining existing large snags and legacy features, no old growth stands or habitat exist within the Gordon Creek Thinning II project area. Surveys have not substantiated spotted owl occupancy in the area. The project is in full compliance with required protections for the spotted owl in the Gordon Creek Thinning II project area. (EA pp. vii, 7, 8, 10, 105, 111-112, 116, 117, 149-150)
**Scale for Northern Spotted Owl Cumulative Effects:** The scale for cumulative effects for the northern spotted owl is the provincial home range of known spotted owl sites, which is 1.2 miles for the Cascades of Western Oregon (BA³, p. 3; LOC⁴, p. 11) and the location of the project in relationship to adjacent known spotted owl sites and Late Successional Reserves (LSRs). The scale was chosen because the Northwest Forest Plan (NWFP) goal for conservation and recovery for the spotted owl is to maintain suitable owl habitat within LSRs and known owl sites, and maintain dispersal habitat between LSRs and known owl sites.

Cumulative effects to spotted owls and their habitat were analyzed thoroughly at multiple scales in the BA, including the current Environmental Baseline (BA pp.11-20), and Cumulative Habitat Effects Summary (BA pp. 38). I reviewed the cumulative effects analysis for the northern spotted owl in the EA and concluded that the scale utilized for the cumulative effects analysis in the EA is the appropriate scale.

Four recent reports on Northern spotted owls were considered in the revised Gordon Creek Thinning EA. Competition from barred owls was one threat that was identified as a conservation concern in one of the four reports (Courtney et al. 2004). Having reviewed the most recent information concerning the effects of barred owl competition on spotted owls, the impacts they are having is unclear at this point. Furthermore, I found no information nor did the commenter provide me with information indicating that deferring the proposed project (see response 10.8) will have any measurable effect at reducing the potential threat that barred owls may have on spotted owls. The commenter presented no evidence that the Gordon Creek Thinning II timber sale would in any way change the potential for these two owl species to coexist.

This topic is addressed in the following sections of the EA: **FONASI** (Stand Characteristics, Special Status Species and Wildlife) pp. vi-vii; **1.2** (Purpose and Need) pp. 2-3; **1.3** (Conformance) pp. 4-8; **1.4.2.4** (Issue 4, Special Status Species) p. 9; **2.3.4** (Design Features – Special Status Species) pp. 28-29; **3.3.5** (Wildlife) – pp. 101-120. See also Biological Assessment (BA) p. 8, and **LOC** p.14, both of which are incorporated by reference.

**10.10 Special Status Species (excluding ESA threatened / endangered species) (EA Issue 4)**

Concerns were raised that the proposed project would have an adverse effect on Special Status Species in particular bats, Larch Mountain salamander and the Columbia duskysnail. The EA discussed measures to protect special status species (SSS) and they were specifically addressed as Issue 4. I have reviewed the concerns and project design and have concluded that the project will not have adverse impacts to SSS. Concerning the Larch Mountain salamander, the project contains no suitable habitat. For bat species the project is retaining what little habitat exists in the form of large snags and old growth trees. For Columbia duskysnail the project is retaining protection buffers around streams where they have been found.

---

³ BA is the Biological Assessment of NLAA Projects with the Potential to Modify the Habitat of Northern Spotted Owls Willamette Planning Province - FY 2009-2010, August 2008.
4 LOC is the Letter of Concurrence Regarding the Effects of Habitat Modification Activities within the Willamette Province, FY2009-2010 (reference # 13420-2008-I-0140).
This topic is addressed in the following sections of the EA: **FONASI** (Stand Characteristics, Special Status Species and Wildlife) pp. vi-vii; **1.2** (Purpose and Need) pp. 2-3; **1.3** (Conformance) pp. 4-8; **1.4.2.3** (Issue 3, Riparian and ACS) p. 9; **1.4.2.4** (Issue 4, Special Status Species) p. 9; **2.3.1** (Proposed Treatments) pp. 12-15; **2.3.4** (Design Features – Special Status Species) pp. 27-29; **3.3.1** (Vegetation, large remnant trees) p. 49; **3.3.3** (Aquatic Habitat) pp. 83-86, 88; **3.3.5** (Wildlife) – pp. 101-120.

10.11 Windthrow

I received comments suggesting that BLM should conduct additional analysis on the extent of windthrow (blowdown) that occurred in the project area during the winter of 2008/2009, and commenters expressed concern that significant windthrow could occur adjacent to new and existing openings created by road construction and timber harvesting on private land. BLM personnel examined the area and assessed the extent of the windthrow during the 2008/2009 winter and found that the amount of windthrow observed was similar to what BLM has observed in the past. BLM did observe breakage and other storm damage from ice and heavy snow. The BLM does not expect a significant or unusually high amount of additional windthrow following thinning because the BLM has observed windthrow patterns in both thinned and unthinned forest stands in the vicinity of the Gordon Creek Thinning II project for many years and has observed no significant differences in levels of windthrow between thinned and unthinned stands (EA pp. 53-54, 58, 60-61). Additionally, research cited in the EA such as Roberts (2007) supports this observation.

This topic is addressed in the following sections of the EA: **1.4.2.1** (Issue 1) p. 9; **2.3.1** (Proposed Treatments) pp. 12-15; **2.9** (Changes) pp. 35-37; **3.3.1** (Stand Characteristics) pp. 48, 53-54, 58, 60-61; **3.3.3** (Aquatic Habitat) p. 92; **3.3.6** (Fire) pp. 120-125.

10.12 Economic Viability of Timber Sale (EA Issue 5)

Concerns were raised that too many restrictions on the project operations would have an adverse effect on the economic viability of the timber sale. Other comments suggested that the project be delayed due to the current poor timber market conditions.

Economic viability was identified in the Purpose and Need and as Issue 5 in the EA (EA pp. 10). The EA analyzed costs for three action alternatives, summarized in EA Table 6 (EA pp. 33). Economic considerations are included in the decision factors for the project and timber value at harvest is a consideration in the management direction for the GFMA LUA (RMP pp. 20, 46) (EA pp. 2, 3, 4). BLM is directed to provide timber on an even flow sustained yield basis, so the BLM is not guided by market conditions. Historically, timber prices are cyclical. Timber sale contracts are typically for a three year period. The length of the contract period provides purchasers flexibility to make business decisions to address cyclical market conditions.

I have reviewed the project design and current market conditions and have concluded that the Gordon Creek Thinning II timber sale is an economically viable project. The BLM modified the original proposed action to enable extension of the logging operating season in response to public comment. The BLM determined that these changes are necessary to improve the economic efficiency of the planned thinning (RMP, D-1), thereby improving the timber value at harvest (RMP p. 46, D-1) and increasing the probability that the proposed timber sale can be successfully offered to the marketplace (EA pp. 2-4, 38).
I have determined that extending the operating season as described in the EA will not result in impacts to resources that are not adequately analyzed in the EA (EA pp. 71-73, 96-100).

This topic is addressed in the following sections of the EA: 1.4.2.5 (Issue 5) p. 10; 2.3.2 (Logging Systems) pp. 15-16; 2.3.3 (Fuel treatments) pp. 18-19; 2.3.4 (Project Design Features) pp. 20-31; 2.9 (Changes in response to comments) pp. 37-38; 3.3.4 (Soils and logging methods) pp. 93-100.

10.13 Invasive Non-Native Plants (EA Issue 6)

Commenters expressed some concern that road building would encourage the spread of invasive/non-native plants, and were interested in the BLM’s plan to control the introduction and spread of invasive non-native plants. One commenter suggested that not logging the area would prevent the establishment of invasive species. Not thinning the proposed units does not meet the purpose and need as stated in EA section 1.2 (EA pp. 1-4). Non-native invasive plants are most often found in road prisms as the likely result of vehicle traffic. The EA includes an expanded discussion of invasive/non-native plants, and project design features to prevent the introduction and spread of non-native invasive species (EA pp. 28, 55). This topic is addressed in the following sections of the EA: FONASI p. vi; 1.4.2.6 (Issue 6) p. 10; 2.3.4 (Design Features) pp. 27-28; 3.3.1 (Vegetation) pp. 51-52, 55, 61. BLM also has an ongoing survey, monitoring and treatment program on all BLM land in the District that is independent of this project.

10.14 Carbon Storage/Climate Change

The commenter expressed the opinion that the BLM should do an EIS on carbon storage because the EA is not based on sound science. The commenter stated that BLM should manage for conservation of carbon and the logic track presented suggests, though does not plainly state, that the BLM should not harvest any timber because “[a]ll net [carbon] emissions are adverse and must be addressed and controlled.” Additional comments, received on the 12/2009 EA include:

a. **Comment:** The EA should not rely on the WOPR EIS.

   **Response:** The BLM did not tier to the 2008 FEIS (aka WOPR EIS). The BLM used the carbon methodology described in the 2008 FEIS because that is the best analysis and methodology available to BLM at this time. The EA used data associated with the No Action Alternative in the 2008 FEIS, which by definition is management under the 1995 ROD and the Northwest Forest Plan, including the cumulative effects analysis.

b. **Comment:** Forests like Gordon Creek should be managed for carbon storage rather than timber and BLM has not provided a compelling need for logging.

   **Response:** BLM has provided the rationale for the project in the purpose and need. Commenter apparently disagrees with BLM’s legal mandates as described in the 1995 ROD and the Northwest Forest Plan. Changing Land Use Allocations or changing management guidelines are beyond the scope of this EA.

c. **Comment:** Commenter expressed concerns about the scale of analysis and the local contribution of changes in carbon storage to global climate change.
Response: BLM has addressed the potential local, regional, U.S. national and global scale incremental impacts of the project that may result in net emissions or net storage of greenhouse gases (EA, pp.138-142).

The EA also addresses the cumulative impact of the projects carbon release and sequestration and presents the incremental effect of the proposed action on greenhouse gas levels within the context of effects of past, present, and reasonably foreseeable future actions at multiple spatial scales on page 141. As described in the EA, the analysis has determined that the project’s carbon net emission is so temporary and small that it was determined to be not significant.

d. Comment: Total carbon storage for the analysis period (2040) would be greater if no logging is done. The difference in carbon storage would result in that amount of carbon in the atmosphere rather than stored in the forest.

Response: We agree with this comment. EA Table 16, page 140 shows that the no action alternative stores more carbon than the action alternatives at year 2040. Table 16 also shows that for the action alternatives, there is a net increase in carbon storage at year 2040 compared to current storage. The analysis has determined that the project’s carbon net emissions, which is directly related to the difference in storage, is so small that it was determined to be not significant because there would be no measurable difference in greenhouse gasses in the atmosphere whether the project is implemented or not.

e. Comment: BLM cannot limit the temporal scope of the analysis by saying that the carbon losses and climate impacts of logging will be erased in 30 years because the extra carbon in the atmosphere will be contributing to adverse climate impacts over the 30 years and the unlogged forest will store far more carbon at the end of 30 years.

Response: As described in the EA, the analysis has determined that the project’s carbon net emissions is so small that it was determined to be not significant (EA, pp. viii, x). The EA does not claim that "carbon losses and climate impacts...will be erased..." The BLM identified the greenhouse gas emissions and storage associated with this project, but this project in and of itself or cumulatively could not measurably affect climate change.

There is no legal, regulatory or policy basis to provide for carbon above other ecosystem services including timber.

f. Comment: The proper scale for analyzing carbon storage/emissions is atmospheric CO2 levels (commenter proposes 350 ppm of CO2 as a threshold) and objects to the BLM using global scale carbon measurements for the discussion of carbon storage and global climate change.

Response: The EA analyzed carbon storage and emissions for the proposed action and no action alternatives at local, Pacific Northwest, United States and worldwide scales. (EA pp. 138-142) At all scales, emissions from the Gordon Creek project are very small, and would be undetectable at the global atmospheric CO2 concentration level.
g. **Comment:** BLM must do all it can to mitigate and reverse climate change in order to meet its legal obligations.

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

h. **Comment:** Commenter claims that the EA should have analyzed changes caused by timber harvest operations in the decay rate of dead wood in the project area.

**Response:** This is an opinion of what should be addressed in an EA. BLM has searched for available scientific literature on this issue and is unaware of any science that would provide a reliable way to quantify differences in decay rates or support the commenter’s viewpoint that such a change in decay rate would potentially change the analysis.

i. **Comment:** The commenter expressed concern that the BLM use the best available science to analyze carbon storage and the project's effects on climate change.

**Response:** BLM has considered a wide range of the best available science (EA, pp. 135,136). BLM has considered numerous scientific sources including the sources utilized in the carbon/climate analysis for the WOPR analysis, sources presented by commenters, and sources available to the BLM from a variety of other sources.

j. **Comment:** Commenter expressed concern that recent and anticipated actions by other landowners in the area, combined with climate change, could affect area hydrology and water quality (cumulative effects) even under the "no action" alternative.

**Response:** BLM has applied best management practices to protect aquatic resources and soils during project implementation (EA pp. 21-25, 29-32) and analysis has demonstrated that there would be no measurable direct effects from implementing the project. If there are no measurable or observable direct effects, by definition there is no measurable or observable contribution to cumulative effects.

**10.15 Access to Stands during Comment Period**

Some commenters expressed concern about being unable to access the area during 2nd EA comment period that took place in spring when roads were blocked by snow and down trees. BLM initiated the project by mailing a scoping letter in September 2006. The comment period on the original EA was in September – November 2007, when the area was free from snow.

Although access to the area is extremely limited due to a series of gates that are controlled by private landowners, the public has been granted entry permission from private landowners when requested. Although it did not take place during a comment period, on June 4, 2007 the BLM hosted one field trip to view areas that were identified as high concern areas by the public. Therefore, I have concluded that the public has had sufficient opportunity to view the project proposal.
10.16  Spotted Owl Recovery Plan/WOPR

A comment was raised suggesting that the Gordon Creek projects be deferred because the Obama administration has withdrawn support for the Spotted Owl Recovery Plan on which the Western Oregon Plan Revision (WOPR) was based. The Gordon Creek Thinning EA was planned in accordance with the 1995 RMP and not the WOPR. Impacts this project would have on the northern spotted are addressed in the EA (EA pp. 13-15, 27-31, 101-119, 135--144, 146). Also, see response 10.9. I find no sufficient reason to defer the sale.

10.17  Range of Alternatives

Commenters feel that there is an inadequate range of alternatives analyzed in the EA and acknowledge that the EA analyzed three Action Alternatives and the No Action Alternative. Some comment letters recommended alternatives to: increase “no harvest buffers” to minimum 220 feet; manage for decadence/old growth; use variable density thinning; manage for water quality; and manage for carbon storage.

The EA also considered additional alternatives which were not analyzed in detail (EA pp. 34-35) and the EA analyzed changes to the original action alternatives (EA pp. 36-39).

After reviewing the EA, I have determined that the range of alternatives analyzed is adequate because the purpose and need for the project defines the project and limits the range of action alternatives to those which fulfill the purpose and need for action (EA pp.2-4).