

**U.S. Department of Interior
Bureau of Land Management
Roseburg BLM District, Oregon**

**Little Wolf Thrice Density
Management Study**

Decision Document

SECTION 1 – THE DECISION

Decision

It is my decision to authorize the Little Wolf Thrice Density Management Study (DMS) Proposed Action Alternative as described in the Little Wolf Thrice Density Management Study Environmental Assessment (EA) in Chapters 1 and 2 (EA #OR-104-08-07; pgs. 9-13). The Project Design Features that will be implemented as part of Little Wolf Thrice DMS are described on pages 13-16 of the EA. These project design features have been developed into contract stipulations and will be implemented as part of the timber sale contract.

Little Wolf Thrice DMS will occur on one unit (approximately 20 acres) of mid-seral forest (70 - 80 years old) located in the Upper Umpqua Watershed in Section 3 of T. 25 S., R. 8 W., Willamette Meridian (Figure 1). No ground will be removed from production for new road rights-of-way, although 0.60 miles of existing road (Spur 1) will be renovated and 5.56 miles will be maintained. Additionally, the 0.60 miles of Spur 1 will be decommissioned (i.e. water barred, seeded/mulched, and blocked) (EA, pg. 11) after use.

This project is within the Late-Successional Reserve (LSR) land use allocation under the 1995 *Roseburg District Record of Decision and Resource Management Plan* (1995 ROD/RMP). Little Wolf Thrice DMS will provide approximately 112 MBF of timber available for auction.

Updated Information

The updated information, described below, has been considered but does not alter the conclusions of the analysis.

1. Land Use Allocation:

The land use allocation for Little Wolf Thrice DMS is the Late-Successional Reserve (20 acres) land use allocation. A Determination of NEPA Adequacy for Little Wolf Thrice DMS (EA#: OR-104-08-07) was completed in order to address the July 16, 2009 withdrawal of the Roseburg District Record of Decision and Resource Management Plan (2008 ROD/RMP) for the Western Oregon Plan Revision by the U.S. Department of the Interior. The land use allocation, as described in the EA (pgs. ii, 1-4), have been updated through the Little Wolf Thrice DMS DNA (pgs. 1-4).

2. Survey and Manage Compliance

The Little Wolf Thrice DMS project is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Roseburg 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 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 Little Wolf Thrice DMS Project in consideration of both the December 17, 2009 and October 11, 2006 order. Because the Little Wolf Thrice DMS 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), and therefore may still proceed to be offered for sale even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case. The first notice for sale will appear in the newspaper on February 23, 2010.

Implementation of the actions proposed in this analysis would conform to the requirements of the 1995 ROD/RMP, incorporating the Standards and Guidelines therein.

Compliance and Monitoring

Monitoring will be conducted as per the direction given in Appendix I of the 1995 ROD/RMP.

SECTION 2 – THE DECISION RATIONALE

The Project Design Features described in the Little Wolf Thrice DMS EA (pgs. 9 - 16) will minimize soil compaction, limit erosion, protect slope stability, protect wildlife habitat, protect fish habitat, protect air and water quality, as well as protect other identified resource values. I have reviewed the resource information contained in the EA, the Determination of NEPA Adequacy (DNA) and the updated information presented in this decision.

On July 16, 2009 the U.S. Department of the Interior, withdrew the Records of Decision (2008 ROD) for the Western Oregon Plan Revision and directed the BLM to implement actions in conformance with the resource management plans for western Oregon that were in place prior to December 30, 2008.

This Decision recognizes that impacts could occur to some of these resources; however, the impacts to resource values will not exceed those identified in the 1994 *Final - Roseburg District Proposed Resource Management Plan / Environmental Impact Statement* (1994 PRMP/EIS). This Decision provides timber commodities resulting from silvicultural treatments whose effects to the environment are within those anticipated and already analyzed in the 1994 PRMP/EIS.

Chapter 2 of the EA describes two alternatives: a "No Action" alternative and a "Proposed Action" alternative. The No Action alternative was not selected because it did not meet the following objectives for land use allocations as updated in the Little Wolf Thrice Density Management Study DNA (pgs. 1-4):

- Within the Late-Successional Reserve (LSR), the objective is to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth forest-related species including the northern spotted owl and marbled murrelet.

Maintain a functional, interacting, late-successional and old-growth forest ecosystem. (1995 ROD/RMP, pg. 29)

- The 1995 ROD/RMP (pg. 86) provides management direction for ongoing research projects. The DMS would be continued according to current or updated study plans. Management direction on existing study sites that conflict with research objectives would be deferred until the research is complete.
- Within the Late-Successional Reserve, the Little Wolf Thrice Density Management Study proceeds with the study as proposed and manages riparian areas, coarse woody debris, green trees, and snags in a manner which meets the intent of the management actions/direction for LSR (1995 ROD/RMP, pgs. 29-30).

This Decision is in conformance with the Roseburg District's 1995 ROD/RMP, as amended. The analysis supporting this Decision tiers to the 1994 PRMP/EIS.

The implementation of this project will not have significant environmental effects beyond those already identified in the 1994 PRMP/EIS. Little Wolf Thrice Density Management Study does not constitute a major Federal action having significant effects on the human environment; therefore, an environmental impact statement will not be prepared.

SECTION 3 – PUBLIC INVOLVEMENT

The BLM solicited comments from affected tribal governments, adjacent landowners, affected State and local government agencies, and the general public on the Little Wolf Thrice Density Management Study EA, which included the Little Wolf Thrice Density Management Study project, during a 30-day public comment period (July 1, 2009 – July 31, 2009). Comments were received as a result of the public comment period.

Upon reviewing the comments, the following topics warrant additional clarification specific to the Little Wolf Thrice Density Management Study project: (1) Snags & Down Wood, (2) "Heavy" Thinning, (3) Stand Diversity, (4) Precommercial Thinning (PCT), (5) Critical Habitat, (6) Large Tree Removal, (7) Riparian Reserves, (8) Blowdown, (9) Roads, (10) LSRA Direction, (11) Other Alternatives.

1. Snags & Down Wood

Comment 1A — Comments were received that questioned the appropriateness of “thinning” as a means to recruiting snags and down wood.

Response 1A — The effects of the past and proposed thinnings on snags is discussed in the EA. Current snag amounts are shown in Table 4 [EA page 18]. The potential for snag recruitment without treatment is discussed in the EA [page 19].

The project’s proposed active snag creation treatment is expected to provide for that structural component for at least 50 years in the proposed treatment area as described in the EA [page 21]. Following all proposed treatments, sufficient overstory trees will be retained to allow for the future achievement of the live and dead wood attributes necessary to meet the stated goals for the Late-successional Reserve (LSR) in which the project resides^a. Active creation of five new snags per acre will provide 160 percent of the Roseburg ROD/RMP estimated needs^b of cavity nesting species on the project area.

At the landscape level BLM stands adjacent to the proposed treatment unit in sections 3 and 10 are also expected to provide snags continuously from suppression mortality and other natural causes in the short and long term. Stands in Sections 3 and 10 include late-seral stands which were thinned only once thirty years ago (59 acres), never thinned late-seral stands (340 acres), and old-growth stands (200 acres).

Reductions in stand density involve tradeoffs between the individual growth rates of trees for future live overstory and the natural production of dead structures (snags and down wood), while promoting understory growth to develop a multi-story stand structure. The reduction in stand density is necessary to meet objectives for understory growth and development, and conform to the design criteria of the Density Management Study. The study is designed to see if active management meets multiple objectives more quickly than with passive management.

Comment 1B — Comments were received concerning surveys and monitoring snag and down wood levels.

Response 1B —Existing down wood and snags were assessed through the density management study monitoring plots and during the tree marking phase of the project. The existing amounts of both attributes are shown in Table 4 [EA page 18].

The proposed active snag and down wood creation treatments are designed specifically to address the low levels of existing coarse woody debris within the context of the formal DMS

^a USDI and USDA. 1998. South Coast - Northern Klamath late-successional reserve assessment. U.S. Department of Agriculture Forest Service, Mapleton Ranger District and U.S. Department of Interior Bureau of Land Management, Coos Bay, Roseburg and Medford Districts, page 28, Table 8.

^b USDI. 1994. Roseburg District: Final - Roseburg District Proposed Resources Management Plan / Environmental Impact Statement (PRMP/EIS). U.S. Department of the Interior, Bureau of Land Management. October 1994, page Chapter 4-43.

design. The active snag creation proposed for this project will provide five times the minimum number of snags required following a thinning treatment^c and within the range of down wood levels for mature stands in the subject LSR^d. Estimates of post-treatment levels of both attributes are shown in Table 5 [EA page 21].

2. “Heavy” Thinning

Comment 2 — *Comments were received questioning the intensity of the treatment needed to reduce stand density.*

Response 2 — Thirty-one trees per acre will be left following all proposed treatments. There are currently forty-seven conifers and four hardwoods per acre that constitute the overstory cohort [Table 4, EA page 18]. Approximately nine will be harvested, five killed for snags and two killed for down wood, leaving thirty-one live conifer trees per acre at the end of the treatment period from the original overstory. All hardwoods are reserved from cutting. Note that Table 5 (EA page 21) shows thirty-seven conifer trees not thirty-one. This is due to ingrowth of smaller trees over the post-harvest ten year period into the minimum diameter class (9”) used to designate the original overstory cohort.

The majority of the existing regeneration layer (understory) is composed of Douglas-fir as a result of its predominance in the overstory of the stand and the adjacent stands. The residual overstory density following treatments should favor the long-term growth of the minor conifer (e.g. grand fir, hemlock) species present due to their higher tolerance^e for growth under conditions of high shade. However, due to its substantial representation in the understory, Douglas-fir will continue to be the dominant understory species.

3. Stand Diversity

Comment 3 — *Spacing* — *Comments questioned previous thinning and the current density management homogenizing the stand, the appropriateness of using variable-density thinning instead, and the potential to eliminate minor species.*

Response 3 — Bailey^f conducted a retrospective study on thinning effects which included the Little Wolf project area subsequent to the first (1980) thinning harvest. He found that light to moderate thinnings did homogenize the overstory tree distribution. Bailey also found that only in heavy thinnings was overstory and understory variability created. The prescription for the proposed treatment does not use a “spacing or grid based rule set”. The marking plan employs a diameter limit or “slot” thinning^g approach where the probability of a tree being cut or retained is relative to its proportion in the targeted diameter range.

^c Regional Ecosystem Office (REO) – Review of the South Coast - Northern Klamath late-successional reserve assessment. Letter dated May 20, 1998 to Regional Forester and BLM State Director.

^d USDI and USDA. 1998. op. cit., page 30, Table 10.

^e Franklin and Dyrness. 1973. Natural vegetation of Oregon and Washington. Gen. Tech. Report PNW-8. USDA Forest Service. Portland, Oregon. 417 pages. Table 3 – page 48.

^f Bailey, John D. 1996. Effects of stand density reduction on structural development in western Oregon Douglas-fir forests – a reconstruction study. Ph.D Thesis. Oregon State University. Corvallis, Oregon. 126 p., page 63.

^g diameter limit thinnings apply different rules to different portions of the stand’s diameter and/or species distribution. For example the proposed action reserves all conifer trees <10” and ≥ 30” diameter and removes 25% of the trees from the intervening “slot”, i.e. 10” to 30” portion of the distribution.

Retention (no cutting) of all trees in the lower and upper end of the existing diameter distribution contributes to variability in the overall tree distribution. Monitoring results after tree marking at Little Wolf indicated that this method increased the spatial inhomogeneity of the overstory component. The estimated range in density after thinning is estimated at 24 to 56 overstory trees per acre. The coefficient of variation of overstory density, a measure of variability increased from 19% to 24%^h over the current condition. In addition, a further opportunity to affect overstory tree spacing and variability will be possible when down wood and snags are created.

Further, data are not available to determine the extent of minor species prior to the 1980 thinning. However, timber sale records show that the proportion of species harvested in the 1980 thinning was 96% Douglas-fir and 4% minor conifers on a basal area basisⁱ, suggesting that minor species were present as a very small proportion in the stand prior to harvest. The current overstory species composition is approximately 98% Douglas-fir and 2% minor conifers and hardwoods. The 1997 thinning harvested only Douglas-fir overstory trees^j. The marking guide for the proposed treatments specifically reserves all minor conifer and hardwood species from harvest^k. The timber cruise verifies that the prescription was met^l.

4. Precommercial Thinning (PCT)

***Comment** — Comments were received stating that the EA implies that thinning would further homogenize the unit with an early-seral thinning prescription and instead, retain clumps of trees, create widely spaced trees, and retain all minor species.*

Response — “Precommercial thinning would reduce understory density to approximately 50 to 60 trees per acre.” [EA page 19]. This density is far below the range which is currently prescribed for areas with commercial timber production objectives (220 to 300 trees per acre). “The need for treatment would be assessed following the timber harvest. Precommercial thinning would be prescribed and implemented in thinned areas where patches greater than one acre of conifer reproduction exceed 80 trees per acre (TPA)...” [EA page 10]. The proposed PCT will incorporate the direction to retain minor species found in the Density Management Study Plan^m.

The current density and distribution of the understory trees is highly variable [EA page 18]. Damage from tree falling and log yarding is expected to reduce understory tree density [EA page 20] and is likely to increase the variability in tree distribution. This variability is likely to persist after early-seral thinning since areas of low overstory density will not be treated.

^h data on file, Roseburg District.

File name: Little_Wolf_Overstory_Tree_Data_2007_Projection_5_2008_FINAL_MARKING.xls

ⁱ Little Wolf Creek Thinning OR-100-TS8-20 timber sale file

^j Little Wolf Creek Thinning Prospectus OR-100-97-09

^k Little Wolf III DMS 3rd Thinning - Marking Guidelines *Final* April 4, 2008

^l Little Wolf Thrice timber cruise

^m Cissel, J.H., Anderson, P.D., Olson, D., Puettmann, K., Berryman, S., Chan, S., and Thompson, C. 2006. *BLM Density Management and Riparian Buffer Study: Establishment Report and Study Plan*. U.S. Geological Survey Scientific Investigations Report 2006-5087., page 11.

5. Critical Habitat

Comment — *Concerns were expressed about the potential for degrading the Critical Habitat Unit (CHU).*

Response — “The proposed DMS analyzed in the Little Wolf Thrice DMS EA would not result in the destruction or adverse modification of critical habitat designated for species listed as endangered or threatened under the Endangered Species Act.” [EA page ii]. The capability of the habitat to function for dispersing spotted owls would be maintained following the proposed treatments [EA page 26].

6. Large Tree Removal

Comment — *Comments expressed concerns about the range of tree diameters to be thinned to attain late-successional characteristics.*

Response — Failure to lower the overstory (large trees) density reduces the likelihood that a multi-cohort stand structure could be maintained [EA page 19]. Multi-cohort or multi-layered structure is a key component of late-successional stands.ⁿ All the very largest trees (> 30” diameter) are reserved from cutting^o. Sufficient large trees will be retained following all treatments to meet the criteria^p of late-successional (old-growth) forest in the long-term for the project area.

7. Riparian Reserves

Comment 7A — *Comments were received questioning the appropriateness of performing similar silvicultural treatments in both the uplands and the riparian reserve and pointed out that the Northwest Forest Plan clearly says: “Active silvicultural programs will be necessary to restore large conifers in Riparian Reserves.... These practices can be implemented along with silvicultural treatments in uplands areas, although the practices will differ in objective and, consequently, design.”^q*

Response 7A — The statement in the Northwest Forest Plan that: “*These practices can be implemented along with silvicultural treatments in uplands areas, although the practices will differ in objective and, consequently, design.*” is contextually more relevant to Riparian Reserves associated with uplands on the Matrix^r land use allocations. Where overlaps occur

ⁿ USDA and USDI. 1994b. Record of decision for amendments to Forest Service and Bureau of Land Management planning documents within the range of the Northern spotted owl (ROD) and standards and guidelines for management of habitat for late-successional and old growth related species within the range of the Northern spotted owl (S&G). U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. April 13, 1994, page B-5.

^o Little Wolf Thrice timber cruise.

^pUSDI and USDA. 1998. op. cit., page 28, Table 8.

^q USDI and USDA. 1994b. op. cit., page B-31.

^r USDA and USDI. 1994a., op. cit., page Glossary 10.

between Riparian Reserves and Late-Successional Reserves, then the standards and guidelines of both land use allocations apply^s. The Little Wolf project area is located on the Late-Successional Reserve land use allocation.

The application of the research prescription to the Riparian Reserve would contribute to the development of a more complex stand structure, maintain the growth and vigor of the residual trees to provide adequate larger trees for meeting future live and dead wood objectives, and maintain native species diversity [EA pages 18-21]. These objectives are consistent with the standards and guidelines for both the Late-Successional Reserves and Riparian Reserves land use allocations^t. Appendix D in the EA [pages 59-65] documents the consistency of the proposed project with the NFP Aquatic Conservation Strategy (ACS).

Comment 7B — *Comments were received expressing concerns about requirements within Riparian Reserves for snags or coarse woody debris under the 1995 ROD/RMP.*

Response 7B — The statement in the EA refers to the fact that the NFP does not explicitly state specific numerical values for either the amounts or distribution of snags and down wood. Following all proposed treatments, sufficient overstory trees will be retained to allow for the future achievement of the live and dead wood attributes necessary to meet the stated goals for the Late-successional Reserve (LSR) in which the project resides^u. Active snag creation will provide 160% of the snag level described in the Roseburg ROD/RMP for cavity nesting species on the project area.^v

8. Blowdown

Comment — *Comments were received concerning requirements for blow-down and down-woody debris.*

Response — Existing blowdown will be retained on site. The down wood requirement will be met through active creation if insufficient amounts are present post-harvest. [EA page 10]

9. Roads

Comment 10 — *Comments were received about the handling of roads on this project.*

Response 10 — The damage to Spur 1 is described in the EA [page 33], including the actions taken in 1999 to remedy the problem, the effectiveness of those actions and the current condition of the area. The document^w which quantified the extent and remediation of the damage in 1999 is incorporated by reference in the EA [page 33].

^s USDA and USDI. 1994b., op. cit., page A-6.

^t USDA and USDI. 1994b., op. cit., page B-6, B-11, B-31.

^u USDI and USDA. 1998. South Coast - Northern Klamath late-successional reserve assessment. U.S. Department of Agriculture Forest Service, Mapleton Ranger District and U.S. Department of Interior Bureau of Land Management, Coos Bay, Roseburg and Medford Districts, page 28, Table 8.

^v See EA, page iii and USDI. 1994. Roseburg District: Final - Roseburg District Proposed Resources Management Plan / Environmental Impact Statement (PRMP/EIS). U.S. Department of the Interior, Bureau of Land Management. October 1994, page Chapter 4-43.

^w Report to Swiftwater Field Manager from Dan Cressy (Soil Scientist) dated December 16, 1999. Paper located in the Little Wolf Creek Thinning OR-100-TS97-09 timber sale contract file.

The reference in the EA to “inconsequential” is taken out of context. The EA [page 33] states that: “Inconsequential amounts of erosion occurred elsewhere [emphasis added] on the subsoiled roadbed surfaces.” is a reference to the rest of the road system not associated with the problems on Spur 1 discussed above.

The EA [page 13] states that: “All spur bed surfaces would be seeded with native seed (or a sterile hybrid mix if native seed is unavailable).” Grass seed is used to rapidly establish ground cover so as to minimize erosion potential during rainy season (Fall-Winter) immediately after harvest is complete. Conifer seed would not germinate until the following Spring and therefore would not provide the necessary erosion control. Conifer and hardwood trees can be expected to develop from seed in subsequent years. Considerable invasion and development of tree and shrub species from native seed on-site occurred on the road surfaces following both the 1980^x and 1998 harvests.^y

The objective of the woody debris on Spur 1 is to prevent the use of the road by motorized vehicles, i.e. make the road impassable to inhibit vehicle caused erosion from occurring. Blocking the first 100 feet of road in conjunction with the other decommissioning actions is expected to be sufficient to meet that objective.

10. LSRA Direction

Comment — *Comments were received about LSRA directions from the South Coast Northern Klamath Late Successional reserve Assessment should be implemented or the EA should explain why not, and if an REO exemption is needed.*

Response — The Regional Ecosystem Office provides guidance for the assessment and review of research proposals developed subsequent to the 1995 ROD/RMP^z. This policy requires that research be assessed to determine if it is consistent with the objectives of the standards and guidelines. The land manager is responsible for assessing the proposed research has discretion regarding how to conduct the assessment and documentation process. The assessment and documentation may be completed in conjunction with the NEPA process.

An assessment and consistency review was initially developed. It was not part of the final EA because the final EA tiers to the 2008 ROD/RMP, not the 1995 ROD/RMP. The REO consistency review is appended to the project decision record.

^x Francis Eatherington for Umpqua Watersheds, email dated 11/15/1999 in Little Wolf D.M. OR100-TS97-09 file.

^y Craig Kintop (Roseburg District Density Management Study Coordinator), personal communication.

^z Regional Ecosystem Office Memorandum to the Regional Interagency Executive Committee (5/12/2003).

11. Other Alternatives

Comment — Comments were received questioning the adequacy of the alternatives presented in the EA.

Response — An alternative that reduced stand density outside the scope of the established Density Management Study plan would not meet the purpose and need of the proposed project. The primary objective of the proposed project is to evaluate if alternative thinning treatments accelerate development of late-successional stand characteristics and vegetation communities [EA page 7]. The study was initiated concurrent with the preparation of the Northwest Forest Plan and specifically “[t]o demonstrate and test options for young stand management to meet Northwest Forest Plan objectives in western Oregon.”^{aa}. The scientific integrity of the DMS research is dependent on implementation of replicated treatments throughout western Oregon. To provide for the widest possible range of inference for the research results, common prescriptions and timelines must be strictly adhered to. This precludes alternative timing or treatments on the Little Wolf site.

It is in the public interest to implement those requirements in the most cost effective manner and where possible through revenue generating methods. Overstory density reduction will be done by commercial harvest, i.e. a timber sale that extracts excess woody material and generates revenue. Subsequent precommercial thinning and snag/down wood creation will be implemented through non-revenue generating service contracts that retain woody material on-site.

The remaining comments did not raise substantive issues that would influence my selection of the Action Alternative for the Little Wolf Thrice Density Management Study portion of the Little Wolf Thrice Density Management Study EA, as updated above.

SECTION 4 – PROTEST PROCEDURES

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 Subpart 5003 Administrative Remedies, protests of this decision may be filed with the authorized officer (Max Yager) within 15 days of the publication date of the notice of decision/timber sale advertisement in *The News-Review*, Roseburg, Oregon.

43 CFR § 5003.3 subsection (b) states: “Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision.” This precludes the acceptance of electronic mail (email) or facsimile (fax) protests. Only written and signed hard copies of protests that are delivered to the Roseburg District office will be accepted. The protest must clearly and concisely state which portion or element of the decision is being protested and the reasons why the decision is believed to be in error.

43 CFR § 5003.3 subsection (c) states: “Protests received more than 15 days after the publication of the notice of decision or the notice of sale are not timely filed and shall not be considered.” Upon timely filing of a protest, the authorized officer shall reconsider the project decision to be implemented in light of the statement of reasons for the protest and other pertinent information available to him. The authorized

^{aa} Cissel, op. cit., abstract.

officer shall, at the conclusion of the review, serve the protest decision in writing to the protesting party(ies). Upon denial of a protest, the authorized officer may proceed with the implementation of the decision as permitted by regulations at 5003.3(f).

If no protest is received by the close of business (4:30 P.M.; Pacific Standard Time) within 15 days after publication of the decision notice, 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 Swiftwater Field Office will issue a protest decision.

For further information, contact Max Yager, Field Manager, Swiftwater Field Office, Roseburg District, Bureau of Land Management, 777 NW Garden Valley Blvd; Roseburg, OR. 97471, (541) 440-4930.

Max Yager, Field Manager
Swiftwater Field Office

Date

BLM Density Management Study Little Wolf Thrice Site

Research Assessment and Review for Consistency with the Objectives of the Northwest Forest Plan Standards and Guidelines

This document constitutes a consistency assessment with the standards and guidelines of the Northwest Forest Plan for the second phase of the BLM Density Management Study. The research is proposed for implementation at the Little Wolf site on the Roseburg BLM District. A full description of the research proposal is found in Cissel et al. (2006). The full environmental effects of the second phase of treatments in support of the study at the Little Wolf site are described in Environmental Assessment OR-104-08-07¹.

BACKGROUND AND GUIDANCE SPECIFIC TO THIS RESEARCH PROJECT

BLM Oregon State Office Instruction Memorandum OR-93-145 and Information Bulletin OR-94-317 provided the initial direction for implementing the Density Management Study. This first phase of the research was reviewed by the Regional Ecosystem Office (REO) for consistency with the Northwest Forest Plan. Their review was documented in two memoranda dated May 24, 1996. They concluded that: “[t]he review did not find any unacceptable risks to the objectives of the standards and guidelines [of the Northwest Forest Plan] that would require modification or cancellation of the project.”

The analyses of effects for the first phase of the DMS at Little Wolf are documented in Roseburg BLM District EA No. OR-100-97-03

Instruction Memorandum OR-2005-083, dated August 16, 2005, initiated and provided direction for the second phase of the Density Management Study. Cissel et al. (2006) describes the study plan and provides the rationale for implementing the treatments.

Regional Ecosystem Office Memorandum to the Regional Interagency Executive Committee (5/12/2003) clarifies implementation of certain Northwest Forest Plan provisions regarding research assessments and reviews.

RESEARCH CONSISTENCY WITH THE OBJECTIVES OF THE STANDARDS AND GUIDELINES

The Northwest Forest Plan (NFP) provides the following guidance regarding research projects conformance to NFP standards and guidelines: “Where appropriate, some research activities may be exempted from the standards and guidelines of this decision.” (USDA and USDI 1994, page15). The Standards and guidelines further provide for this by indicating that

¹ Copy available at the Roseburg BLM District Office, Roseburg, Oregon

some activities not otherwise consistent with the objectives of the standards and guidelines may be appropriate (USDA and USDI 1994, pp. C-4, 18 & 38), particularly if the activities:

- Will test critical assumptions of these standards and guidelines;
- Will produce results important for habitat development; or
- If the activities represent continuation of long-term research.

The Bureau of Land Management, Pacific Northwest Research Station, U.S. Geological Survey, and Oregon State University established the Density Management and Riparian Buffer Study in 1994 specifically to demonstrate and test options for young stand management to meet Northwest Forest Plan objectives (Cissel et al. 2006).

As of 2006, the first phase of the research and collaborative studies on the Density Management Study sites have resulted in twenty-seven journal articles and book chapters, three brochures, seven posters, and seven unpublished reports (Appendix F in Cissel et al. 2006).

The proposed second phase of the Density Management Study will extend current research and provide new research opportunities for at least twelve additional years (Table 1 in Cissel et al 2006 page 6). This second phase of management was developed subsequent to the REO review in 1996.

In a memorandum dated May 12, 2003, the Regional Ecosystem Office provided the following guidance on assessment and review of proposed research under the Northwest Forest Plan: *“New research, i.e., research proposed after the NWFP was signed, does not require REO, Research and Monitoring Group (RMG), or Regional Interagency Executive Committee (RIEC) review.”* and *“USDA and USDI (1994, pp. C-4, 18 & 38) requires that research be assessed to determine if it is consistent with the objectives of the standards and guidelines. The appropriate land manager is responsible for assessing proposed research and has discretion regarding how to conduct the assessment and documentation process. For example, the assessment and documentation may be completed in conjunction with the NEPA process.”*

Compatibility of Research in the Late-Successional Reserve portion of the Little Wolf Site

The essential long-term goal of the Density Management Study is to accelerate development of late-successional characteristics in younger forests (Cissel et al. 2006 page 4). This goal mirrors the direction provided by the Roseburg District Resource Management Plan for the Late Successional Reserve, which in turn were derived from the Northwest Forest Plan:

- ▲ *“Plan and implement silvicultural treatments inside Late-successional Reserves to be beneficial to the creation of late-successional habitat”* (USDI 1995, page 29).
 - Implementation of the proposed treatments are expected to improve Late-Successional Reserve stand structure by enhancing the growth and vigor of the residual trees, provide for snags and down wood which provides for long-term development of diverse stand structures, key components of late-successional² forest stands.
- ▲ Implement recommendations and management priorities contained in the *South Coast - Northern Klamath Late-Successional Reserve Assessment* to “protect and enhance

² Forest seral stages which include mature and old-growth age classes [USDI 1995]

conditions of late-successional and old-growth forest ecosystems; and to create and maintain biological diversity associated with native species and ecosystems.” (USDI and USDA. 1998, page 62).

- The proposed actions will maintain and/or further the development of late-successional and old-growth ecosystems attributes. Table 1 below shows that five of the seven displayed attributes currently meet minimum standards for late-successional stands. All seven attributes are maintained or enhanced as a result of the proposed treatments over time.

Table 1
BLM Density Management Study - Little Wolf Thrice Site

Selected Structural Components of Late-successional Stands Compared to Little Wolf Current Condition and Projected Outcome of the Proposed Action

Stand Component	Characteristic	Old-growth > 200 Years	Mature 80-195 Years	Current Condition	Proposed Action	
					Age 120	Age 150
Live Trees	Quadratic Mean Diameter (inches)	11-13	12-15	15	14	18
	Total Basal Area – Entire Stand (feet ² /acre)	200-405	230-283	156	222	301
	Basal Area of Tolerant Conifers (feet ² /acre)	0-48	n/a	1	2	3
	Basal Area – Hardwoods (feet ² /acre)	0-56	n/a	6	11	9
	# of Douglas-fir/acre > 40" DBH	4-23	0.4-1.9	2	3	5
Down Wood	Volume (feet ³ /acre)	1,382-5,141	300-3,162	14	900	1,200
Snags	20 Inches and Larger in DBH and Greater Than 16 feet tall (per acre)	2-6	0-7	< 1	4	2

Attributes based on all trees > 4.5 feet tall for structure classes and ≥ 2.0" DBH for the current condition and the proposed action. 95% confidence limits displayed for LSRA structure classes and average values for the proposed action.

Old-growth and Mature stand attributes are from Tables 8 and 10; South Coast-Northern Klamath Late-Successional Reserve Assessment.

Proposed Action attributes are derived from simulation of stand growth following the proposed treatments. Color coding of numeric values indicates that the stand meets/exceeds average condition for the defined structure class [**Mature, Old-growth**], i.e. value is within 95% confidence limit shown. Values indicated in “black” font do not meet criterion.

🌲 *Stand management in LSRs should focus mainly on stands that have been regenerated following timber harvest or stands that have been thinned. The overall criteria for silvicultural treatment is that they are beneficial to the creation of late-successional forest conditions.*” (USDI and USDA 1998, page 77).

- The stand meets the criterion of having been previously thinned.

Compatibility of Research in the Riparian Reserve portions of the Little Wolf Site

“Apply silvicultural practices for Riparian Reserves to control stocking, re-establish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy[ACS] Objectives” (USDI1995, page 25).

BLM Oregon State Office memo to the State of Oregon Department of Environmental Quality (ODEQ): Bureau of Land Management Density Management and Riparian Buffer Study Effectiveness Monitoring, September 8, 2006 describes the contributions of the Density Management Study to understanding the effects of active management in the attainment of Riparian Reserve restoration objectives.

The application of the research prescription to the Riparian Reserve would contribute to the development of a more complex stand structure, and maintain the growth and vigor of the residual trees to provide adequate larger trees for meeting future down wood objectives while maintaining native species diversity.

Additional documenting showing consistency with the ACS is found in the Little Wolf Thrice Density Management Study Environmental Assessment (EA No. OR-104-08-07, Appendix D)

Conclusion:

Based on the preceding assessment, I find that the continuation of this research project as proposed is consistent with the standards and guidelines of the Northwest Forest Plan.

Max Yager
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Date: _____

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