Myrtle Morgan Timber Sale Decision Document
Revised Can-Can Regeneration Harvest Project Plan
Environmental Assessment (EA # OR-105-05-06)

South River Field Office, Roseburg District

Prepared: May 24, 2006

Decision:

It is my decision to offer the Myrtle Morgan Timber Sale, partially implementing Alternative Two described in the Revised Can-Can Regeneration Harvest Project Plan EA (pp. 4-8). The sale will contribute an estimated 7,549 thousand board feet of timber toward the objective of an annual allowable sale quantity (ASQ) of 45 million board feet for the Roseburg District.

The sale consists of seven units located in Section 5, T. 30 S., R. 4 W., and Sections 9, 10, 11 and 15, T. 30 S., R. 5 W., W.M. The total harvest area is 229 acres which includes one acre of right-of-way. All of the lands to be harvested are allocated as either General Forest Management Area (167 acres) or Connectivity/Diversity Block (62 acres).

Unit 3 (H) was reduced by approximately nine acres from the area indicated in the EA, to buffer great gray owl foraging habitat consistent with management direction contained in the Roseburg District *Record of Decision and Resource Management Plan* (ROD/RMP, p. 44). Subsequent to this change, construction of a 400 foot semi-permanent spur road and renovation of 2,810 feet of Road No. 30-5-14.0 are eliminated.

Harvest will be primarily accomplished with skyline cable systems capable of maintaining a minimum of one-end log suspension. Approximately one-half of Unit 5 (B) is designated for ground-based yarding. As described in Table 2-1 in the EA (p. 6), all harvest and hauling operations on Units 4 (A) and 5 (B) will be restricted to the dry season, between mid-May and the onset of autumn rains, generally around mid-October. All remaining units are available for all-weather operations.

Site preparation will be conducted prior to reforestation. Approximately 191 acres will be hand piled, covered and burned in late autumn or early winter as described in the EA (p. 7). The remaining 37 acres, consisting of Unit D (6), will be broadcast burned in the spring under conditions described in the EA (p. 6).

Access will be provided by existing roads, supplemented by the construction of two temporary spur roads totaling 0.21 miles in length, three semi-permanent spur roads totaling 0.33 miles in length, and 1.25 miles of new permanent road. Approximately 3.4 miles of existing road will be renovated to include brushing, replacement of cross-drain culverts, and surfacing or resurfacing with crushed rock. Construction will not occur inside of any Riparian Reserves, and road renovation will not involve the replacement of any stream crossings.

As discussed in the EA (pp. 7-8), the intent is to construct, use and decommission temporary roads in the same operating season. If temporary roads cannot be utilized and decommissioned in a timely manner, because of events such as an extended summer fire closure, they will be winterized and held over for use the following year. Winterizing will implement erosion control measures, in conjunction with blocking the road(s) to vehicular use during the wet season, and decommissioned after the following operational season. Semi-permanent roads will be surfaced for all-weather use and decommissioned upon completion of site preparation and reforestation.

Rationale for the Decision:

The Roseburg District *Record of Decision and Resource Management Plan* (ROD/RMP) established an objective for an ASQ of 45 million board feet to be harvested from those lands allocated as Matrix (ROD/RMP, p. 60). Implementation of Alternative Two, the proposed action, is consistent with these assumptions and objectives and would meet the purpose and need identified in the Revised Can-Can Regeneration Harvest Project Plan EA (pp. 1-2), whereas Alternative One, an alternative of no action, would not meet the purpose and need.

Comments on the Revised Can-Can Regeneration Harvest Project Plan EA were received from two individuals and three organizations, expressing both support for and opposition to the timber sales proposed in the Revised Can-Can Regeneration Harvest Project Plan EA. Most comments in opposition to the harvest plan were of a general and philosophical nature, or raised issues that were outside the scope of the EA. Those comments which did address specific aspects of the analysis did not identify any issues or concerns not already considered and addressed in the EA, or provide any new information that would alter the conclusions of the analysis.

Noxious Weeds

Road construction and yarding equipment will be pressure washed or steam cleaned prior to move-in to remove any soil that may be contaminated with vegetative material or seeds, in order to minimize, if not eliminate, the risk of transporting new weed species into the project area.

Botany

Following the implementation of the 2004 *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines*, all vascular and non-vascular botanical Survey & Manage species whose range includes the lands of the Roseburg District were assigned to the BLM Special Status Species Program, and designated as Bureau Sensitive, Bureau Assessment or Bureau Tracking species.

Consistent with the requirements of the BLM Special Status Species Program, clearances and surveys were conducted for all Special Status and Survey & Manage botanical species with a reasonable likelihood of being present in the timber sale area, including those Category B species designated for equivalent-effort surveys (Attachment A). The BLM has fulfilled survey requirements consistent with the direction of the 2001 *Record of Decision For Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, as amended or modified as of March 21, 2004, by Annual Species Reviews.

The only species documented was the Bureau Sensitive wayside aster (*Eucephalis vialis*), located beside BLM Road No. 30-5-15.0 in the SE¼SE¼, Section 10, T. 30 S., R. 5 W. As described in the EA (p. 46), the primary concerns are maintenance of canopy gaps sufficient to allow sunlight to stimulate flowering, and protection of the site from physical disturbance.

These concerns have been addressed by relocating the road, tagging the site boundary for identification purposes, prohibiting ground disturbance within these boundaries, and felling any timber cut in renovation of the road away from the site. The Myrtle Morgan timber sale is not anticipated to contribute to a future need to list any of these species.

As described in the EA (pp. 46-47), surveys for most Survey & Manage fungi species are not considered practical, so their presence cannot be substantiated. If any of these species are present in the proposed regeneration harvest units, loss of the sites would likely result as a consequence of the removal of substrate and modification of micro-climate, as described in the *Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (pp. 150-154). It is anticipated, however, that the network of late-successional forest managed by the BLM within the watershed, much in land use allocations reserved from regeneration harvest, will provide in excess of 31,000 acres of potential habitat for these species.

Wildlife

Special Status Species

The Myrtle Morgan timber sale will remove 229 acres of suitable nesting, roosting and foraging habitat for the Federally-threatened **northern spotted owl**. The timber sale area is located entirely outside of designated critical habitat units. As illustrated in the EA (p. 14), units in the Myrtle Morgan timber sale are located outside or at the extreme periphery of the two northern spotted owl home ranges in proximity to the sale area.

As discussed in the EA (p. 31), because the location of the units is beyond the 65 yard disturbance threshold, now referred to as the "disruption" threshold by the U.S. Fish and Wildlife Service, no disturbance to nesting owls is anticipated. All units are more than a quarter-mile from either known owl activity center so no direct effects during the nesting and post-fledging periods are anticipated from removal or modification of suitable habitat.

The BLM consulted with the U.S. Fish and Wildlife Service (Service) on the effects of timber harvest on the northern spotted owl. The effects of the removal of suitable nesting, roosting and foraging habitat are addressed in the August 29, 2005 *Biological Opinion for fiscal year 2003-2008 Management Activities* (1-15-05-F-0512).

The Service found in the Opinion (p. 78) that conducting surveys and applying seasonal restrictions, where indicated, would minimize the possibility of directly injuring or killing individual owls. Timber harvest would, however, indirectly affect owls ". . . by removing habitat elements necessary for nesting, roosting, foraging, and dispersal." This could result in indirect effects that include: displacement from nest areas; concentration into smaller, fragmented areas

of suitable habitat that may already be occupied; increased competition for nest sites; increased risk to predation; reduced prey base; diminished reproductive success; declines in productivity and recruitment; reduction in future nesting opportunities; and reduced dispersal capabilities.

Based on these factors the Service concluded that regeneration harvest was likely to adversely affect spotted owls. In the Opinion (p. 79), the Service concluded although some sites on the Roseburg District would be rendered non-viable, the effect is not expected to appreciably reduce the likelihood of spotted owl survival and recovery, noting that such declines were anticipated in the Northwest Forest Plan, and that the best available information indicates that there is no reason to believe that the conservation strategy of the Northwest Forest Plan is flawed.

To further minimize the likelihood of take, beginning in fiscal year 2006 the BLM is required to seasonally restrict timber harvest from March 1 to September 30 within one-quarter mile of unsurveyed suitable habitat, known nest sites and known activity centers unless protocol surveys indicate: 1) spotted owls not detected; 2) spotted owls present, but not attempting to nest,; or 3) spotted owls present, but nesting attempt has failed. Waiver of the seasonal restriction would be valid until March 1 of the following year.

A meta-analysis of available demographic data was conducted in 2004 by Anthony et al. that combined population data from 14 study areas located throughout the range of the spotted owl. In 1999, Lint et al. found that owl populations were declining range-wide, particularly in the State of Washington. This information was synthesized with existing literature in *Scientific Evaluation of the Status of the Northern Spotted Owl* in 2004 by Courtney et al. Causes of population decline could not be identified with certainty, but researchers feel that a combination of previous habitat loss, recent loss of habitat to wildfire, predation on spotted owls, weather, prey abundance, and competition from barred owls is responsible. Researchers also noted that the importance of each of these agents likely varies by region.

Spotted owl populations in the Klamath Mountains physiographic province were shown to be stable or declining very slightly. This finding is consistent with the prediction of the Northwest Forest Plan that populations would slowly decline and eventually reach equilibrium with available habitat. Courtney et al. stated that: “the fact of such a decline is not in and of itself unexpected or reason to doubt the effectiveness of the core NWFP strategy.”

As described in Attachment B, the best available information indicates that the Northwest Forest Plan and associated Roseburg District ROD/RMP will continue to provide for survival and recovery of the spotted owl as originally anticipated.

As described in the EA (p. 16), Units F (1) and G (2) constitute suitable habitat for **northern goshawks**. These units were surveyed in the summer of 2005 and determined to be unoccupied, so no direct effects to goshawks are expected.

The **Oregon shoulderband snail** (*Helminthoglypta hertleini*), a Bureau Sensitive species was identified as a potential occupant of the forest stands comprising the timber sale area. As documented in the EA (p. 15), surveys were conducted but no shoulderband snails were located.

Survey & Manage Species

The **Chace sideband snail** (*Monadenia chaceana*), also designated as a Bureau Sensitive species, was identified as a potential occupant of the forest stands comprising the timber sale area. As documented in the EA (p. 15), the results of the surveys were negative.

Suitable habitat for **great gray owls** is characterized by: (1) large diameter nest trees, (2) forest canopy providing roosting cover, and (3) proximity [within 200m] to openings ten acres or larger in size that could be used as foraging areas. Suitable habitat was identified in the timber sale area adjacent to Unit H (#3). Management direction from the ROD/RMP (p. 44) and standards and guidelines from the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (p. C-21) specify establishment of a 300 foot no harvest buffer around meadows and natural openings. Establishment of the buffer resulted in the removal of approximately nine acres from the unit, as described on page 1.

The BLM has fulfilled survey requirements consistent with the direction of the 2001 *Record of Decision For Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, as amended or modified through March 21, 2004.

Other Wildlife

As described in the EA (p. 16), in the summer of 2004 a pair of adult **red-tailed hawks** and a fledged juvenile were observed on a nest tree near the bottom of Unit 1 (F) in the southeast corner of the unit. In order to maintain the viability of the site, a buffer approximately five acres in size was established around the nest tree. Seasonal restrictions will be applied that prohibit operations between March 1 and July 15. These restrictions may be lifted after June 15 if surveys indicate that the hawks have not successfully nested.

Fish and Essential Fish Habitat

There are no fish species listed as threatened or endangered or currently proposed for listing under the Endangered Species Act. Oregon Coast coho salmon and Oregon Coast steelhead trout remain Bureau Sensitive species, though. With the establishment of Riparian Reserves on all intermittent and perennial streams adjacent to or within proposed timber sale units, there will be no effect on large in-stream wood, pool habitat, sediment, substrate and stream bank stability (EA, pp. 37 - 39). As a consequence, timber harvest has no measurable potential for directly affecting any fish species or Essential Fish Habitat.

Sediment could be generated in association with road construction and renovation, timber hauling, and road decommissioning. To a great extent haul routes do not cross fish-bearing streams or other perennial streams where sedimentation could be expected. Where the haul route is in close proximity to perennial and fish-bearing streams, haul will be restricted to the dry season to effectively eliminate the possibility of introducing sediment into streams. Road renovation will focus on reducing potential sources for sediment.

With implementation of measures described in the EA (pp. 38, 39, 44 and 45), the potential for sediment and effects to fish and Essential Fish Habitat is considered negligible. In a letter dated October 6, 2005, the National Marine Fisheries Service concurred with these findings.

Monitoring:

Monitoring will be done in accordance with provisions in Appendix I of the ROD/RMP (p. 84, 190, 193, & 195-199). Monitoring efforts would include the following resources: Riparian Reserves; Matrix; Water and Soils; Wildlife Habitat; and Special Status and SEIS Special Species Habitat.

Protest Procedures:

As outlined in 43 CFR § 5003 Administrative Remedies at § 5003.3 (a) and (b), protests may be made within 15 days of the first publication date of the timber sale notice. Publication of such notice on May, 30, 2006, in *The News-Review*, Roseburg, Oregon, constitutes the decision date from which such protests may be filed.

43 CFR 5003.3 subsection (b) states that: "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 or facsimile protests. Only written and signed hard copies of protests that are delivered to the Roseburg District Office will be accepted.

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William Haigh Date
Field Manager
South River Field Office

2001 ROD Compliance: Survey & Manage Botany Species (vers. 04-11-2006)

Project Name: Myrtle Morgan Timber Sale
Project Type: Regeneration Harvest
Location: T30S,R4W, sec 5 and T30S,R5W,sec 9,10,11,15

Prepared By: Gary Basham
Date: May, 2004
S&M List Date: Dec. 29, 2003

The list of species below was compiled from the 2003 Annual Species Review (IM-OR-2004-034) and the 2006 list of species requiring equivalent-effort surveys (IM OR-2006-038). It includes those species whose known or suspected range includes the Roseburg District according to: *Protection Buffer Bryophytes* v2.0 (1999), *Survey and Manage Survey Protocol-Lichens* v2.1 Amendment (2003), *Survey Protocols for Survey & Manage Strategy 2 Vascular Plants* v2.0 (1998), *Survey Protocols for Bridgeoporus nobilissimus* v2.0 (1998), and *Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines* (2006).

Species	S&M Category	Survey Triggers			Survey Results			Site Management
		Within Range of the Species?	Project Contains Suitable habitat?	Project may negatively affect species/habitat?	Surveys Required?	Survey Date (month/year)	Sites Known or Found?	
Fungi								
Bridgeoporus nobilissimus	A	Yes	No[1]	No	No	N/A	No	No
Lichens								
Bryoria pseudocapillaris	A	No[2]	No	No	No	N/A	No	No
Bryoria spiralifera	A	No[2]	No	No	No	N/A	No	No
Bryoria subcana	B	Yes	No[3]	No	No	N/A	N/A	No
Hypogymnia duplicata	C	Yes	Yes	Yes	Yes	5/2004	No	No
Leptogium cyanescens	A	Yes	Yes	Yes	Yes	5/2004	No	No
Lobaria linita	A	Yes	Yes	Yes	Yes	5/2004	No	No
Nephroma occultum	A	Yes	Yes	Yes	Yes	5/2004	No	No
Niebla cephalota	A	No[2]	No	No	No	N/A	No	No
Pseudocyphellaria perpetua	A	No[2]	No	No	No	N/A	No	No
Pseudocyphellaria rainierensis	A	Yes	Yes	Yes	Yes	5/2004	No	No
Teloschistes flavicans	A	No[2]	No	No	No	N/A	No	No
Tholurna dissimilis	B	No[5]	No	No	No	N/A	No	No
Bryophytes								
Kurzia makinoana	B	No[6]	No	No	No	N/A	No	No
Marsupella emarginata var. aquatica	B	No[7]	No	No	No	N/A	No	No
Orthodontium gracile	B	No[8]	No	No	No	N/A	No	No
Schistostega pennata	A	Yes	Yes	Yes	Yes	5/2004	No	No
Tetraphis geniculata	A	Yes	Yes	Yes	Yes	5/2004	No	No
Tritomaria exsectiformis	B	Yes	No[11]	No	NO	N/A	No	No
Vascular Plants								
Botrychium minganense	A	Yes	No[12]	No	No	N/A	N/A	NO
Botrychium montanum	A	No[12]	No	No	No	N/A	No	No
Coptis asplenifolia	A	No[12]	No	No	No	N/A	No	No
Coptis trifolia	A	No[12]	No	No	No	N/A	No	No
Corydalis aquae-gelidae	A	No[12]	No	No	No	N/A	No	No
Cypripedium fasciculatum	C	Yes	Yes	Yes	Yes	5/2004	No	No
Cypripedium montanum	C	Yes	Yes	Yes	Yes	5/2004	No	No
Eucephalis vialis	A	Yes	Yes	Yes	Yes	5/2004	Yes	Yes
Galium kamtschaticum	A	No[13]	No	No	No	N/A	No	No
Plantanthera orbiculata var. orbiculata	C	No[13]	No	No	No	N/A	No	No

[1] This species is associated with a host species which is absent from the project area (Survey Protocols, Version 2.0, T.E. O'Dell *et al.*, May 1998).

[2] Known sites of the species only occur in coastal habitat (Survey Protocols for Category A and C Lichens, Version 2.0, C. Derr *et al.*, Sept. 2002).

[3] This species occurs within 80 miles of the coast in the 200 cm precipitation zone with greater than 170 days of measurable precipitation (Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[4] This species is associated with old growth forests (Macrolichens of the Pacific Northwest, B. McCune, L. Geiser, OSU Press, 1997; Management Recommendations for Survey and Manage Lichens, Version 2.0, C. Derr *et al.*, March 2000).

[5] Species is mostly known from north of Oregon with only three sites in Oregon. The southern-most sites are at Iron Mtn. and Carpenter Mtn. (both with elevations greater than 5000 feet) on the Willamette National Forest. These sites are noted for their stunted condition which suggests they are near the southern-most extent of the species' range (Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[6] Known sites of the species only occur in coastal habitat within 25 miles of the coast (Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[7] Species known from only two sites in the western U.S. on submerged rocks in cold, perennial streams: on Willamette National Forest and on the Mt. Baker-Snoqualmie National Forest (Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[8] Known in the Pacific Northwest only from the coast redwood area of northern California and southwestern Oregon (Koch 1951, 1952; Lawton 1971, as cited in Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[9] Known sites of this species occur on mineral soil in dark, wet microsites in old growth forests ranging in elevation from 1500 to 5000 feet (Survey Protocols for Protection Buffer Bryophytes, Version 2.0, J. Christy *et al.*, December 1999).

[10] This species is associated with large diameter coarse woody debris, decay class 3 or greater (Survey Protocols for Protection Buffer Bryophytes, Version 2.0, J. Christy *et al.*, December 1999).

[11] This species occurs in direct contact with water in low-volume, very cold, perennial streams within an elevational range of 3200-5200 feet. It is usually associated with lodgepole pine and other high elevation tree species (Survey Protocol Guidance for Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines, USDA Forest Service regions 5 and 6, USDI Bureau of Land Management, Oregon and California, March 2006).

[12] This species is associated with perennially moist areas along streams, and wet shaded meadow edges in mature to old growth forests (Survey Protocols for Survey and Manage Strategy 2 Vascular Plants, Version 2.0, L. Whiteaker *et al.*, December 1998).

[13] Douglas County is outside of the known range for this species (Survey Protocols for Survey and Manage Strategy 2 Vascular Plants, Version 2.0, L. Whiteaker *et al.*, December 1998; www.oregonflora.org/oregonplantatlas.html).

File Code 1730/6840A

Evaluation of the Roseburg District Resource Management Plan Relative to Four Northern Spotted Owl Reports

September 12, 2005

I. Introduction

The Roseburg District Record of Decision (ROD) and Resource Management Plan (RMP), June 1995, incorporates and adopts the Northwest Forest Plan ROD (April 1994) based on the Interagency (BLM and Forest Service) Final Supplemental Environmental Impact Statement (February 1994) and the Roseburg District Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/EIS)(October 1994).

The overall objectives of the Northwest Forest Plan (NFP) and the Roseburg District RMP/ROD are to manage for healthy forest ecosystems with habitat that will support populations of native species, particularly those associated with late-successional habitat, and respond to the need for a sustainable supply of timber and other forest products. In addition, these plans are based on the principles of adaptive management. Adaptive management is a continuing process of monitoring, research, evaluation and adjusting, as determined necessary, with the objectives of improving the implementation and achieving the goals of the RMP/ROD. Under the concepts of adaptive management new information is evaluated and a decision is made to determine if adjustments or changes are deemed necessary (Roseburg RMP/ROD, June 1995).

The Bureau of Land Management (BLM), Forest Service (FS), and US Fish and Wildlife Service (USFWS) have conducted a coordinated review of four recently completed reports containing information on the NSO. The reviewed reports (hereinafter collectively referred to as "the reports") include the following:

- *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney et al. 2004);
- *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony et al. 2004);
- *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and
- *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).

The interagency review and summary of the findings from those reports is described below.

The BLM planning regulations require that , "The District Manager shall be responsible for monitoring and evaluating the plan at "established intervals . . . and at other times as appropriate to determine whether there is sufficient cause to warrant amendment or revision of the plan" (see 43 CFR 1610.4-9).

As a key element of the Northwest Forest Plan monitoring strategy, completion of the NSO status and trend portion of *The First Ten Years* monitoring report, as well as the other timely studies pertinent to the NSO, is considered appropriate to warrant this focused evaluation. The monitoring report and this evaluation carry out the process of monitoring (ROD/RMP pp. 84-86 and adaptive management (ROD/RMP pp. 79-80) envisioned by the Northwest Forest Plan (NWFP), as adopted and implemented through the Roseburg District RMP.

Following is the interagency review and summary of key findings from the four reports regarding the NSO. This summary has been reviewed by report authors Dr. Steven P. Courtney and Dr. Robert G. Anthony to ensure that it accurately reflects their findings. In addition, agency representatives Terry Rabot and Joseph Lint reviewed the document to verify that the USFWS five-year review and the ten-year NSO status and trend report, respectively, were appropriately incorporated.

II. Review and Summary of Key Findings Regarding the Northern Spotted Owl

The most important conservation concerns addressed in the reports are: 1) the precipitous NSO population declines in Washington, and declining trends in the three northern Oregon demographic areas, as described by Anthony et al. (2004); and 2) the three major current threats identified by Courtney et al. (2004), i.e., lag effects from prior harvest of suitable habitat, habitat loss due to wildfire in portions of the range, and competition from barred owls.

Anthony et al. (2004) indicated that NSO populations were doing poorest in Washington, with precipitous declines on all four study areas. The number of populations that declined, and the rate at which they declined, were noteworthy (Anthony et al. 2004). In northern Oregon, NSO population declines were noted in all three study areas. The declines in northern Oregon were less than those in Washington, except in the Warm Springs study area, where the decline was comparable to those in Washington (Anthony et al. 2004). The NSO has continued to decline in the northern portion of its range, despite the presence of a high proportion of protected habitat on federal lands in that area. Although Courtney et al. (2004) indicated that population declines of the NSO over the past 14 years were expected, they concluded that the accelerating downward trends on some study areas in Washington where little timber harvest was taking place suggest that something other than timber harvest is responsible for the decline. Anthony et al. (2004) stated that determining the cause of this decline was beyond the scope of their study, and that they could only speculate among the numerous possibilities, including competition from barred owls, loss of habitat from wildfire, timber harvest including lag effects from prior harvest, poor weather conditions, and defoliation from insect infestations. Considering the fact that the NSO is a predator species, Anthony et al. (2004) also noted the complexities of relationships of prey abundance on predator populations, and identified declines in prey abundance as another possible reason for declines in apparent survival of NSO.

In southern Oregon and northern California, NSO populations were more stationary than in Washington (Anthony et al. 2004). The fact that NSO populations in some portions of the range were stationary was not expected within the first ten years, given the general prediction of continued declines in the population over the first several decades of NWFP implementation (Lint 2005). The cause of the better demographic performance on the southern Oregon and

northern California study areas, and the cause of greater than expected declines on the Washington study areas are both unknown (Anthony et al. 2004). Courtney et al. (2004) noted that a rangewide population decline was not unexpected during the first decade, nor was it a reason to doubt the effectiveness of the core NWFP conservation strategy.

Lint (2005) indicated that loss of NSO habitat did not exceed the rate expected under the NWFP, and that habitat conditions are no worse, and perhaps better than expected. In particular, the percent of existing NSO habitat removed by harvest during the first decade was less than expected. Courtney et al. (2004) indicated that models of habitat growth suggest that there is significant ingrowth and development of habitat throughout the federal landscape. Courtney et al. (2004) also noted that management of matrix habitat has had a lower impact on NSO populations than predicted. Owls are breeding in substantial numbers in some matrix areas. The riparian reserve strategy and other habitat management guidelines for the matrix area appear to preserve more, better, and better-distributed dispersal habitat than earlier strategies, and there is no evidence to suggest that dispersal habitat is currently limiting to the species in general (Courtney et al. 2004). Anthony et al. (2004) noted declining NSO populations on some study areas with little harvest, and stationary populations on other areas with consistent harvest of mature forest. No simple correlation was found between population declines and timber harvest patterns (Courtney et al. 2004). Because it was not clear if additional protection of NSO habitat would reverse the population trends, and because the results of their study did not identify the causes of those trends, Anthony et al. (2004) declined to make any recommendations to alter the current NWFP management strategy.

Reductions of NSO habitat on federal lands are lower than those originally anticipated by the Service and the NWFP (Courtney et al. 2004). The threat posed by current and ongoing timber harvest on federal lands has been greatly reduced since 1990, primarily because of the NWFP (Courtney et al. 2004). The effects of past habitat loss due to timber harvest may persist due to time-lag effects. Although noting that it is probably having a reduced effect now as compared to 1990, Courtney et al. (2004) identified past habitat loss due to timber harvest as a current threat. The primary current source of habitat loss is catastrophic wildfire (Courtney et al. 2004). Although the total amount of habitat affected by wildfires has been small, there is concern for potential losses associated with uncharacteristic wildfire in a portion of the species range. Lint (2005) indicated that the NWFP recognized wildfire as an inherent part of managing NSO habitat in certain portions of the range. Courtney et al. (2004) stated that the risk to NSO habitat due to uncharacteristic stand replacement fires is sub-regional, confined to the dry eastern and to a lesser extent the southern fringes of the NSO range. Wildfires accounted for 75 percent of the natural disturbance loss of habitat estimated for the first decade of NWFP implementation (Courtney et al. 2004). Lint (2005) cautioned against relying solely on the repetitive design of the conservation strategy to mitigate effects of catastrophic wildfire events, and highlighted the potential to influence fire and fire effects through active management.

Anthony et al. (2004) indicated that there is some evidence that barred owls may have had a negative effect on NSO survival in the northern portion of the NSO range. They found little evidence for such effects in Oregon or California. The threat from barred owl competition has not yet been studied to determine whether it is a cause or a symptom of NSO population declines, and the reports indicate a need to examine threats from barred owl competition.

The synergistic effects of past threats and new threats are unknown. Though the science behind the NWFP appears valid, new threats from barred owls, and potential threats[1] from West Nile virus and Sudden Oak Death may result in NSO populations in reserves falling to lower levels (and at a faster rate) than originally anticipated. If they occur, such declines could affect NSO recovery (Courtney et al. 2004). According to Courtney et al. (2004), there exists a potential for habitat loss due to Sudden Oak Death in the southern portion of the range, however the threat is of uncertain proportions. In addition, Courtney et al. (2004) indicated there is no way to predict the impact of West Nile virus, which is also identified as a potential threat. The reports do not provide supporting analysis or recommendations regarding how to deal with these potential threats. Courtney et al. (2004) concluded that the risks currently faced by the NSO are significant, and their qualitative evaluation is that the risks are comparable in magnitude to those faced by the species in 1990.

According to the USFWS (November 2004), the current scientific information, including information showing declines in Washington, northern Oregon, and Canada, indicates that the NSO continues to meet the definition of a threatened species. Populations are still relatively numerous over most of the species' historic range, which suggests that the threat of extinction is not imminent, and that the subspecies is not endangered even in the northern part of its range where greater than expected population declines were documented (USFWS, November 2004). The USFWS (November 2004) did not consider the increased risk to NSO populations due to the uncertainties surrounding barred owls and other factors sufficient to reclassify the species to endangered at this time.

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. The status of the NSO population, and increased risk to NSO populations due to uncertainties surrounding barred owls and other factors, were reported as not sufficient to reclassify the species to endangered at this time. The reports did not include recommendations regarding potential changes to the basic conservation strategy underlying the NWFP, however they did identify opportunities for further study.

The full reports are accessible on the internet at the following addresses:

- Courtney et al. 2004:
  http://www.sei.org/owl/finalreport/finalreport.htm
- Anthony et al. 2004:
  http://www.reo.gov/monitoring/trends/Compiled%20Report%20091404.pdf

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[1] Courtney et al. (2004) distinguish between operational threats (perceived as currently negatively influencing the status of the NSO) and potential threats (factors that could become operational threats in 15-20 years, or factors that may be threatening the NSO currently and for which the extent of the threat is uncertain).

- USFWS, November 2004: http://www.fws.gov/pacific/ecoservices/endangered/recovery/5yearcomplete.html
- Lint, Technical Coordinator, 2005: http://www.reo.gov/monitoring/10yr-report/northern-spotted-owl/documents/owl_text%20and%20tables.pdf

III. Comparative Evaluation of the Roseburg District Resource Management Plan with the Four, Previously Referenced, Reports on the Northern Spotted Owl.

Following are excerpts from the Roseburg District RMP, the supporting Roseburg District Proposed Resource Management Plan/Environmental Impact Statement (PRMP/EIS) and the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (FSEIS). These excerpts form the basis for short discussions of consistency of the report findings with effects described for the NSO in the PRMP/EIS and FSEIS, and the ability to meet RMP goals and objectives.

The Roseburg District PRMP/EIS summarizes discussions from the FSEIS regarding NSO populations. "The overall results [declining populations across much of their range] of the demographic analysis were not surprising since the data was gathered during a time of habitat decline that was of sufficient concern to serve as the primary reason for listing of the owl as a threatened species" and "the result that should be of most concern is the declining rate of adult survival". "While there is strong reason to believe that the owl populations have declined across much of their range there is ample reason to believe that the pattern of population change is not the same everywhere" and "It is unlikely that a single factor, with the exception of habitat loss, is primarily responsible for the declines in owl populations across its range" (PRMP/EIS pp. 4-63 – 4-64). Also as stated in the FSEIS under the strategies proposed, both the Interagency Scientific Committee (Thomas et al 1990) and the Northern Spotted Owl Recovery Team (USDI 1992) projected that owl habitat and owls would continue to decline for up to 50 years before reaching a new equilibrium.

The continuing decline in NSO populations was anticipated and is consistent with the analysis in the Roseburg PRMP/EIS and Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (FSEIS) (USDA; USDI, 1994a). The Roseburg PRMP/EIS incorporated by reference (PRMP/EIS 4-54, 4-63) the discussion and conclusions of the FSEIS relating to the analysis of the spotted owl population trends (FSEIS Chapter 3&4, pages 3&4-212 to 245 and Appendix J3). The discussion and conclusions in the FSEIS and the Roseburg PRMP/EIS anticipate that NSO populations had declined throughout much of their range and would continue to decline for the first few decades of the NFP implementation. It also concluded that the effects or rate of decline from implementation would not be the same everywhere across the range and for all habitat types. These conclusions are consistent with the information in Section II of this evaluation in that the reports did not find a direct correlation between habitat conditions and changes in NSO populations and were also inconclusive as to the cause of the population declines.

Lint (2005) indicated that the NWFP recognized wildfire as an inherent part of managing NSO habitat in certain portions of the range. Courtney et al. (2001) also added "The Forest Plan acknowledges the potential for the loss of owls and habitat from catastrophic events such as wildfire, particularly in the East Cascade Provinces and the Klamath Province." (pp 6_25) Even though stand replacing wildfire is identified as a continuing threat to NSO suitable habitat in the reports, it is not considered a widespread threat throughout the range of the NSO. Stand replacing wildfire did have some local negative effects, but these were most notable in the Klamath Provinces in northern California and southern Oregon.

The threat from barred owls competition was not considered specifically in the Roseburg PRMP/EIS or the FSEIS although it did consider other factors outside of habitat loss. It was a concern that other factors may be responsible for population decline outside of those that could be managed under land management practices. "… it is unlikely that a single factor, with the exception of habitat loss, is primarily responsible for the declines in [Northern spotted] owl populations across the range" (PRMP/EIS 4-64). Anthony et al indicated that there is some evidence that barred owls may have had a negative effect on NSO survival in the northern portion of the range. They have found little evidence for such effects in Oregon and California. The threat from barred owl competition has not yet been studied to determine whether it is a cause or a symptom of NSO declines, and the reports indicate a need to examine these threats from barred owl competition.

IV. Conclusions/Findings

Based on the above evaluation of pertinent elements of the Roseburg District ROD/RMP and its associated PRMP/EIS, I find that effects on NSO populations identified in the four reports are within those anticipated in the PRMP/EIS, and that the RMP goals and objectives are still achievable in light of the information from the reports As such, I find that the latest information on the NSO does not warrant a change in RMP decisions pertinent to the NSO, and therefore does not warrant amendment or revision of the Roseburg District RMP. I also find that the underlying analysis in the EIS remains adequate for purposes of tiering NEPA analyses of NSO effects from proposed actions implementing the RMP.

Jay K. Carlson
District Manager, Roseburg District

9/14/05
Date

References

USDA; USDI, 1994a. U.S. Department of Agriculture, Forest Service; U.S. Department of Interior, Bureau of Land Management, February 1994. Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.

USDA; USDI, 1994b. U.S. Department of Agriculture, Forest Service; U.S. Department of Interior, Bureau of Land Management, April 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.

MYRTLE MORGAN

Regeneration Harvest

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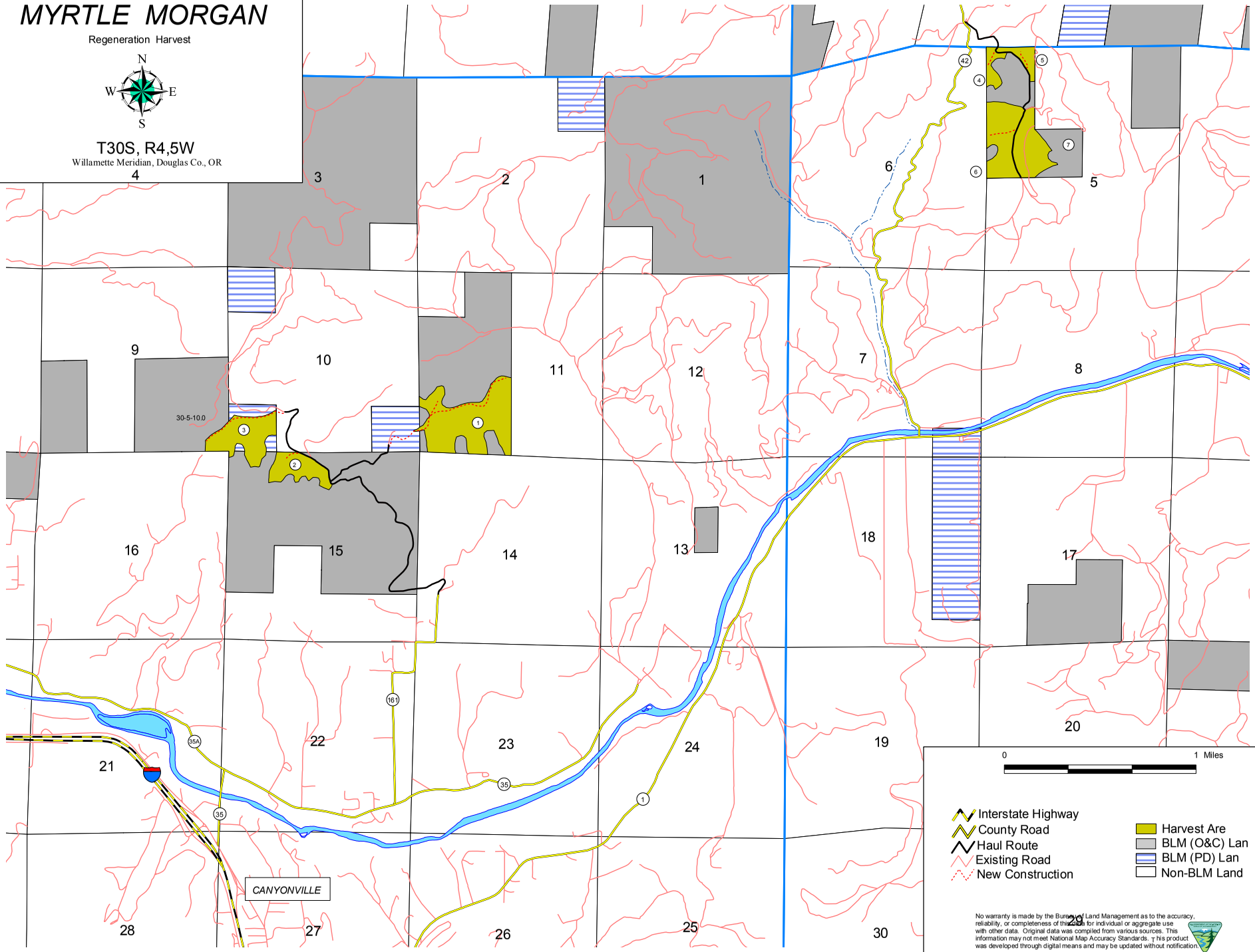
T30S, R4,5W

Willamette Meridian, Douglas Co., OR



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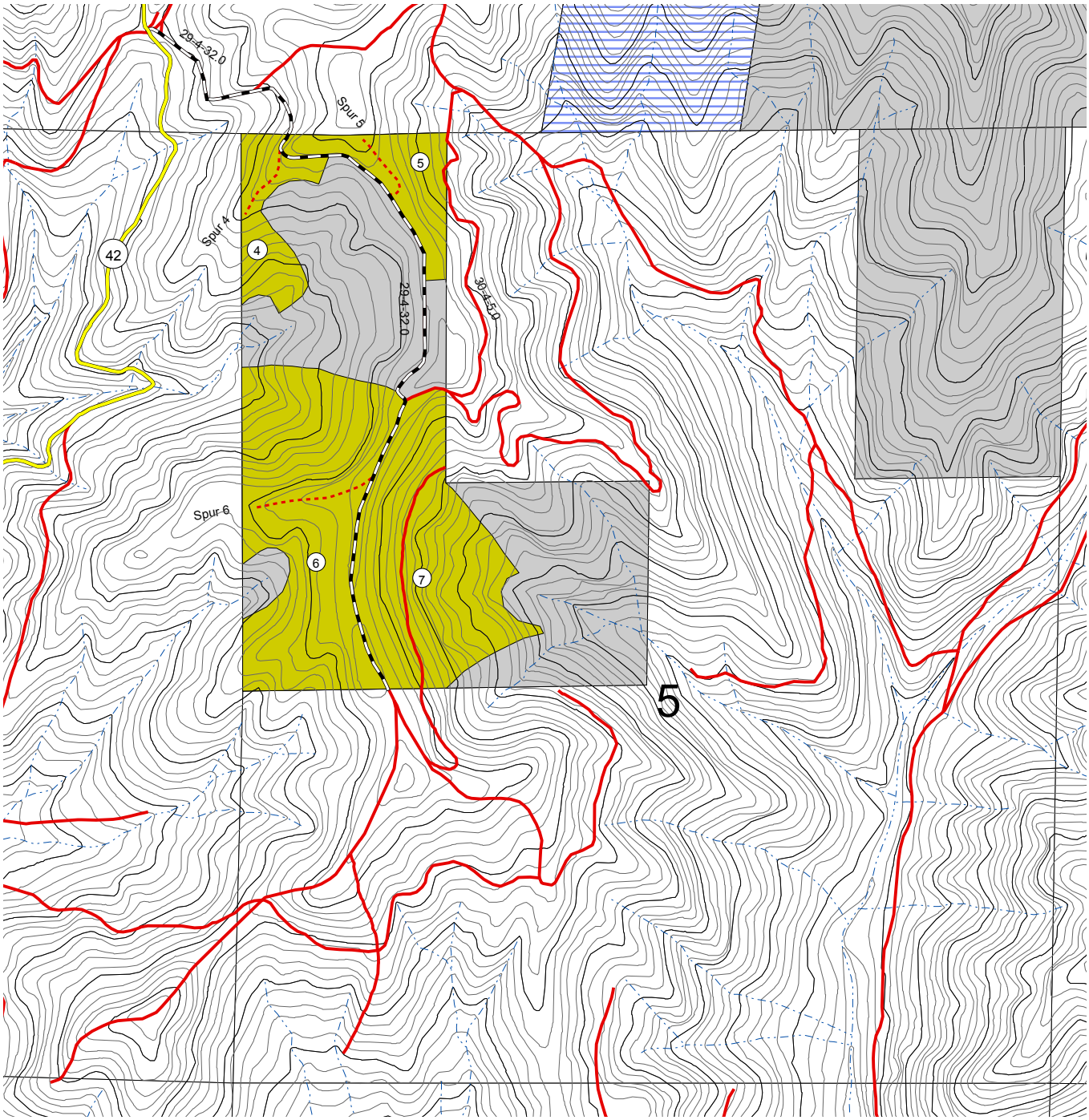
Regeneration Harvest



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Willamette Meridian, Douglas Co., OR.

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County Road
Existing Road
Construct, Decommission
Renovate, Permanent Rock
Stream
100' Contour
20' Contour

Harvest Area
BLM (PD) Land
BLM (O&C) Land
Non-BLM Land

11-29-2005

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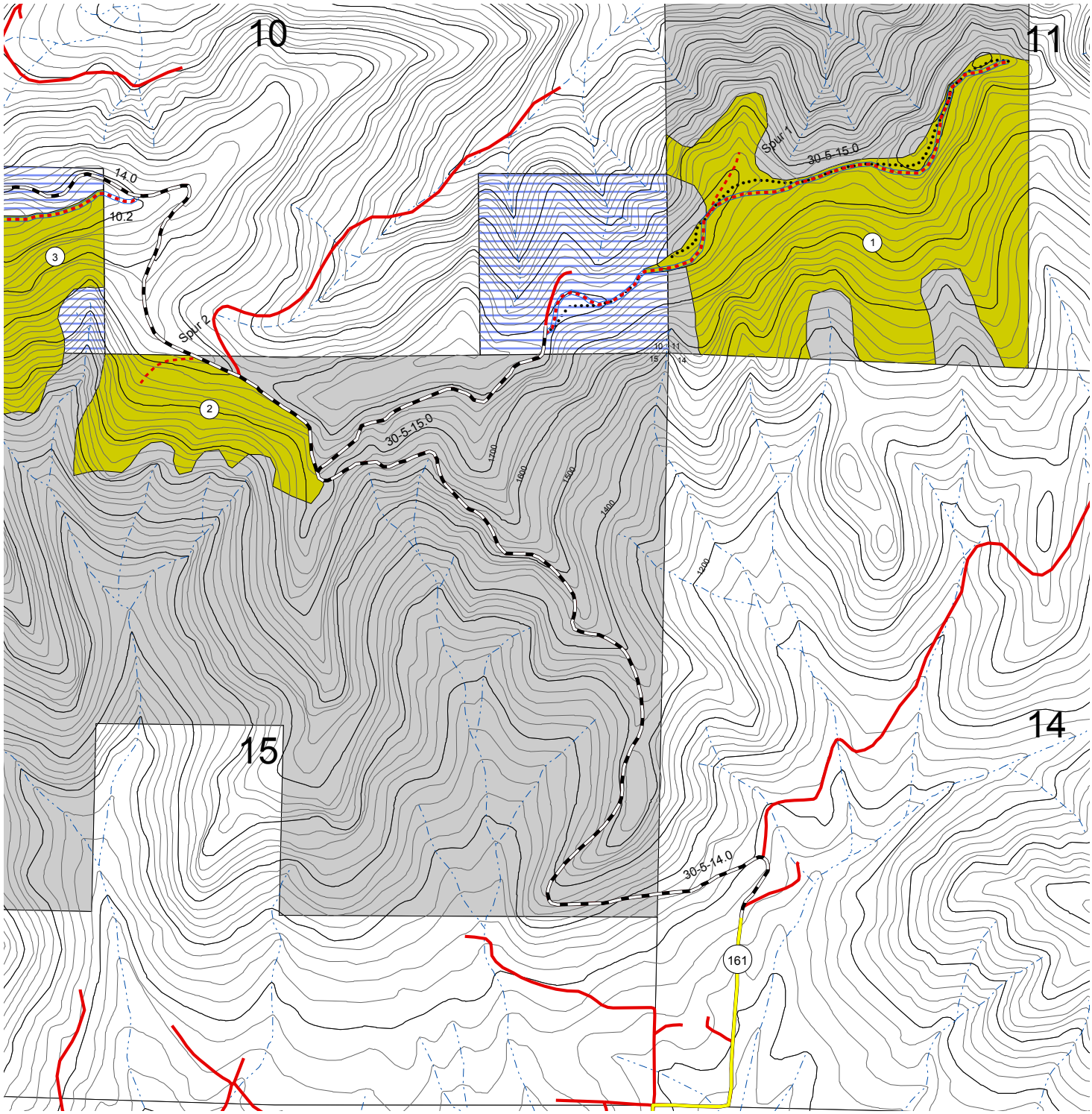
Regeneration Harvest



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T30S R5W

Willamette Meridian, Douglas Co., OR.

0 1,000 Feet

Jeep Road
County Road
Existing Road
Construct, Permanent Rock
Construct, Decommission
Renovate, Permanent Rock
Stream
100' Contour
20' Contour

Harvest Area
BLM (PD) Land
BLM (O&C) Land
Non-BLM Land

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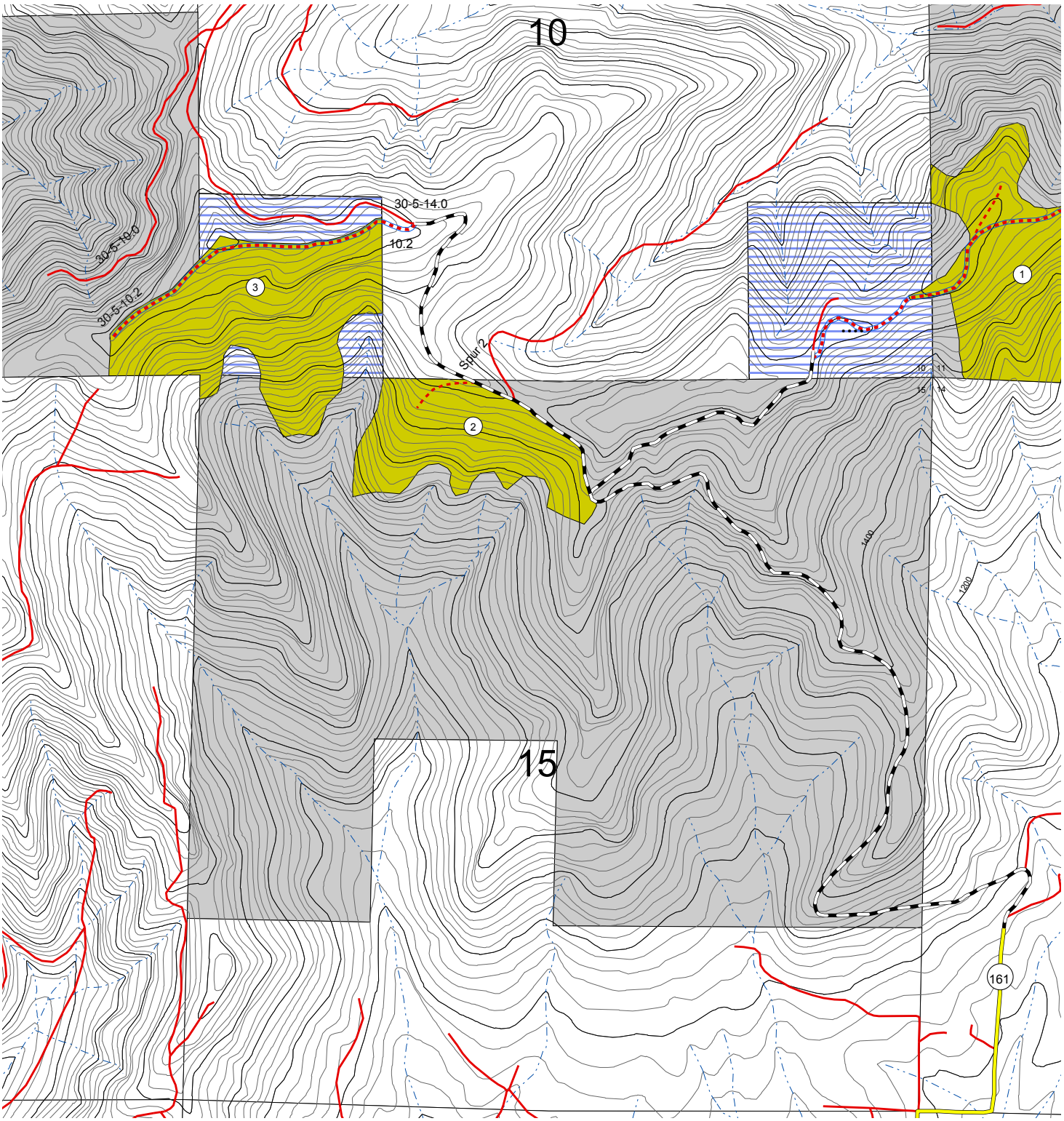
11-29-2005

MYRTLE MORGAN

Regeneration Harvest



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Willamette Meridian, Douglas Co., OR.

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3-1-2006