

Decision Record
Gunners Lakes Project
Environmental Assessment # DOI-BLM-OR-S060-2010-050-EA

I. INTRODUCTION

The Bureau of Land Management (BLM) conducted an environmental analysis documented in *Gunners Lakes Project Environmental Assessment* (EA # DOI-BLM-OR-S060-2010-050-EA) and the associated project file. The proposed project is to commercially thin approximately 508 acres of 60-70 year old conifer, construct and then decommission approximately 1.3 miles of new temporary road, renovate and then decommission about 2 miles of existing roads, maintain or improve about 14 miles of existing road, including replacing about six stream crossing culverts, and decommission another 0.3 miles of existing roads. The EA and Finding of No Significant Impact (FONSI) were made available for public review in May, 2010. The FONSI was then signed on July 27, 2010.

The decision documented in this Decision Record (DR) is based on the analysis documented in the EA.

II. DECISION

I have decided to implement the Gunners Lakes Project as described in Alternative 2, the Proposed Action (EA pp.11-20). This decision is based on site-specific analysis in the Gunners Lakes Project Environmental Assessment (EA # SOI-BLM-OR-S060-2010-005-EA), the supporting project record, management recommendations contained in the East Fork Nehalem River Watershed Analysis, as well as the management direction contained in the *Salem District Record of Decision/Resource Management Plan* (ROD/RMP) (May 1995), which are incorporated by reference in the EA. Hereafter, Alternative 2 is referred to as the “selected alternative”. The maps of the selected alternative can be found on pages 8-11 of this DR.

The project will be implemented through two commercial timber sales, as follows:

Timber Sale Name	Treatment Areas from EA	Total Acres	Anticipated Year of Sale (Fiscal Year)
Trigger Finger	7-5, 9-4, 9-10	125	2011
Baked Tater	21-7, 29-2, 29-3, 29-4, 29-7	383	2011

In addition to the above timber sales, the Proposed Action includes road construction, renovation, maintenance and decommissioning. A portion of the road work will be implemented under the timber sale contracts, and the remainder will be done separately from the timber sales. For the purposes of this Decision Record, the road work and timber sales will be described as the same project, however the Administrative Review Opportunities will be identified separately for the road work and timber sales.

Modifications:

There are no modifications to the Proposed Action from the description in the EA.

Decision Summary:

Timber Harvest: In the **General Forest Management Area (GFMA)** land use allocation, approximately 67 acres of 70 year old stands will be thinned. Stands selected for thinning are overstocked and thinning is needed to maintain good diameter growth rates, live crown ratios and stand stability. The thinning would be designed to maintain good volume productivity of the stand as well as reducing potential losses from *Phellinus weirii* root rot. In the **Connectivity/Diversity Block (CON)** land use allocation, approximately 224 acres of 60 to 70 year old stands will be commercially thinned. Stands selected for this treatment are well-stocked stands where thinning is needed to promote development of late-successional forest structure. Stands would be variably thinned to encourage rapid development of vertical and horizontal diversity while continuing to manage the bulk of the acres as even-aged stands with substantial overstories. In the **Riparian Reserve (RR)** land use allocation, approximately 217 acres would be thinned in conjunction with treatment areas proposed for the GFMA and CON land use allocations. The thinning prescription in the RR would be the same as the adjacent land use allocation. Approximately 90% (456 ac) of the timber harvest will be accomplished using ground-based equipment, and the remainder (52 acres) will be harvested with a skyline system.

Fuel treatment strategies will be implemented on portions of the project areas. Strategies will include directional falling (to keep slash away from fuel breaks), followed by a reduction of surface fuels in order to reduce both the intensity and severity of potential wildfires in the long term (after fuels reduction has occurred). Fuels reduction will be accomplished by burning of slash piles, which will be created by hand or mechanical methods.

All design features described in the EA (EA pp. 14-20) are incorporated into the selected alternative.

Road Work: Approximately 1.3 miles of new temporary road construction will occur on BLM lands to access the treatment areas. Another 2.0 miles of existing roads will be renovated as necessary to accommodate log-hauling, and approximately 14 miles of existing roads will have maintenance or improvements prior to log hauling. All of the new roads, about 1.6 miles of the renovated roads, and another 0.3 miles of existing roads will be decommissioned and blocked following timber harvest and site preparation operations, for an overall net reduction of 1.9 miles of road as a result of this project. Decommissioning will include removal of approximately seven stream-crossing culverts, ripping compacted soils, reestablishing natural drainage patterns, out-sloping the road surface so that water drains quickly to stable slopes, seeding and/or planting the road surface and adjacent areas of exposed mineral soils, and blocking access and/or scattering woody debris on the road surface.

All design features described in the EA (EA pp. 14-20) are incorporated into the selected alternative.

III. COMPLIANCE WITH DIRECTION

The analysis documented in the Gunners Lakes Project EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). This project has been designed to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (ROD/RMP) and related

documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 4-7). All of these documents may be reviewed at the Tillamook Resource Area office.

Survey and Manage Species Review:

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

Following the Court's December 17, 2009 ruling, the Pechman exemptions are still in place. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM from proceeding with projects. Nevertheless, the Gunners Lakes Project has been reviewed in consideration of both the December 17, 2009 and October 11, 2006 order. Because the Gunners Lakes Project entails no regeneration harvest and entails thinning only in stands less than 80 years old as well as replacing culverts on system roads that are in use and removing culverts on roads that are to be decommissioned, I have made the determination that this project meets Exemptions A and B of the Pechman Exemptions (October 11, 2006 Order), and therefore may still proceed to be implemented 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.

Northern Spotted Owl (NSO) Status Review:

The following information was considered in the analysis of proposed project: a/ *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney et al. 2004); b/ *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony et al. 2004); c/ *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and d/ *Northwest Forest Plan – The First Ten Years (1994-2003): Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005). In summary, although the agencies anticipated a decline of NSO populations under land and resource management plans during the past decade, the reports identified greater than expected NSO population declines in Washington and northern portions of Oregon, and more stationary populations in southern Oregon and northern California.

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

IV. ALTERNATIVES CONSIDERED

Alternatives Considered but Not Analyzed in Detail:

The following action alternative was evaluated but not included in detailed analysis (EA p. 27):

Additional treatment areas and regeneration harvest in GFMA and CON: The IDT considered an alternative that included an additional 360 acres of treatment area, some of which was located in T4N R3W sections 17 (GFMA) and 19 (CON), which are not included in the Proposed Action. This alternative was developed to be consistent with the management direction in the RMP, which addresses the need to manage stands to reduce the risk of loss from disease. Regeneration harvest was considered to be the only appropriate harvest treatment of these stands because of the high levels of laminated root rot present in the stands, and the low levels of stocking and relative densities that result from the widespread root rot. This alternative was dropped from further consideration based on direction from BLM management to limit timber harvest treatments to commercial thinning for this project.

Alternatives Considered in Detail:

The EA analyzed the effects of the proposed action and the no action alternatives. Complete descriptions of the "action" and "no action" alternatives are contained in the EA, pages 10-20.

V. DECISION RATIONALE

Timber Harvest and Road Work

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the East Fork Nehalem Watershed Analysis, and the management direction contained in the ROD/RMP, I have decided to implement the selected alternative as described above. The following is my rationale for this decision.

1. The selected alternative:
 - Meets the purpose and need of the project (EA section 1.2).
 - Complies with the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 4-7).
 - Is fully compliant with The *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).
 - Considers new information on the northern spotted owl (DR p.4).
 - Will not have significant impact on the affected elements of the environment (EA pp. 84-85) beyond those already anticipated and addressed in the RMP EIS.
 - Has been adequately analyzed.

2. The No Action alternative was not selected because it does not meet the Purpose and Need directly, or delays the achievement of the Purpose and Need (EA section 2.1).

VI. PUBLIC INVOLVEMENT/CONSULTATION/COORDINATION

Scoping:

A description of the proposal was included in the Salem Bureau of Land Management Project Update for November 2009 and January and April 2010, which were mailed to more than 1000 individuals and organizations. A letter asking for scoping input on the proposal was mailed on January 20, 2010 to eight individuals, groups and agencies that were potentially affected and/or interested in management activities in the resource area as a whole or in this area. A total of three emails were received as a result of this scoping. Responses to these comments can be found in Section 1.4 of the EA.

Comment Period and Comments:

Based on the original response, the EA was mailed to 12 agencies, individuals and organizations on May 17, 2010. A legal notice was placed in the *Hillsboro Argus* and *South County Spotlight* newspapers soliciting public input on the action on May 21 and May 18, respectively. A total of three comments were received during the 30 day comment period for the EA. Responses to these comments can be found in Appendix A of this DR.

Consultation/Coordination:

Wildlife Consultation

The spotted owl would be affected by this project only through the modification of dispersal habitat. Due to the minor impact to a component of spotted owl habitat, informal consultation with the U.S. Fish and Wildlife Service is warranted and will be completed programmatically within the appropriate years (year of sale) Habitat Modification Biological Assessment in the “Light to Moderate Thinning” category.

Fisheries Consultation

Consultation with the National Marine Fisheries Service on the potential effects of the proposed action on Oregon Coast coho salmon will be completed with project specific consultation (Section 7 Streamlined Consultation) or one of the programmatic consultation processes available at the time of implementation for actions that require consultation.

Required consultation for Magnuson-Stevens Fisheries Conservation and Management Act Essential Fish Habitat for the proposed action is included in *EA Section 3.4.3*.

Section 7 Endangered Species Act Consultation will be completed prior to the Final Decisions (timber sale notices) being issued for the timber sales.

VII. CONCLUSION

Review of Finding of No Significant Impact

I have determined that change to the Finding of No Significant Impact covering the Gunners Lakes Project is not necessary because I’ve considered and concur with information in the EA and FONSI and this Decision Record. No new information was provided that lead me to believe the analysis, data or conclusions are in error or that the selected action needs to be altered. The selected action would not have effects beyond those already anticipated and addressed in the RMP/FEIS.

Supplemental or additional information to the analysis in the RMP/FEIS in the form of a new environmental impact statement is not needed for the reasons described in the Finding of No Significant Impact (FONSI, pages 1-4).

Administrative Review Opportunities

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management Regulations at 43 CFR 5003, protests of this decision may be made within 15 days of the publication of a notice of decision in a newspaper of general circulation. This notice of decision will be published in the *Hillsboro Argus and South County Spotlight* newspapers on **August 3 and August 4, 2010**, respectively. To protest this decision a person must submit a written protest to Tillamook Field Manager, 4610 Third Street, Tillamook, Oregon 97141 by the close of business (4:30 p.m.) on **August 19, 2010**. The protest must clearly and concisely state the reasons why the decision is believed to be in error.

- Commercial Thinning: Any objection to the commercial thinning portion of this project or my decision to go forward with the commercial thinning portion of this project must be filed at this time in accordance with the protest process outlined above.

At the time of advertisement (Notice of Sale) what constitutes a protestable decision is limited to 1) whether there has been new BLM direction requiring a change from that in the Gunners Lakes Project EA and/or 2) changes between the timber sale design as described in the Gunners Lakes Project EA and that in the final timber sale contract.

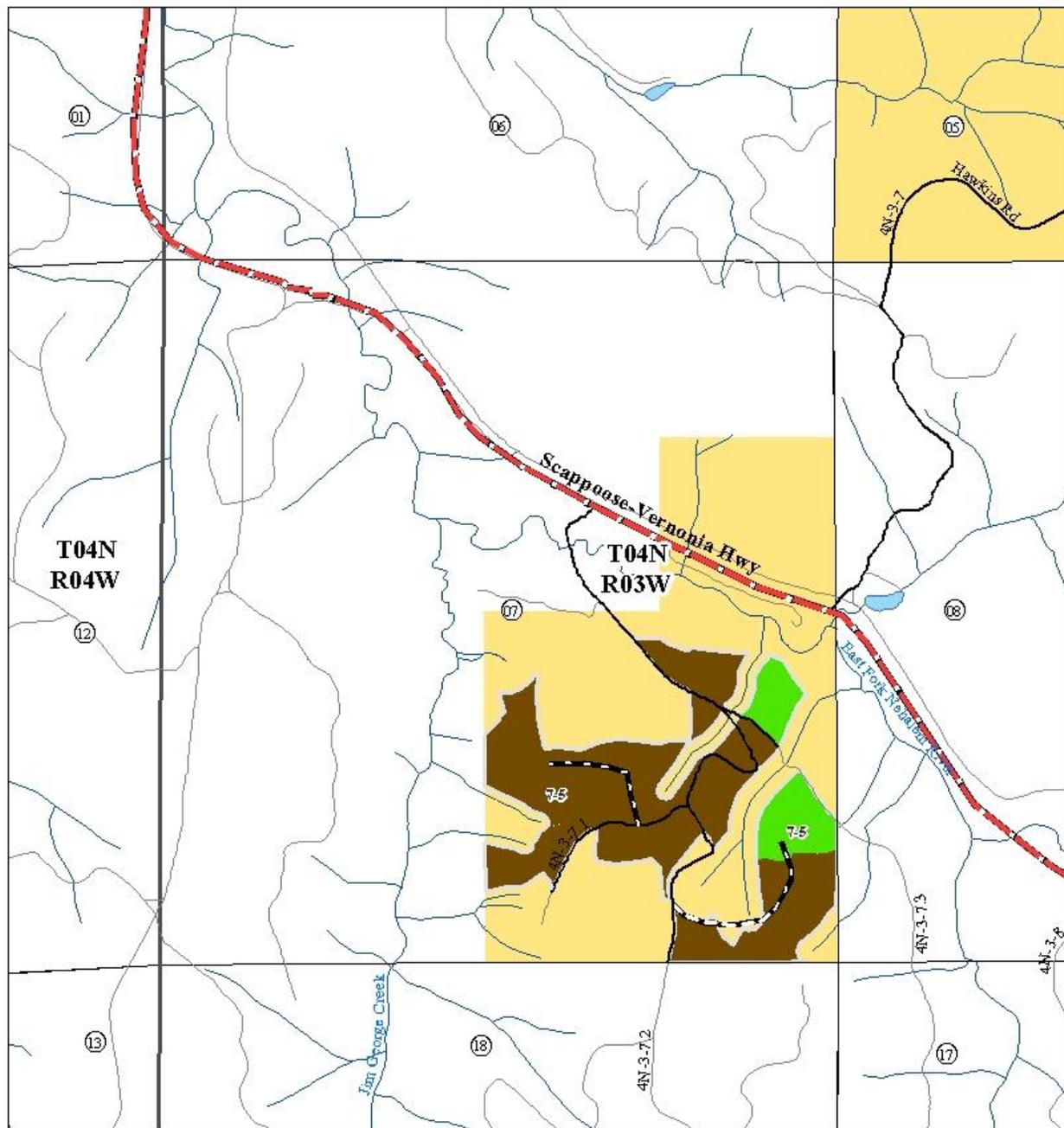
- Road Work: Any objection to the road work portion of this project or my decision to go forward with the road work portion of this project must be filed at this time in accordance with the protest process outlined above.

As interpreted by BLM, the regulations do not authorize the acceptance of protests in any form other than a signed, written hard copy that is delivered to the physical address of the BLM Tillamook Resource Area Office. If no protest is received by the close of business (4:30 pm) on **August 19, 2010**, this decision will become final. If a timely protest is received, the project decision will be reconsidered in light of the statement of reasons for the protest and other pertinent information available, and the Tillamook Resource Area will issue a protest decision.

Approved by: /s/ Stephen M. Small
Stephen M. Small
Tillamook Resource Area Field Manager

7/29/2010
Date

Gunners Lakes Project Proposed Treatment - Section 7



0 500 1,000 Feet

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

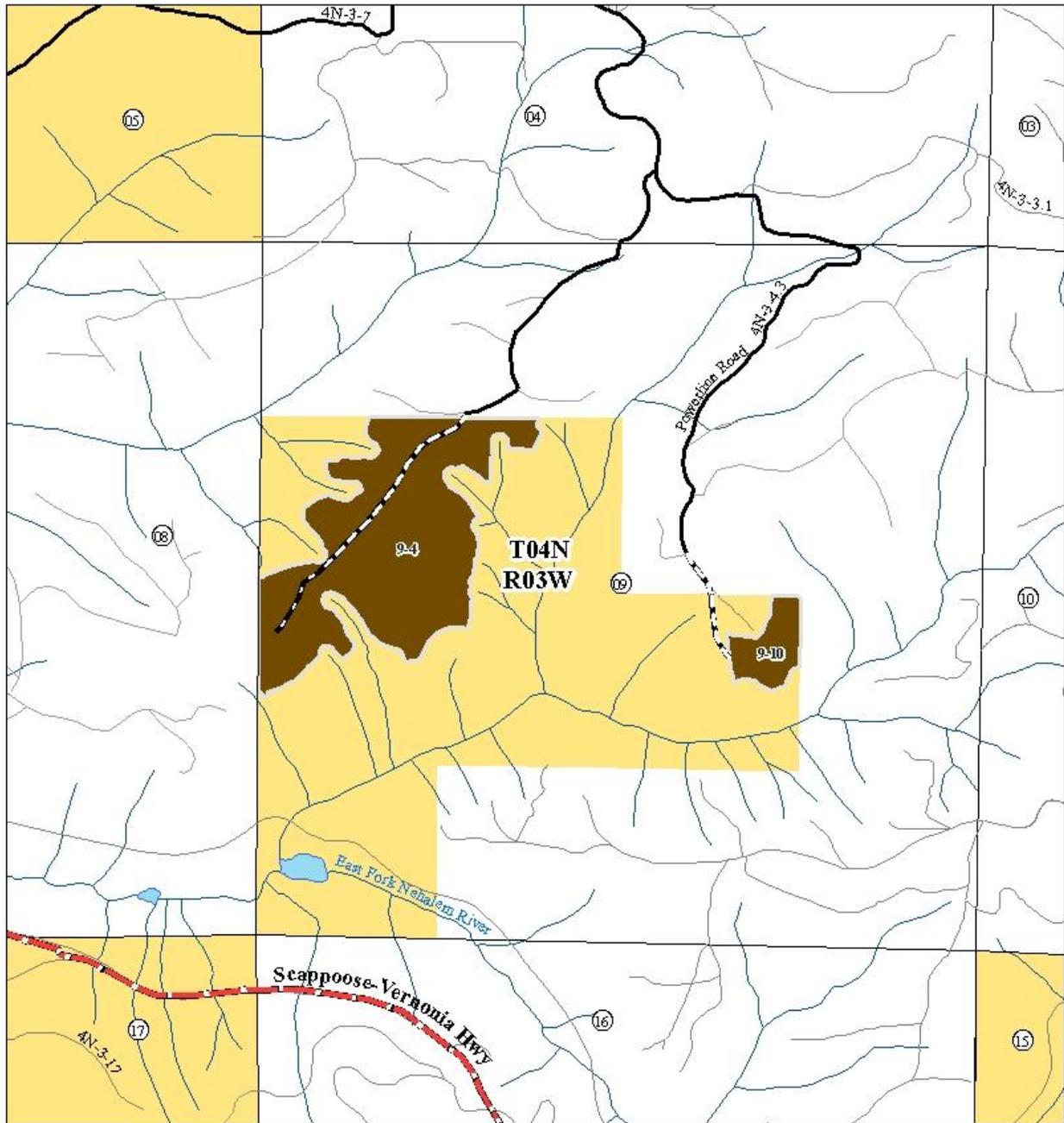
- Roads
- Highway
- Stream
- Water Bodies

- Haul Routes/Road Work**
- Haul Route
 - New
 - Renovate

- Unit boundaries
- Logging System**
- Cable Yarding
 - Ground-Based Yarding
 - BLM Land



Gunners Lakes Project Proposed Treatment - Section 9



0 500 1,000 Feet

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

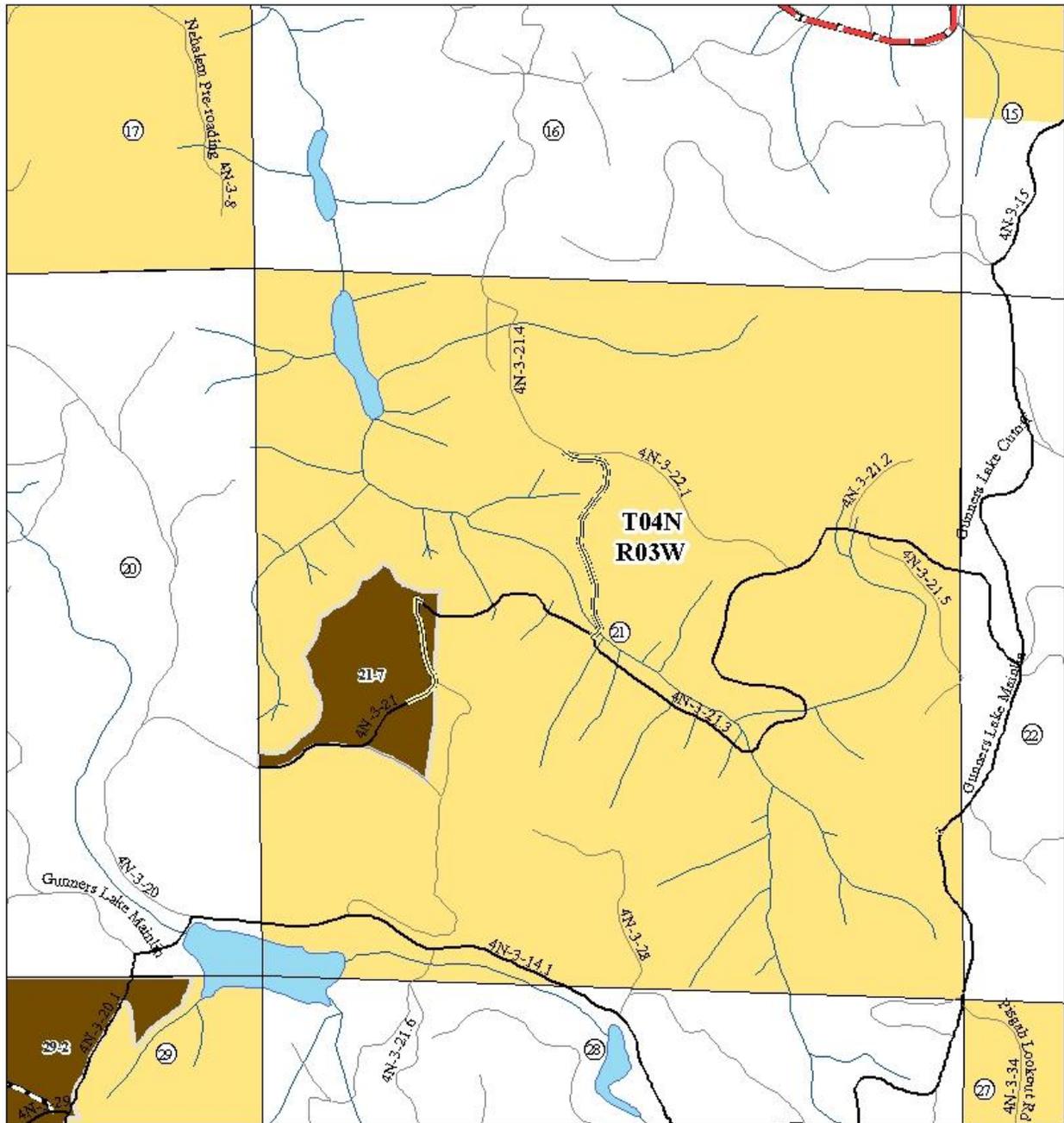
- Roads
- Highway
- Streams
- Water Bodies

- Haul Routes/Road Work**
- Haul Route
 - New
 - Renovate

- Unit boundaries
- Logging System**
- Cable Yarding
 - Ground-Based Yarding
 - BLM Land



Gunners Lakes Project Proposed Treatment - Section 21

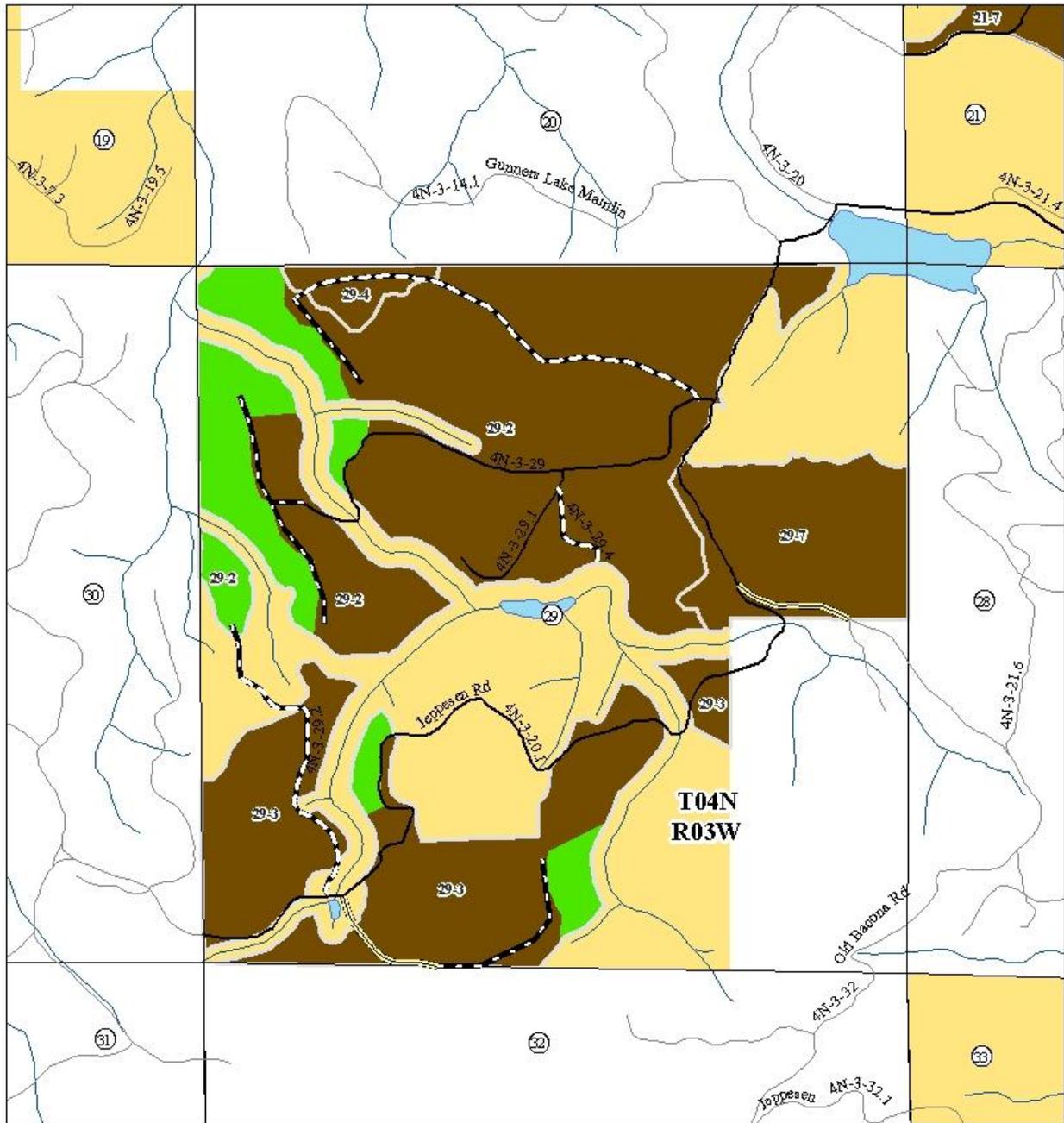


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- | | | |
|--------------|------------------------------|-----------------------|
| Roads | Haul Routes/Road Work | Unit boundaries |
| Highway | Haul Route | Logging System |
| Streams | New | Cable Yarding |
| Water Bodies | Renovate | Ground-Based Yarding |
| | Proposed Road Projects | BLM Land |



Gunners Lakes Project Proposed Treatment - Section 29



0 500 1,000 Feet

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

- Roads
- Streams
- Water Bodies

- Haul Routes/Road Work**
- Haul Route
 - New
 - Renovate
 - Proposed Road Projects

- Unit boundaries
- Logging System**
- Cable Logging
 - Ground-Based Logging
 - BLM Land



APPENDIX A:

RESPONSE TO PUBLIC COMMENTS RECEIVED ON THE GUNNERS LAKES PROJECT ENVIRONMENTAL ASSESSMENT AND FONSI (EA# DOI-BLM-OR-S060-2010-005-EA)

On May 17 2010, a notice stating that the Gunners Lakes Project EA was available for public comment was sent to 12 individuals, organizations and agencies (Project Record Documents 16 and 17). As a result of this scoping effort, two emails providing comments were received - Project Record Document 23 from Doug Heiken at Oregon Wild; Project Record Document 24 from Francis Eatherington at Cascadia Wildlands.

The following are comments received and BLM's responses to those comments.

Project Record Document 23 – Doug Heiken – Oregon Wild

Comment 1: *"The EA does not accurately reflect the real and substantial effect of logging on long-term recruitment of snags and dead wood....The EA admits that LWD is "no properly functioning" in local streams, but the EA does not discuss the adverse effect of thinning on recruitment of large wood in riparian reserves. The EA analysis of "hydrology" ignores the issue on riparian large wood. The EA analysis of "threatened & endangered fish" focuses on distant downstream effects and ignores site-specific effects except to say that adverse effects to instream wood recruitment would be avoided by not logging unstable slopes (but this is incorrect because the logging will clearly occur within the wood recruitment area of local streams. The EA analysis of "other fish" talks about a different project that may add LWD to streams in the area, but not about the adverse effects of logging in recruitment of LWD, except to say "see T&E section" which we have already pointed out it flawed."*

BLM Response: It is not expected that logging would negatively affect the future availability of large snags, dead wood or large wood in riparian reserves (EA pages 26-27). Thinning "captures" the mortality that would occur from inter-tree competition. This mortality occurs in the smallest trees in the stand. Competition related mortality would continue in the no-cut buffers, as well as the 78% of the riparian reserves within the four sections with harvest units which would remain untreated under this project. The proposed stocking levels were purposely set to maintain shade and a relatively high production of wood (future CWD) within the Riparian Reserve, especially within 240 feet of streams. Natural mortality in larger trees is usually due to disease, insects, wind or fire. In addition to this mortality, there is the management option to create snags and down wood. During this entry the proposal is to cut and leave two trees per acre for CWD. Phellinus root disease is the major cause of large tree mortality in the project area. Phellinus treatment patches and/or heavily thinned patches would not be located within 240 feet of streams so there would be minimal change in this on-going source of mortality and if anything, it is expected to increase as the Phellinus patches continue to expand.

The primary source for potential large woody debris (LWD) recruitment in the project area is direct tree fall. Indirect recruitment is likely to be minimal. Approximately 95% of the proposed timber harvest area are on slopes that are less than 50% (EA p. 49). All high-risk sites for mass wasting were

removed from the proposed timber sale, and the existing stream bank stability would be maintained with no-cut buffers. Local streams, based upon several hydrologic factors (channel size and gradient, stream flow, and location above ponds) generally do not have ability to transport LWD to lower reaches.

The standard for LWD as defined by both Oregon Department of Fish and Wildlife and National Marine Fisheries Service is individual pieces of wood at least 50 feet long and 24 inches in diameter. None of the stands to be thinned inside or outside of the Riparian Reserves have a Quadratic Mean Diameter (QMD) of 24 inches, therefore none are considered to be sources of LWD at this time. In addition, there is only one unit (7-5) that is adjacent to Oregon Coast coho, however its QMD is only 15.3 inches with an average tree height of 138 feet. With no-harvest buffers at a minimum of 100 feet in width, there is a theoretical loss of small wood (6 to 8 inch diameter) recruitment to this stream, however because these stands are thinned from below (smaller diameters are preferentially taken) the potential of affecting even this small wood that may reach the stream is negligible in this unit.

Habitat inventories (ODFW aquatic inventory) also collect data on Course Woody Debris (CWD) pieces of wood down to 6 inches diameter in stream channels. There are a few locations that thinning in the Riparian Reserve will remove some trees that could provide some of this material. All other harvest areas that will have Riparian Reserve treatments to timber stands are located either above the ponds discussed in the hydrology section on small intermittent streams (that would not be anticipated to move wood that is 6 inches in diameter or larger). As such with the use of no harvest buffers of 60 to 100 feet in width in combination with thin from below prescriptions and primarily small streams there is no chance of affecting LWD and a negligible chance of affecting CWD.

Comment 2: *"It would be best to avoid road construction as much as possible if not entirely. The landscape already has far too many roads, and areas that are inaccessible from existing roads can be used to meet important objectives like snags, dead wood, and carbon storage. We urge BLM to drop the small acreage accessed by roads 29-1, 29-3, and 29-5, because there is an unacceptable ratio of road construction relative to thinning area."*

BLM Response: Oregon Wild is stating an opinion that there are too many roads and that there is an "acceptable" ratio of road construction relative to thinning area that this project exceeds. We disagree. Because the project area has had relatively little timber harvest in the past 70 years, the existing road network does not provide access to all the stands that BLM has determined are suitable and economically viable for commercial thinning at this time. As stated in the EA, all new roads will be temporary, natural-surfaced roads that will be winterized at the end of each operating season and decommissioned after timber harvest is completed. The discussions of environmental effects of the new road construction on water quality (EA pages 34-35) and ESA-listed fish and their habitat (EA page 41) state that all the new roads are on gentle slopes, are not near streams, and do not involve stream crossings. For these reasons, new road construction is not expected to have any impact on water quality or fisheries resources, and minimal impact on terrestrial resources.

Comment 3: *"It would be preferable to minimize the amount of ground-based logging which has adverse effects on soil, water weeds, and the habitat values such as understory vegetation health and diversity."*

BLM Response: Oregon Wild is stating an opinion that ground-based logging is less desirable than other types of logging systems without offering evidence to support that opinion. The environmental effects of the proposed ground-based logging on soil, water, fisheries, wildlife and invasive, non-native plants are located in Chapter 3 of the EA.

Comment 4: *"Logging in riparian reserves is not usually justified."*

BLM Response: Watershed analysis is a component of the Aquatic Conservation Strategy. The East Fork Nehalem Watershed Analysis (USDI Bureau of Land Management 1996) recommended (p. 53) thinning "well-stocked and over-stocked mid-aged conifer stands in Riparian Reserves to encourage remaining conifers to attain larger sizes in a shorter amount of time than would occur through the natural "self-thinning" process." The RMP (p. C-32) states: "Apply silvicultural practices for Riparian Reserves to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy objectives." The RMP (p. B-31) states that "Active silvicultural programs will be necessary to restore large conifers in Riparian Reserves." Thinning is directly related to that objective, and as addressed under Comment 1, it can be done without compromising CWD objectives. In addition, thinning would promote the development of a second canopy layer, another desired stand characteristic within the Riparian Reserve.

Comment 5: *"Since these stands are generally less than 80 years old, BLM may rely on the Pechman exemption and not complete surveys for rare and uncommon species. However, this exemption is intended to apply to even-aged stands, and BLM should apply the applicable survey protocols in any portion of units with two or more predominant trees per acre."*

BLM Response: There are no stands or portions of stands that have any "pre-dominant" trees included in the project area. These stands all originated after regeneration harvests and, while there are small differences in some tree ages (less than ten years) within the stands, they are not by any means enough to show any ecological difference and therefore are even-aged stands. The stand ages presented are based on actual stand exam data where the ages were determined by coring the largest trees on the sample plots. These are simple second-growth stands with no legacy features.

Comment 6: *"BLM should not rely on the matrix land allocation to support timber extraction. BLM has a continuing duty to keep its RMP up to date, and since the 1995 RMP was approved, there is significant new information indicating a need to protect and restore more forests for carbon storage to mitigate climate change, and late successional habitat (so that spotted owls have a greater chance of co-existing with barred owls and to minimize the chances of competitive exclusions between the tow owls). Also, the matrix only makes up a small fraction of the total acres of this project."*

BLM Response: The Salem RMP is land management plan that provides direction for management activities on the Salem District, and this project is consistent with the RMP. Amending or updating the RMP is outside the scope of this EA.

As stated in the EA on page 12, there are 291 acres of Matrix lands in the proposed action, which is 57% of the total treatment area for the project.

Comment 7: *"Up to 19 acres of the 67 acres of Matrix might be heavily thinned leaving only small trees non-Douglas fir trees. This is not a good ecological prescription. Root rot is not an ecological problem. It is an agent of change and ecological diversification. Root rot create snags, reduces canopy cover and stimulates the growth of diverse early seral vegetation. This is a good thing. Don't try to stop it. And certainly don't mistake it for restoration when you are removing most of the legacy large wood structures from these areas."*

BLM Response: Direction in the Salem RMP: states that for partial-cut harvest design in GFMA (Appendix D-3) and Connectivity/Diversity Blocks (Appendix D-5), "Where root diseases such as laminated root rot (*Phellinus weirii*), black stain (*Ceratocystis verticicladiella*) or Port-Orford-cedar (*Phytophthora lateralis*) are present in stands to be thinned, the thinning will incorporate state-of-the-art recommendations for treatment. Openings created will be planted with seedlings of species resistant or immune to the disease, or in a manner to reduce the rate of disease spread". At best, the prescribed treatments for *Phellinus* will retard its spread. The disease is throughout the stands and it is likely that much of it has gone undetected. *Phellinus* remains viable in stumps for up to 50 years and with an influx of naturally regenerated Douglas-fir and western hemlock it is expected that the disease would persist, even in openings. We are not planning to remove any legacy large wood structures from the units.

Comment 8: *"EA page 55-56 are contradictory because it says that not logging will retard development of spotted owl habitat, and the next page says that logging will "halt the natural snag production process" which is important to owl prey species."*

BLM Response:

The statements are not contradictory. There is more to spotted owl habitat than small diameter snags. As stated in the EA, not thinning will result in a less stable stand that will take considerably longer to develop large trees and a complex understory which are very important elements of spotted owl habitat. Large snags, which are more important than small snags when considering owl habitat, cannot be gotten from small trees. Stating that thinning would also diminish the recruitment of snags for the next couple of decades is accurate and would have a small effect on owl habitat by reducing some of the ecological benefits provided to prey species by small snags. The overall effect is miniscule because it is both highly unlikely that there are any spotted owls in the area that would suffer the consequences due to the very low quality and quantity of suitable habitat in the area, and that, even though there may be a quantity of snags on the landscape, the stands would still be dense, poor quality habitat with little structural diversity.

Comment 9: *"BLM has adopted a flawed temporal scale of analysis of the effects of logging on carbon storage. NEPA requires that BLM compare the effects of logging to the effects of not logging, not compare the effects of logging now and in the future. BLM as adopted a too short time frame for the carbon analysis. When the logged stands have recaptured the carbon emitted by logging and wood products processing and disposal, the unlogged stand will have capture much more carbon compared to the logging alternative. The proper temporal scale is the full time period that the logging alternative results in increased cumulative emissions relative to the no action alternative."*

BLM Response: Table 14 in the EA clearly shows the effects of carbon storage logging now vs. not

logging. The table also shows the effects of carbon storage for not only no action, but it also compares carbon storage over the next 50 years of the proposed action (logging) vs. no action (not logging). The rationales behind the analytical assumptions used in the carbon storage analysis are described in the EA on pages 77-78.

Comment 10: *"The EA does a poor job of comparing the alternatives in terms of carbon storage. BLM should provide a graphic that shows the difference in carbon storage among alternatives over time."*

BLM Response: We believe that Table 14 in the EA adequately displays the difference in carbon storage between the Proposed Action and No Action alternatives, however we will include a graph of this information in future Environmental Assessments.

Comment 11: *"BLM should not rely on the carbon analysis in the WOPR FEIS. That NEPA analysis was protested and BLM never responded to our protest."*

BLM Response: 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 Gunners Lakes EA did not tier to the 2008 FEIS, and Oregon Wild's protest of that FEIS has no bearing on the use of that carbon storage analysis in the Gunners Lakes EA.

Comment 12: *"The ACS analysis is flawed. It appears to assume that the goal is to accelerate attainment of ACS objectives when the goal is to maintain and avoid "retarding" attainment of objectives and to avoid interfering in natural processes unless "needed.""*

BLM Response: The commenter is suggesting that restoration of aquatic systems is not a goal of the ACS, when in fact the nine ACS objectives all start with the words "Maintain and restore" and the word "retarding" is found not in the descriptions of those objectives. To do nothing more than maintain or avoid "retarding" the attainment of the objectives would not contribute to improving systems that have been degraded or damaged in the past, and would not be consistent with the ACS. We believe that this project is consistent with the ACS objectives, as discussed in EA Section 3.14.

Comment 13: *"We are opposed to creating openings in alder stands. We question the assumption implicit in this prescription, that alders are bad and must be replaced. Alder provides landscape diversity in an area that already has far too many dense young conifer stands."*

BLM Response: Since the EA was completed and after further on-the-ground work, it has been decided not to plan the creation of small "openings" i.e. locations where all the trees would be cut and removed. The proposed action would impact a small fraction of the red alder within the project area. The only two stands dominated by alder, totaling 39 acres, were dropped from the proposed treatment area. There is also a young 17 acre alder plantation in Section 21 which was also dropped from the proposed treatment area. Portions of riparian areas dominated by alder have already been excluded from the treatment area as have other areas extensively stocked with bigleaf maple. In addition, hardwoods associated with Phellinus pockets would be retained as would hardwoods necessary to meet

prescribed stocking levels. After the project is completed, alder would be expected to seed-in along roads, on landings and within the decommissioned roads, and alder is one of the choices for planting in Phellinus pockets. The RMP (p. 47) direction for the Matrix land use allocation (GFMA and Connectivity/Diversity Blocks) is: "Plan harvest of marketable hardwood stands in the same manner as conifer stands, if the land is not otherwise constrained from timber management."

Comment 14: *"The NEPA analysis fails to adequately analyze the potential impacts to white-footed voles."*

BLM Response:

The white-footed vole is not a Special Status Species and as such there is no requirement to analyze the effects to it. The BLM's Special Status Species policy requires that the State Director develop a list of species that may require management consideration in order to not cause a species to need further protections under the Special Status Species policy. Specifically the BLM needs to consult with State wildlife agencies and with Natural Heritage Programs to develop the list. The most recent list is from 2008, however an updated list is currently being developed. The white-footed vole is not on any list with the Oregon Department of Fish and Wildlife's diversity program, which oversees non-game species. Also, the Oregon Natural Heritage Information Center ranks the white-footed vole as List 4, the lowest ranking, which includes taxa that may be of concern but are currently secure or that otherwise do not currently meet the criteria for being considered threatened or endangered.

Project Record Document 24 – Francis Eatherington – Cascadia Wildlands

Comment 1: *"1.3 miles of new road will be built. These, plus .3 miles of existing roads will be decommissioned. The cover letter for this project states that only 1.1 miles of new road would be constructed, not 1.3. We assume the cover letter information is a typo."*

BLM Response: That is correct; there will be 1.3 miles of new road constructed in this project. The 1.1 miles cited in the cover letter is in error. Thank you for pointing out this error.

Comment 2: *"None of the project maps have new road locations on the map, a serious oversight. The decision document should be clear on where the new roads will be built, as well as where the location of the .3 miles of existing road that will be decommissioned."*

BLM Response: That is correct; the locations of new roads and roads to be decommissioned were inadvertently left off of the version of map included in the EA. Thank you for pointing that out. The maps included in the Decision Record correct this omission.

Comment 3: *"New road construction is excessive for the acres thinned."*

BLM Response: We disagree with the assertion that 1.3 miles of new temporary road construction is excessive for a treatment area of approximately 508 acres. See BLM Response to Oregon Wild Comment 2 for more discussion on this subject.

Comment 4: *"Decommissioning methods: ... The BLM should also remove cutbanks and spread logging slash over the roads....Logging slash should be placed on the entire 1.9 miles of decommissioned roads."*

BLM Response: We have found through past road decommissioning, that by subsoiling the road surface, placing waterbars for drainage and blocking the beginning of the road with earth barricades and clearing debris that this level of decommissioning is sufficient to deter OHV use. Because most of the roads are in flat areas or ridgetops, the cutbanks are short and by removing them it can be more disturbing than leaving them.

Comment 5: *"Roads in Riparian Reserves should be limited."*

BLM Response: We agree that roads in the Riparian Reserve land use allocation should be limited, and we believe that we have reduced new road construction in Riparian Reserves to the maximum extent practicable while still providing access to treatment areas that are suitable and would benefit from thinning at this time. The RMP identifies a number of actions to take in order for existing and new roads to meet ACS objectives, including completing watershed analyses, minimizing road and landing locations inside Riparian Reserves, restricting sidecast, avoiding wetlands, and designing stream crossing structures to meet 100-year floods. The Gunners Lakes Project is consistent with the management direction contained in the RMP regarding road management in the Riparian Reserve land use allocation.

Comment 6: *"The EA states that openings will be concentrated in areas of a natural pathogen, *Phellinus weirii*, with *P. Weirii* resistant species planted within those openings. Instead, the BLM should allow this natural pathogen to create the openings the BLM feels they need. Allowing the natural pathogen to create natural openings will allow these openings to provide wildlife habitat in the form of decaying trees, which is a better opening than a mini-clearcut where most of the trees are put on a log truck."*

BLM Response: Direction in the Salem RMP Appendix D-5 states that for partial-cut harvest design in Connectivity/Diversity Blocks, "Where root diseases such as laminated root rot (*Phellinus weirii*), black stain (*Ceratocystis verticicladiella*) or Port-Orford-cedar (*Phytophthora lateralis*) are present in stands to be thinned, the thinning will incorporate state-of-the-art recommendations for treatment. Openings created will be planted with seedlings of species resistant or immune to the disease, or in a manner to reduce the rate of disease spread." It is doubtful that this treatment would have a long-term effect on the amount of *Phellinus* in the stand due to the number of infected stumps and the limited scope of the proposed treatment. This treatment is not a "mini clearcut", as twenty trees per acre will be left in a combination of clumps and scattered trees.

Comment 7: *"The EA also implies areas of dwarf western hemlock mistletoe will be targeted for reduction and elimination in the small openings (page 18). Especially in C/D blocks and riparian reserves, western hemlock must be retained where it is below historical numbers and where mistletoe provides a benefit to nesting wildlife. The EA failed to disclose the historical amount of mistletoe in*

the watershed, and if the project area is over the historical amount. Without this analysis, the BLM should not target mistletoe for removal in created openings and as a thinning priority. Treatments to enhance late-seral forest conditions means all components of late-seral forests should be protected, including mistletoe.”

BLM Response: We do not plan to target hemlock trees infected with dwarf mistletoe for cutting. The infected trees noted in the stands are severely deformed and will be retained under the design feature that includes leaving trees with significant damage. This was not adequately explained in the EA, and it is understandable that there would be confusion on this point.

Comment 8: *”Two and three acre clearcuts for conversion of alder to conifer is not necessary.”*

BLM Response: See BLM Response to Oregon Wild Comment 13.

Comment 9: *”The BLM should not thin in all project area riparian reserves.”*

BLM Response: Treatment area boundaries would maintain a minimum 100 foot no-harvest buffer on either side of fish-bearing streams and perennial non-fish bearing streams and a minimum 60 foot no-harvest buffer on either side of intermittent non-fish bearing streams. Within the 4 sections containing proposed harvest units, 768 acres or 78% of the riparian reserve, would remain untreated during this entry.

Comment 10: *”Even thinning in Connectivity/Diversity Blocks should be different than thinning in the GFMA portion of the matrix.”*

BLM Response: The proposed prescription in Connectivity/Diversity Blocks does differ from the prescription for GFMA. Prescriptions for the Connectivity/Diversity Blocks include the following design features not prescribed for GFMA:

- Treatment would result in up to 15% of each harvest unit being in “heavily thinned patches”. Note: “openings” where all trees are cut are not now planned for implementation. Heavily thinned patches are defined as areas equal to or greater than one (1) acre and equal to or less than five (5) acres that would be thinned to an average of 30 trees per acre. Within the heavily thinned patches, as much as possible, reserve trees would be distributed as clumps (approximately 70%) and scattered individual trees (approximately 30%). An effort would be made to clump reserve trees around existing high quality snags and/or down coarse wood. The purpose of these areas is to encourage the development of vertical and horizontal stand diversity.
- Outside of openings and heavily thinned patches, areas prescribed for thinning would generally be thinned to a lower relative density (Curtis) than the GFMA. Marking guidelines would include a higher tolerance for variation, both at the plot level and the cumulative average for all plots than for marking in the GFMA.

Comment 11: *”Spacing diversity on a tree-level should also be restored. C/D Blocks and Riparian Reserves should not be thinned on a grid. Spacing diversity should include retaining trees together that share a crown and root space, whose lower boles are closer than 3’ together at breast height.”*

BLM Response: The stands proposed for treatment seeded-in naturally after fire and logging, and for the most part have never been thinned. Given the existing stand conditions, there is no need to “restore” spacing. The existing spacing would be retained in the clumps within the heavily thinned patches and in the portions of the stands that have been excluded from treatment, approximately 200 acres. Marking guidelines would include direction to leave most of the western redcedar. Western redcedar significantly smaller than the neighboring leave trees would be retained but not counted towards the target spacing. This would also contribute to variability of spacing in certain stands. It should be noted that marking is not done on a “grid”. Thinning is generally from “below”, usually leaving the largest and healthiest trees (modified to ensure retention of damaged trees and for species diversity), and these trees do not occur in a grid pattern.

Comment 12: *”Hardwoods should be protected, at least up to the population numbers that existed prior to the original clearcut.”*

BLM Response: See BLM Response to Oregon Wild Comment 13. If anything, alder increased after previous harvests because of its propensity to seed-in disturbed areas such as old roads, skid trails and landings. Management direction for the Matrix (RMP page 48) includes: “Convert to appropriate conifer species lands where hardwood trees or brush become established following harvest of conifers.”

Comment 13: *”Thinning should be prioritized in managed plantations.”*

BLM Response: Planning and analysis is done on a watershed basis and priorities are set at that level, not by individual units. Within that context, stands are evaluated on the basis of management direction and the need for treatment.

Comment 14: *”The BLM should avoid thinning habitat used by spotted owls, including younger forests near spotted owl core areas.”*

BLM Response: There are no spotted owl core areas within the nearly 17,000 acre analysis area. Thinning will occur in stands that are classified as spotted owl dispersal habitat only and it is extremely unlikely that they are used by any spotted owls, given the surrounding landscape and stand histories.

Comment 15: *”The EA says (page 79): “The annual accumulation of carbon from forest management in the United States is 191 million tonnes”. Does the BLM really mean forest management did this? Rather, isn’t most of the carbon sequestration the result of native forests growing without direct management?”*

BLM Response: The BLM means exactly what it states, carbon from forest management accumulates

191 million tonnes of carbon per year. Currently out of that 191 million tonnes of carbon storage, 1.69 million comes from current management of BLM-managed lands in western Oregon. Carbon sequestration will be higher in the US on unmanaged forests by 141 times. However, this seems to be comparing apples to oranges. Unless managed and unmanaged lands are the same in size and tree composition they cannot be compared equally. It only makes sense that a 500 acre stand of Red Oaks are going to store more carbon than a 5 acre stand of Douglas fir.

Comment 16: *"The carbon storage analysis in the Gunners Lake EA concludes that 35,367 tonns of carbon would be lost to the atmosphere from this project over the next 50 years. The BLM should have considered lowering this by thinning lighter and eliminating 35 acres of forest openings (mini clearcuts), and reducing acres of new road right-of-way clearcuts"*

BLM Response: The 35 acres of forest opening are not mini-clearcuts, as leaving 20 trees to the acre is far from a clearcut. Leaving an average of 75 trees to the acre is a fairly light thinning and promotes the development of late successional forests. BLM has considered lowering this by not thinning and eliminating the heavily thinned areas with the no action alternative.

Comment 17: *"The EA is unclear on page 80, when it says that 24,499 gallons of fossil fuels would be used for harvest operations. What is included in the 24,499 gallons? Does it include the petroleum products use in the fertilizer that was used on these stands or road-side herbicides that will be used? Does it include the daily commuting of forestry workers and BLM inspectors to the site, or the distribution of the forest products produced from the timber sale volume? If not, when will these direct petroleum-product carbon releases be considered?"*

BLM Response: The fossil fuels included in the 24,499 gallons is the estimated amount to haul the logs and the yarding equipment (yarder, dozer, skidder, etc.). Forestry workers and BLM workers are not considered due to the unknown factor of how many workers there will be or how often inspectors will travel to the site. We have not included the emissions for the distribution of the forest products. This would be difficult to do without knowing who purchases the sale as to where the timber and lumber would be going. The BLM has not used herbicides since the 1980's, and there are no plans to fertilize these stands, therefore the production of herbicides and fertilizer was not considered in the carbon analysis.