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Point A Panther

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

ENVIRONMENTAL ASSESSMENT NO. OR090-98-37
Point A Panther Timber Sale

I. INTRODUCTION

A. PURPOSE AND NEED FOR THE ACTION

This action proposes timber harvest and other forest management activities within a 300-acre project area located in Section 13, Township 19 South, Range 6 West, Willamette Meridian, Lane County, Oregon, in the South Valley Resource Area of the Eugene District of the Bureau of Land Management (BLM).

The project area is in the Matrix Land Use Allocation and has management objectives for General Forest Management Activities (GFMA) and Riparian Reserves.

The purpose of the Proposed Action within GFMA is to provide forest products while maintaining forest health and productivity. The need for the action is established in the "Eugene District Record of Decision and Resource Management Plan," June 1995 (RMP), which directs that timber be harvested from Matrix lands in a sustained yield manner.

The purpose of the Proposed Action within the Riparian Reserves is to provide in-stream structure to create or enhance fish habitat within two stream channels currently deficient in large woody debris, and to rehabilitate two stream crossings. The need for the action is established in the RMP, which directs that management practices be implemented within Riparian Reserves to restore and enhance fish habitat and stream channel integrity in a manner that contributes to the attainment of Aquatic Conservation Strategy (ASC) objectives.

B. CONFORMANCE WITH LAND USE PLAN

The Proposed Action and alternatives are in conformance with the RMP. The RMP makes land use allocations and allows for regeneration harvests in the GFMA land use allocation and silvicultural practices within Riparian Reserves.

On November 4, 1996, "Interim Guidance for Survey and Manage Component 2 Species: Red Tree Vole" was issued to implement component 2 of the Survey and Manage Standard and Guideline under the Northwest Forest Plan Record of Decision (BLM Instruction Memorandum No. OR-97-009). This memorandum contained both the management recommendations (interim guidance) and the survey protocol for the red tree vole. Instruction Memorandum No. OR-98-105 extended the interim guidance through FY99 or until superseded by revised direction. The Proposed Action and alternatives are in conformance with this guidance.

Plan maintenance documentation postponing surveys for 32 Component 2 and Protection Buffer species was recently completed ("Plan Maintenance Documentation, USDI Bureau of Land Management, To Change the Implementation Schedule for Survey and Manage and Protection

Buffer Species,” approved March 3, 1999). The Proposed Action and alternatives are in conformance with the direction provided in the Plan Maintenance Documentation. The implementation of the plan maintenance is provided for by BLM planning regulations (43 CFR 1610.5-4).

The effect of the plan maintenance action was analyzed in an environmental assessment (EA), “To Change the Implementation Schedule for Survey and Manage and Protection Buffer Species,” issued October 7, 1998 (“Schedule Change EA”). The analysis contained in the Schedule Change EA is incorporated into this document by reference.

Additional site-specific information is available in the Point A Panther Timber Sale project analysis file. This file and the above referenced documents are available for review at the Eugene District Office. The Schedule Change EA and the Plan Maintenance Documentation are also available for review on the internet at <http://www.or.blm.gov/nwfp.htm>.

II. PROPOSED ACTION AND ALTERNATIVES

A. PROPOSED ACTION - Regeneration Harvest

This regeneration harvest alternative is designed to provide forest products and regenerate the stand. Approximately 3.3 million board feet (MMBF) or 5,900 hundred cubic feet (CCF) of timber from approximately 106 acres would be offered for sale (see map).

Silviculture

C All trees not specifically identified for retention would be cut.

C Site preparation would include excavator and hand piling. Ten percent of the machine piles would be reserved for wildlife and all remaining piles burned after the onset of fall rains.

Excavator piling would be restricted to relatively dry soil conditions and slopes 40% or less, and considerable surface slash and duff would be retained.

C Harvested areas would be planted at a density of approximately 400 trees per acre (TPA).

Seedlings would be predominately Douglas-fir from the District Tree Improvement Program, if available, with western red cedar comprising up to 10 percent of the trees planted. Planted seedlings would be netted to reduce deer browse.

Retention

C Green conifer trees would be retained at an average density of 6-8 TPA. Trees would be clumped around some features (remnant seed trees and Spring 18), and the remainder dispersed throughout the harvest area.

C Decay class 3, 4 and 5 downed logs would be retained where possible. In addition, 240 linear feet per acre of logs at least 20 inches in diameter and 20 feet in length would be recruited as Coarse Woody Debris (CWD) from trees felled during harvest operations.

C All existing snags and hardwoods would be retained; those that pose a safety hazard to woods workers would be felled and retained for CWD. Two to three additional green conifer trees with minimum diameters of 20 inches DBH would be retained per acre to provide for future snags.

- If found, nest trees would be retained where possible.

Reserves

C The height of one site-potential tree in the Wolf Creek Watershed has been determined to be 200 feet slope distance. Riparian Reserves (widths of 200 feet on either side of non-fish bearing streams and 400 feet on either side of the stream of fishbearing streams) would be

established in accordance with the standards and guidelines in the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (NSO ROD) (Appendix C, pp. 31-38). Management treatments within the Riparian Reserves would include road construction, road decommissioning, stream channel enhancement, and stream rehabilitation.

- C Five *Prophysaon coeruleum* sites, four *Megomphix hemphilli* sites, and one site containing both species of mollusks would be protected consistent with the Eugene District Interim Management Guideline For Three Survey and Manage Mollusks (October 1998). These interim recommendations are included in the project analysis files and are incorporated herein by reference. One site in the proposed harvest area would receive a 0.75 acre buffer, three sites would be protected by clumps of 15 to 25 retention trees, and six sites would be incorporated into the Reserve Area.
- C One *Helvella compressa* site and one *Ulota megolaspora* site would be incorporated into the Reserve Area.

Roads and Yarding

- C Approximately 1,040 feet of road would be constructed on privately-owned land, and 7,945 feet of road would be constructed on land managed by BLM. Roads would be temporary, natural surfaced, built to minimum widths (14 foot subgrade), with reduced clearing limits, no ditches and outsloped where possible. Rocking of these temporary roads would not be allowed. Existing Road No. 19-5-18.9 would be renovated; approximately 704 feet of the renovation would be on privately-owned land and approximately 363 feet would be on BLM-managed land. Two additional cross drain culverts would be installed on existing Road No. 19-6-13.
- C Approximately 150 feet of Spur F would be located within the Riparian Reserve for Stream 3.
- C Roads would be waterbarred and blocked at the end of each operating season. Upon project completion, all newly constructed roads and landings would be subsoiled (i.e., mechanically breaking up the compacted area of the road) and blocked.
 - Operations in the harvest area accessed by Spur G and Road No. 19-5-18.9 would be limited to one season. Subsoiling and blocking of Spur G would occur in the same season following completion of operations.
- C Yarding would be by cable and tractor. The Purchaser would have the option of using ground-based equipment on approximately 19 acres. Best Management Practices (BMP's) for cable and tractor yarding would be followed, including one end suspension, predesignating skid trails, and limiting tractor yarding to dry seasons and slopes less than 35% (ROD/RMP Appendix C). Upon completion of logging, skid trails would be subsoiled and waterbarred.
- C Falling or yarding would not be permitted in adjacent Reserve Areas or Mollusk Buffers. Falling and yarding would be required in the Riparian Reserves for the construction of Spur F, renovation of Road No. 19-5-18.9, and the Stream Channel Enhancement project.

Stream Channel Enhancement

- C To provide in-stream structure to tributaries which are currently deficient in large woody debris, approximately 150 trees from one mile of the Riparian Reserve would be felled and bucked into Wolf Creek. In Stream 6, approximately 30 trees from approximately 2,000 feet of the Riparian Reserve would be felled into the stream and possibly bucked. Existing suspended windthrow would be bucked to fall into its stream channel. Three to six trees each would be felled into Streams 1 and 14. The work would be accomplished via a contract separate from any timber sale contract.

Road No. 19-5-18.9 Decommissioning and Stream Rehabilitation

- Existing Road No. 19-5-18.9 would be fully decommissioned to the south property line at Section 24 by removing one cross drain, two culverts at Streams 1 and 14, and subsoiling. Decommissioning would occur in the same season following completion of operations. Channels and sideslopes of Streams 1 and 14 would be rehabilitated. The subsoiled road surface and rehabilitated sideslopes would be planted with conifers.

B. ALTERNATIVE A - Commercial Thinning

This is a commercial thinning alternative designed to maximize Douglas-fir timber production over the life of the stand. Approximately 1.11 MMBF or 1,900 hundred cubic feet (CCF) of timber on approximately 106 acres would be offered for sale.

Silviculture

C No Site Preparation would be needed.

C No planting would be required.

C All other Silviculture features would be the same as the Proposed Action.

Retention

C The stand would be thinned to an average density of approximately 80 TPA by retaining the most vigorous dominant and codominant trees. Retained trees would include larger Douglas-fir trees, other conifer species where practical, and all remnant seed trees, hardwoods, and snags. Spacing would vary as needed to retain the larger trees. Any remnant seed trees, hardwoods or snags that pose a safety hazard to woods workers would be felled and retained for CWD.

C Decay class 3, 4 and 5 downed logs would be retained where possible.

- If found, nest trees would be retained where possible.

Yarding

C Yarding would be by a skyline cable system in accordance with the Best Management Practices (BMPs) as described in Appendix C of the RMP.

C All other Yarding features would be the same as the Proposed Action.

All other design features, including **Reserves, Roads, Stream Channel Enhancement, and Road No. 19-5-18.9 Decommissioning and Stream Rehabilitation** would be the same as the Proposed Action.

C. ALTERNATIVE B (no action)

All timber harvest activities would be deferred, and no management activities, such as Stream Channel Enhancement, described under any alternatives would occur at this time. Because the project area is within the Matrix land use allocation, it may be considered for future timber harvests even if this alternative is selected at this time.

III. ISSUES NOT ANALYZED

No site specific surveys were completed for any of the 32 Component 2 or Protection Buffer species listed in the Schedule Change EA. It is possible that these species may reside in the project area. The issue of how the Proposed Action and alternatives would impact potential locations of these species was not analyzed because impacts are not expected to exceed those anticipated in the

Schedule Change EA.

IV. AFFECTED ENVIRONMENT

The project area is located in the Wolf Creek Watershed. Watershed analysis has been completed (BLM Eugene District, Wolf Creek Watershed Analysis, February 1995). The Wolf Creek Watershed Analysis analyzed the condition of the Riparian Reserves in the watershed and established guidelines under which they should be treated.

Most forest stands in the Wolf Creek Watershed are currently in early or mid-seral stages, with approximately 26% of the BLM-managed lands in the watershed in a “mature” (80-199 years) or “old forest” (200+ years) condition. The project area, located on the eastern edge of the watershed, is within a large area of pole-young stands (30-79 years). Sections to the SW, SE, and NE of the project area are classified as Late Successional Reserve (LSR), which are to be managed to protect and enhance conditions of late-successional and old-growth forest ecosystems. Sections to the NW are GFMA.

Other sections adjacent to the project area are privately owned.

The plants and animals in the project area do not differ significantly from those discussed in the “Eugene District Resource Management Plan Environmental Impact Statement,” November 1994 (RMP/EIS) (Chapter 3). The following resources are also discussed in greater detail in the project file.

Vegetation

The stand is a well stocked overstory of approximately 59-year old Douglas-fir with a minor component of western hemlock and western red cedar. The stand regenerated naturally following harvest in the early 1940's. The seed trees were partially harvested in 1958-59, leaving generally low amounts of remnant trees, large snags and coarse woody debris as a current stand component. Precommercial thinning was completed in 1970, except in the southeast portion of the project area, where suppression mortality is now occurring, resulting in many small diameter snags and down trees. Understory vegetation consists of salal, sword fern and Oregon grape at moderate to high levels.

All botanical surveys have been completed. No threatened, endangered, or sensitive vascular plant species were detected. Surveys for *Ulota megalospora*, a Protection Buffer species of moss, were conducted during the fall of 1998 according to survey protocols established by the Eugene District Botany Work Group. Protocols were developed using information from Appendix J2 of the FSEIS and local expertise. One site hosting *Ulota* was found within the Riparian Reserve for Stream 2.

Incidental to other surveys, one population of *Helvella compressa*, a Survey and Manage Component 1 fungus species, was found within the Riparian Reserve for Stream 3.

Wildlife (including Special Status and Special Attention Species)

The project area is considered northern spotted owl dispersal habitat, which is defined as coniferous forest greater than 11 inches in diameter at breast height (dbh) with 40% canopy closure. On the Eugene District, forest stands that are greater than 40 years old meet this definition. The project area may function as owl foraging habitat, but of low quality due to the large amount of salal and low number of snags.

In 1992, the U.S. Fish and Wildlife Service (FWS) designated lands considered to be critical spotted owl habitat; these lands were encompassed in a series of critical habitat units (CHUs). The proposed project area lies within one such CHU (OR-53). Critical habitat, as defined by the FWS, includes roosting, nesting and foraging habitat (also called “suitable” habitat) for resident owls, and dispersal habitat for non-resident owls seeking an unoccupied territory.

The Northwest Forest Plan states that the combination of reserves and the standards and guidelines should allow critical habitat to perform the biological function for which it was designated and that site-specific considerations of critical habitat will be evaluated through watershed analysis. The Wolf Creek Watershed Analysis shows that approximately 5,880 acres of CHU OR-53 are within the watershed. Of these, 26% (1,514 acres) are suitable spotted owl habitat. The watershed analysis also states that approximately 30% of BLM-managed lands in the watershed are suitable spotted owl habitat. OR-53 has been identified as being important in supporting owl pair clusters and providing nesting, roosting and foraging habitat and maintaining and improving dispersal habitat in a region of habitat fragmentation.

The project area is located on the edge of the 1.5 mile provincial home range of the High Point owl site. Owls have been known to inhabit this site since 1980 and have successfully nested there in the past several years. The amount of suitable habitat in the High Point owl site's home range is low (18%). This is below the incidental take threshold, which occurs when the amount of suitable habitat is below 40% of the available habitat within the home range of an owl site.

The project area is not critical habitat for marbled murrelets, nor is it suitable marbled murrelet habitat. A portion of the route proposed for hauling timber from the project area would fall within 0.25 miles of suitable marbled murrelet habitat.

The project area is defined as suitable habitat and within the expected range of three Survey and Manage species mollusks: *Megomphix hemphilli* (Oregon megomphix), *Prophysaon coeruleum* (Blue-grey tail-dropper), and *Prophysaon dubium* (Papillose tail-dropper). Surveys were conducted as directed in current draft protocols and 10 sites were located: four Oregon megomphix, five Blue-grey tail-dropper, and one site containing both species.

The project area is potential low quality habitat for red tree voles. Red tree vole remains were found in pellets from the High Point owls. There is a chance that they occur in the project area or disperse through it. No surveys are required in the watershed under current interim guidance policy as directed in IM-97-009 and none were conducted.

Five special status bat species potentially use the project area for all or part of their life cycle. The large trees and snags scattered in the stand could provide roosting and hibernacula sites. No surveys have been conducted.

Soils

Soils in the project area are of the Peavine, Honeygrove, and Bohannon series. Peavine is a well drained, moderately deep, silty clay loam. Honeygrove is a deep, well drained, clayey soil. Bohannon is a moderately deep, well drained, gravelly or cobbly loam soil.

Timber Productivity Capability Class (TPCC) areas classified as fragile nonsuitable lands due to potential instability (FGNW) are located in the northern portion of the project area and have been withdrawn from the proposed harvest area.

Slopes range from 0% to 70%. The elevation in the project area ranges from approximately 1,000 to 1,400 feet.

Aquatic and Riparian Resources and Fisheries

All streams located in the project area drain to Wolf Creek, which drains directly to the Siuslaw River. There are 17 streams and two springs located within or immediately adjacent to the project area. Stream 19 is entirely on private land. The closest filed water right is more than 1 mile west of the project area.

Wolf Creek is in the Oregon Coast (OC) coho salmon (*O. kisutch*) and steelhead trout (*O. mykiss*) Evolutionary Significant Unit (ESU). Oregon coast coho salmon are listed (August 1998) as threatened, and steelhead trout are designated as candidate for listing (March 1998) under the Endangered Species Act. Suitable habitat for other anadromous and non-anadromous species

exist.

Fish surveys were conducted on all streams in the project area. Small numbers of sculpin (*Cottidae* sp.) and cutthroat trout (*O. clarki*) were detected in Wolf Creek. Coho salmon and cutthroat trout were detected in Stream 6 from its confluence with Wolf Creek to approximately 2,300 feet upstream, where stream topography restricts further fish passage. Low numbers of cutthroat trout were detected in Stream 11 adjacent to the project area. Other streams in or near the project area were found to be non-fishbearing due to insufficient flow, lack of habitat, natural barriers, or steep topography.

Upper Wolf Creek is a low gradient stream that is functioning below its potential for spawning and rearing habitat for salmonids and other aquatic species. Limiting factors include lack of sufficient large woody debris, deep pools and off-channel rearing habitat, as well as excessive siltation, bedrock exposure, and above normal water temperatures (Wolf Creek Watershed Analysis p.5-24). The upper portion of Wolf Creek adjacent to the project area is predominately glides and riffles with very few pools. Most of the channel has been deeply incised, exposing large segments of bedrock, while other areas are dominated by silt/sand. Gravels are limited, and deposition is mainly associated with large down wood or boulder structures established in a 1994 stream restoration project.

The fishbearing portion of Stream 6 has ideal rearing habitat. The area consists mostly of riffles, glides, and a moderate number of deep pools. The stream channel substrate is predominately silt/sand; however, there are sporadic areas that are rich in gravels and lend themselves well to spawning grounds. The stream is well shaded, has stable streambanks and riparian, but lacks instream structure such as large woody debris which would increase the quality and quantity of fish habitat.

Non-fishbearing streams within the project area appear to be functioning properly in relation to their biological, chemical, and physical processes.

No mass movement or severe streambank erosion, or human caused barriers to upstream migration were detected in Wolf Creek or project area tributaries.

Visual Resources

Because the project area is classified as Visual Resource Management Class IV, which allows moderate levels of change to the character of landscapes, no specific timber management constraints apply (RMP p.75).

Cultural Resources

A survey of the project area found no cultural resources.

Air Resources

Air resources that would be affected by the alternatives are discussed in the RMP/EIS (Chapter 3, pp. 14-20).

V. ENVIRONMENTAL CONSEQUENCES

The Proposed Action and alternatives would have environmental effects. However, none of the alternatives would have effects beyond those described in the RMP EIS and the NSO FSEIS. Impacts based upon site specific analysis of the alternatives are described below.

A. UNAFFECTED RESOURCES

The following resources are either not present or would not be affected by any of the Alternatives: Areas of Critical Environmental Concern, prime or unique farm lands, flood plains, Native American religious concerns, solid or hazardous wastes, Wild and Scenic Rivers,

Wilderness, minority populations and low income populations.

B. DIRECT AND INDIRECT EFFECTS OF THE PROPOSED ACTION

Vegetation

Most of the existing trees would be removed, resulting in an open canopy condition over an early successional stage. The overstory would consist of clumps of retention trees around remnant seed trees or other features; and dispersed retention trees, snags, and hardwoods, growing over a planted and naturally regenerated fully-stocked stand of primarily Douglas-fir. Clumping retention trees would improve the growing environment of Douglas-fir regeneration by allowing more light to reach seedlings than would full dispersal of retention trees.

Site preparation following harvest would provide good distribution of planting spots and control competing vegetation to promote seedling establishment and growth.

Opening the canopy would allow light and drying winds into the proposed harvest area, and harvest operations, site preparation, and planting would cause ground disturbance, which would change microclimate factors which support forest floor native herbs, and increase the likelihood of non-native plants and/or noxious species entering the unit. Increased competition for remaining native plants usually occurs from the growth of shrub-layer species exposed to more light.

Road construction would cause ground disturbance, which is known to inoculate forest lands with noxious weeds such as Scotch broom, which occurs in this area. Effects would be somewhat mitigated because all roads would be natural surfaced and subsoiled after operations, but net disturbance tends to set back native herbaceous communities and promote the spread of weedy non-native plants in the area of road construction.

Mycorrhizal associates of trees cut down would be expected to die. Populations of epiphytes left on remnant trees would be expected to suffer negative impacts due to dessication and exposure.

Habitat fragmentation caused by harvesting would affect plant species dependent on interior habitat. Drying winds and temperatures tend to increase next to a cut edge; moisture and shade are reduced, and some species could suffer and die out.

No effects to the *Helvella compressa* site, located within the Riparian Reserve for Stream 3, or the *Ulota megalospora* site, located within the Riparian Reserve for Stream 2, would be expected.

Wildlife (including Special Status and Special Attention Species)

The Proposed Action may affect and is likely to adversely affect spotted owls by removing 106 acres of dispersal habitat. The amount of suitable habitat within the High Point site's home range is presently below the incidental take threshold. The Proposed Action would remove foraging habitat within the home range. Although it is of low quality, given that the amount of suitable habitat within High Point's home range is low (18%), the owls might have no choice but to use the proposed unit for foraging. The Proposed Action may adversely affect spotted owl critical habitat by removing foraging and dispersal habitat which are primary constituent elements of critical habitat.

Overall habitat conditions for mollusks may be degraded in both treatment areas, based on disturbance to down woody debris, moisture regimes, canopy closure, and temperature. As the new stand grew up, mollusk habitat conditions would recover. Suitable habitat would remain in unharvested areas and protected known site locations, allowing for survival of many resident individuals. In both the Coast Range and the Cascade foothills of the Eugene District, reducing the number of conifers ultimately favors bigleaf maples and the associated mollusk fauna.

Populations of these mollusks are capable of surviving disturbances such as thinning and regeneration harvests, especially if habitat components such as downed wood are left. The unharvested areas can provide a population source to recolonize the harvested areas.

If found, nest trees would be retained where possible. However, species that require a closed canopy may abandon nests.

Potential habitat for red tree voles would be removed by opening the canopy. Any voles residing in the remnant trees would be isolated and vulnerable to predation.

Many effects from treatment on bats are unknown. Species could persist or be displaced, depending on their needs. Retained trees and snags would maintain habitat for some species, and damage to limbs and bark of retained trees from harvest operations may create roost structures.

Soils

Effects on soils have been analyzed broadly in the RMP/EIS (Chapter 4, pp. 5-21).

Road and landing construction would cause localized, short-lived soil erosion and compaction until the roads are subsoiled and blocked. Compaction from roads/landings is estimated to be approximately 4 to 6 acres over the term of the contract.

Site productivity losses as a result of harvest and site preparation operations would be limited to within the ROD/RMP commitment of 1 percent through implementation of project design features.

Mass soil movement would not be a concern within the proposed treatment area because areas with high soil moisture, shallow soils, steep stream adjacent side slopes or soil movement indicators have been excluded from the proposed harvest area.

Aquatic and Riparian Resources and Fisheries

Effects on water quality and quantity would be similar to those described generally in the RMP/EIS (Chapter 4, pp. 21-25). No critical effects on fish habitat or populations would be anticipated.

The Proposed Action includes management within Riparian Reserves that promotes attainment of Aquatic Conservation Strategy (ACS) objectives. The following is a site-specific analysis of the effect of the Proposed Action on attainment of the ACS objectives:

1. The Proposed Action would maintain the distribution and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted. Management activities within the Riparian Reserves would be that required for road construction and decommissioning, Stream Channel Enhancement, and Road No. 19-5-18.9 Decommissioning and Stream Rehabilitation, leaving the Riparian Reserves largely intact.
2. The Proposed Action would maintain and restore the spacial and temporal connectivity between watersheds. There would be no new stream crossings, and most road construction would be outside of Riparian Reserves, thus maintaining the existing connectivity within and between watersheds. Project area streams would be well protected from the effects of timber harvesting and road construction by the 200 to 400 foot Riparian Reserves.

There are no human caused barriers in Wolf Creek; however, upstream migration of aquatic biota other than fish have been disrupted on Stream Nos. 1 and 14 within the project area by Road No. 19-5-18.9. Rehabilitation of these streams would restore their connectivity to the mainstem Wolf Creek, and in the long-term, contribute to the restoration of the spatial and temporal connectivity within the watershed.

3. The Proposed Action would maintain and restore the physical integrity of the aquatic

system. Geomorphic characteristics of Wolf Creek and associated tributaries would be maintained with the establishment of Riparian Reserves boundaries. Yarding is not proposed across any of the hydrologic features, so existing bank stability would be maintained. No new stream crossings or physical barriers to aquatic species movement are proposed.

The sideslopes, streambanks, and channel bottom configuration of Stream Nos. 1 and 14 would be rehabilitated in the Road No. 19-5-18.9 Decommissioning and Stream Rehabilitation portion of the project.

Falling trees into selected stream channels under the Stream Channel Enhancement proposal would increase the quantity and complexity of aquatic habitat, and enhance the physical structure and biological characteristics of the streams by increasing overall stream depth, creating deeper pools, backwater areas, and off-channel habitat. Additional expected effects would be increased cover for aquatic species, nutritional sources for some detritus feeding microbes and invertebrates, and retention of essential spawning gravels. In the long-term, this action would contribute to the restoration of the physical integrity of the aquatic system and the overall productivity for resident and anadromous fish populations within the watershed.

4. The Proposed Action would maintain the existing water quality in the proposed project area. No measurable increases to stream temperature would occur. Harvesting would not occur in the Riparian Reserves, except that required for construction of approximately 150 feet of Spur F, which would remove an estimated 0.1 acres of vegetation within the Riparian Reserve. The minimal cutting associated with this activity and the Stream Channel Enhancement project would not cause alterations in streamside vegetation sufficient to influence stream temperature. Similarly, no effects on other water quality parameters, such as pH, conductivity, dissolved oxygen, and nutrients, would be likely.

5. The Proposed Action would maintain the existing sediment regime in the proposed project area. Increases in erosion/sedimentation from yarding, road construction, or site preparation would be low. Potential for sedimentation from yarding would be minimized by the 200 to 400 foot Riparian Reserves. The addition of two cross drain culverts on existing Road No. 19-6-13 would minimize its potential as a source of erosion/sedimentation.

Negligible increases of sediment from the proposed new roads would be expected. Spur F would drain to a cross drain on Road No. 19-6-13 and would not have a sediment impact to any stream channel. Design features as described in Roads and Yarding would protect water quality from sediment.

Short-term changes to the sediment regime and stream channel sedimentation would be anticipated during decommissioning of Road No. 18-5-18.9. Waste material would be moved to a local site that would avoid or minimize the chance of filtration into the stream system. In the long-term, this action would contribute to the restoration of the sediment regime, and sedimentation in these channels would be expected to decrease below existing conditions.

The addition of large woody debris to Wolf Creek and Streams 1, 6, and 14 under the Stream Channel Enhancement proposal would be expected to help regulate the sediment regime by dissipating energy of flowing water and managing the sorting and storage of sediments.

6. The Proposed Action would maintain existing in-stream flows. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows would be protected.

The project area is very unlikely to experience rain-on-snow events because of the low elevations. Design features of the temporary roads, including outsloping and subsoiling, would minimize effects from compaction and reduction of infiltration rates, and would

prevent extension of the stream network.

Changes in the magnitude and timing of peak flows as result of this action would be low. A decrease in both evapotranspiration and interception would occur because of the removal of the overstory. The most likely changes to peak flows would occur during smaller storms in autumn or early winter where less precipitation is needed to recharge soil moisture.

A minor increase in summer low flows and total water yield would be possible because of the removal of the overstory.

7. The Proposed Action would maintain or contribute slightly to the restoration of the timing, variability, and duration of flood plain inundation and water table elevation in meadows and wetlands. Effects on large peak flows associated with flooding or channel alteration are likely to be negligible.

The Stream Channel Enhancement proposal would be anticipated to increase channel deposition and raise the streambed levels. One of the primary objectives would be to raise the groundwater effective level, thus raising the storage capacity of the system. In addition, this would promote increased floodplain inundation at peak flows, thereby creating critical off-channel rearing habitat for fish and aquatic-dependent species.

8. The Proposed Action would maintain existing species composition and structural diversity of plant communities in riparian areas, except where a reduction of riparian vegetation on 0.1 acres associated with road construction would occur. Effects would be minor because of the extensive untreated Riparian Reserves.
9. The Proposed Action would maintain habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species. Native riparian-dependent species would likely be protected by the Riparian Reserves.

Based on the above analysis of the effect on attainment of the ACS objectives, the Proposed Action is consistent with the ACS and the objectives for the Riparian Reserves, and would not prevent or retard the attainment of any of the ACS objectives.

Air Resources

Effects on air quality have been analyzed generally in the RMP/EIS (Chapter 4, pp. 10-14). The amount of smoke released from pile burning in any of the alternatives would cause a negligible impact on air quality and would not affect the air quality in the Designated Smoke Management Area.

C. DIRECT AND INDIRECT EFFECTS OF ALTERNATIVE A (commercial thinning)

Vegetation

Commercial thinning would promote growth of the retained trees by removing competition for growing space. Maintaining the growing stock at the density prescribed would promote stand level volume growth toward an eventual final harvest in approximately 20 years. Canopy closure would be approximately 60% after treatment. The retention of other conifer species and hardwoods would promote plant species diversity.

Effects from road construction on botany resources would be similar to the Proposed Action. Because of the higher green tree retention, other effects on botanical resources in the harvested area would be less than the Proposed Action.

Wildlife (including Special Status and Special Attention Species)

The action may affect and would be likely to adversely affect spotted owls. Dispersal habitat would be degraded due to the opening of the canopy. Foraging habitat would be removed until the canopy closes. Dispersal habitat in CHU OR-53 would be maintained, but degraded.

Effects of thinning on red trees voles are unknown. Voles could be able to survive in the remnant trees and persist in the treated area. After canopy cover returns to acceptable levels, the treated area would again be potential habitat.

Effects on mollusks and bats would be similar to the Proposed Action.

Soils

Effects on soils would be similar to the Proposed Action

Aquatic and Riparian Resources and Fisheries

Alternative A would have effects on attainment of the Aquatic Conservation Strategies similar to the Proposed Action.

Air Resources

Because no site preparation would be required, there would be no effect on air quality.

D. DIRECT AND INDIRECT EFFECTS OF ALTERNATIVE B (no action)

Vegetation

Deferring treatment at this time would continue current trends in stand and plant and fungal community development. Stand density is approaching the point at which suppression mortality occurs. Competition caused by stand density would slow the diameter growth of the stand. Maintaining a closed canopy condition would decrease crown retention. Overall stand vigor would decrease and potential harvest volume would be lost to competition mortality.

Non-native plants and noxious weeds would not be provided the opportunity to enter the undisturbed stand.

Aquatic and Riparian Resources and Fisheries

Existing conditions would continue. Aquatic Conservation Strategy Objectives 1-9 would be maintained. Neither Stream Channel Enhancement or Road No. 19-5-18.9 Decommissioning and Stream Rehabilitation, which would contribute to restoration of features described in ACS Objectives 2, 3, 4, 5, and 7, would occur.

Foraging and dispersal habitat for spotted owls would not be removed nor degraded. Spotted Owl Critical Habitat would not be affected.

Existing conditions would continue for other resources, including **Wildlife, Soils, and Air**.

E. CUMULATIVE EFFECTS

This analysis incorporates the analysis of cumulative effects in the USDA Forest Service and USDI Bureau of Land Management Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl, February 1994, (Chapter 3 & 4) and in the Eugene District Proposed RMP/EIS November, 1994 (Chapter 4). These documents analyze most cumulative effects of timber harvest and other related management activities. None of the alternatives in this proposed action would have cumulative effects on resources beyond those effects analyzed in the above documents. The following section supplements those analyzes, providing site specific information and analysis particular to the alternatives considered here.

Approximately 50% of the land in Wolf Creek Watershed is forest industry owned, and approximately 44% is under BLM management. Land use in the watershed is primarily forest management, with some scattered residential and small agricultural development.

Recent activities on BLM-managed land near the project area include Swinglog Thinning timber sale (FY91); replacement of culverts for fish passage and a stream restoration project on Swing Log Creek; and a stream restoration project on Wolf Creek.

The Swinglog Thinning timber sale was released for harvest as designed pursuant to Section 2001(k)(1) of the Fiscal Year 1995 Rescissions Act (P.L. 104-19). The sale, which was sold prior to issuance of the NSO ROD and RMP, included an eight-acre clearcut unit. This unit, which comprises less than 0.05% of BLM-managed land in the Wolf Creek Watershed, did not include any activities in Riparian Reserves or any road construction. The harvest of the Swinglog Thinning sale was generally considered in the NSO ROD analysis of the cumulative effects of timber harvest. There would be no cumulative effects of this sale with the proposed project beyond those effects generally analyzed in the NSO ROD and RMP.

Since 65% of the BLM-managed lands in the watershed are in the LSR land use allocation, it is likely that most future harvests in the watershed would be thinnings. Other stands could be regeneration harvested. Sales sold or proposed in this watershed include Link 'n Log (FY98), a density management thinning, and Panther Bottom (FY01), a regeneration harvest.

On private forest lands in the watershed, more intensive timber management actions, including clearcutting and burning, are occurring and are likely to continue. It is also possible that some of these lands will be converted to non-forested land for either residential or agricultural use.

The Proposed Action, together with other harvesting, would set back botanical succession patterns. Non-native and more aggressive native species could monopolize habitats, excluding late-successional native species on a long-term or permanent basis.

The Proposed Action, together with other harvesting, would contribute to the fragmentation and elimination of forested habitat. CHU OR-53 would be degraded by the loss of foraging and dispersal habitat. Research within OR-53 unit shows that the population of spotted owls is declining at a rate of 8.7% per year (Thraill et al, 1996, **Studies in Avian Biology** No. 17:53-58) due to loss of habitat. Unit OR-53's location along the eastern fringe of the Coast Range province and the western end of the South Willamette-North Umpqua area of concern make it an important link for maintaining and improving dispersal habitat for spotted owls. The Proposed Action, together with other harvesting, would remove dispersal habitat and add to the fragmentation of the forest in the CHU. However, much of the public land within CHU OR-53 is in the LSR land use allocation. Over time, as existing stands in the LSR age, the level of fragmentation within the CHU would diminish.

Species preferring heavy canopy cover and interior forest would be displaced and concentrated in fragmented suitable habitat. Species preferring open habitats and young stands would increase.

Forest fragmentation would contribute to reduced habitat for sensitive and Threatened and Endangered species to colonize, reduced incidence of interior forest animal species which function as vectors for pollen and propagule dispersal, heightened predation by edge species such as deer and other herbivores, and inbreeding depression associated with inability of isolated populations to cross-pollinate.

Within the Coast Range Province, ten project areas surveyed in 1997 and 1998 resulted in the discovery of 122 *Megomphix hemphilli*, 60 *Prophysaon coeruleum*, and 12 *Prophysaon dubium* sites. All three species appear to be well distributed across the province. In both the Coast Range and the Cascade foothills of the Eugene District, reducing the number of conifers ultimately favors bigleaf maples and the associated mollusk fauna. Populations of these mollusks are capable of surviving disturbances such as thinning and regeneration harvests. The Proposed Action and other federal harvest activities in the area would not be expected to pose a risk to local viability or distribution of these three mollusk species because of the protection of the Riparian Reserves and other management recommendations. Harvest on

private lands would likely cause population declines due to the low amount of coarse woody debris left and small riparian buffers.

Cumulative effects from the Proposed Action or Alternative A on **Aquatic and Riparian Resources and Fisheries Resources** would not be beyond those discussed in the analysis of the effect on attainment of the ACS objectives in the Environmental Consequences section.

Alternative A would have fewer negative cumulative effects on botanical resources than the Proposed Action for species which tolerate some canopy opening and ground disturbance.

If Alternative A was implemented, it is possible that this stand would be subject to a regeneration harvest in 20-50 years. Under this alternative, the stand could have several more decades to develop into mature or late-successional forest, which is limited in the immediate area. The stand could thus provide refugia for late-successional forest associated species during the decades prior to final harvest.

Alternative A, together with other harvesting, would contribute for approximately 10-40 years, to the degradation or elimination of habitat for species preferring heavy canopy cover stands. Species that cannot tolerate disturbance would be affected. For these species, fragmentation of habitat would be a negative but shorter-term effect of thinning.

Under Alternative B (no action), current trends in stand development would continue. Stand density is approaching the point at which suppression mortality occurs. Alternative B would not result in the benefits to fisheries from the Stream Channel Enhancement project. Cumulative effects from restoration of features described in ACS Objectives 2, 3, 4, 5, and 7, would not occur. Habitat for species that require heavy canopy cover would be maintained. Fragmentation of forest habitat for plants and animals would not occur.

Alternative B would not contribute to cumulative effects on **Soils or Aquatic and Riparian** resources.

C. MITIGATION MEASURES

The Proposed Action may result in the incidental take of the northern spotted owl. The U.S. Fish and Wildlife Service (FWS) has issued incidental take provided that the BLM: 1) prohibit timber hauling activities within 0.25 miles of suitable spotted owl between March 1 and July 1, 2) between April 1 and September 15, restrict hauling within 0.25 miles of suitable marbled murrelet habitat to between two hours after sunrise to two hours before sunset, and; 3) monitor the project for compliance and report to FWS.

Surveys for the 32 species listed in the Schedule Change EA will begin if technical feasibility problems can be solved. If it is determined by species experts that survey feasibility issues have been resolved throughout the suspected range of any of the 32 species, and if a letter of direction is received prior to issuance of a Decision Record, surveys and appropriate management actions would be implemented.

VI. CONSULTATION AND COORDINATION

A. LIST OF PREPARERS

The Proposed Action and alternatives were developed and analyzed by the following interdisciplinary team of BLM specialists:

Jeff Apel	Engineering
Alison Center	Wildlife and Threatened and Endangered species
Rick Colvin	Landscape Planner
Al Corbin	Timber Management

Phil Dills	Fire
Richard Hardt	Ecology
Pete O'Toole	Silviculture
Kim Reviea	Timber
Mike Southard	Cultural Resources
Steve Steiner	Hydrology
Chuck Vostal	Fisheries
Molly Widmer	Botany
Barry Williams	Soils

B. CONSULTATION

Pursuant to the Endangered Species Act, formal consultation was completed with the Fish and Wildlife Service on this proposed action. The Fish and Wildlife Service issued its Biological Opinion on May 25, 1999, completing consultation.

Pursuant the Endangered Species Act, consultation will be conducted with the National Marine Fisheries Service (NMFS) to evaluate the effects of the Proposed Action on coho salmon (*O. kisutch*) by applying the standards of section 7(a) (2).

In response to initial consultation regarding a number of potential timber harvests within their ancestral area, the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians raised a concern about "...the state of dwindling resources of a cultural nature left for native people to rely upon for their traditional ways of living." Follow-up conversations with their cultural coordinator revealed that they had no specific information regarding use areas within the proposed project area, nor did they have specific concerns regarding the Proposed Action.

C. PUBLIC PARTICIPATION

This environmental assessment will be sent to the following list of groups, agencies and individuals:

Ann Mathews, Eugene, OR
Carol Logan, Kalapooya Sacred Circle Alliance, Springfield, OR
Charles and Reida Kimmel, Eugene, OR
Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, Coos Bay, OR
Craig Tupper, Eugene, OR
David Simone, Eugene, OR
Governor's Forest Planning Team, Salem, OR
Harold Schroeder, Eugene, OR
Jan Wroncy, Eugene, OR
John Bianco, Creswell, OR
John Poynter, Lorane, OR
Lane County Land Management, Eugene, OR
Neal Miller, Eugene, OR
Oregon Dept. of Land Conservation and Development, Salem, OR
Oregon Dept. of Forestry, Veneta, OR
Oregon Dept. of Fish and Wildlife, Springfield, OR
Oregon Dept. of Environmental Quality, Portland, OR
Oregon Natural Resources Council, Eugene, OR
Pacific Rivers Council, Eugene, OR
Pam Hewitt, Marcola, OR
Peter Saraceno, Eugene, OR
Roseburg Forest Products, Roseburg, OR
Sierra Club - Many Rivers Group, Eugene, OR
Swanson-Superior Forest Products, Inc., Noti, OR
Western Environmental Law Center, Eugene, OR

Attachments
Map

VII. REFERENCES

USDA, Forest Service and USDI 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. Portland, Oregon.

USDA, Forest Service and USDI 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.

USDI, Bureau of Land Management. June 1994. Eugene District Record of Decision and Resource Management Plan. Eugene District Office, Eugene, Oregon.

USDI, Bureau of Land Management. November 1994. Eugene District Proposed Resource Management Plan/Environmental Impact Statement. Eugene District Office, Eugene, Oregon.

USDI, Bureau of Land Management. February 1995. Wolf Creek Watershed Analysis. Eugene District Office, Eugene, Oregon.

USDI, Bureau of Land Management, Eugene District. October 1998. Eugene District Interim Management Guideline For Three Survey and Manage Mollusks

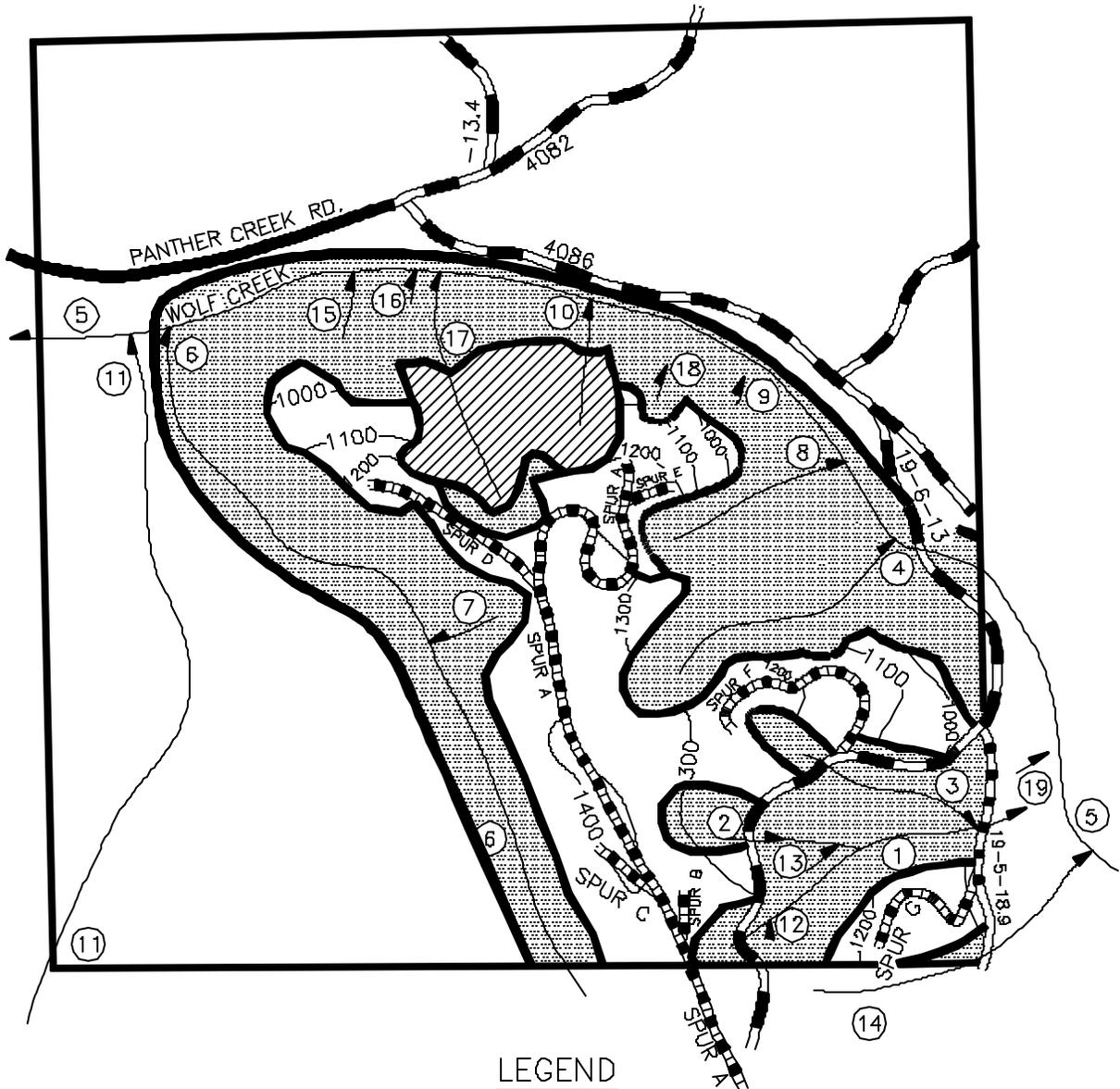
Thraikill et al, 1996. Studies in Avian Biology No. 17:53-58

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

PROPOSED ACTION
 OR
 ALTERNATIVE A

POINT A PANTHER EA MAP

T. 19S. , R. 6W. , SEC. 13 , WILL. MER., EUGENE DISTRICT



LEGEND

SCALE: 1" = 1,000 FT.

- | | |
|--|--|
|  HARVEST AREA (PROPOSED ACTION = REGENERATION HARVEST)
(ALTERNATIVE A= THINNING) |  ROCK SURFACED ROAD |
|  RESERVE AREA |  ROAD TO BE RENOVATED |
|  TPCC AREA |  ROAD TO BE CONSTRUCTED |
|  PROJECT AREA |  PAVED ROADS |
|  STREAM |  NATURAL SURFACED ROAD |
| |  HYDROLOGY FEATURE |

**UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE**

Finding of No Significant Impact
for
Point A Panther Timber Sale

Determination:

On the basis of the information contained in the Environmental Assessment, and all other information available to me, it is my determination that implementation of the proposed action or alternatives will not have significant environmental impacts not already addressed in the *Final Eugene District Timber Management EIS* (May 1983), and the *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (April 1994) and the *Eugene District Record of Decision and Resource Management Plan* (June 1995), with which this EA is in conformance, and does not, in and of itself, constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

Area Manager, South Valley Resource Area

Date: _____

ENVIRONMENTAL ASSESSMENT NO. OR090-98-37

Point A Panther
Timber Sale Tract No. E-02-353

Prepared by
Debra Wilson
July 1999

United States
Department of the Interior
Bureau of Land Management
Eugene District Office
South Valley Resource Area