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

The Incredible Holt

DECISION DOCUMENT

SECTION 1 – THE DECISION

Introduction

TheIncredibleHolt decision is for the forest density management project identified in the Upper Umpqua Watershed Plan and its succeeding Decision Record. This decision is consistent with the Roseburg District Resource Management Plan (RMP) adopted in June 1995. The implementation of this decision would meet the objectives to accelerate stand diversity in midseral forests on BLM lands designated as Late-successional Reserves and to enhance the development of aquatic habitat.

Decision

It is my decision to authorize implementation of TheIncredibleHolt density management timber sale. This sale was originally named Bottleneck, but its name was changed to TheIncredibleHolt to honor Craig Holt, who was the lead forester for this project and passed away in September 2004. This decision is subject to administrative remedy under 43 CFR 5003.2 and 5003.3.

The Appendix A map and the following tables provide a summary of forest treatments that are part of TheIncredibleHolt density management project.

Table 1. TheIncredibleHolt Density Management Acreage

Forest Treatment Type	Acres
Right-of-way Harvest	1
Variable Low Residual Density Thin	110
Moderate Residual Density Thin	22
High Residual Density Thin	22
No Harvest – Unthinned Areas	10

Within Late-Successional Reserves the following criteria will also create variable stand density:

- Unthinned areas and varied densities within harvest units
 - High residual density thinning have been placed adjacent to contiguous blocks of existing late-successional habitat that are outside the harvest boundaries.
 - Variable no-harvest buffers have been placed around non-fish bearing streams. No harvest means that some trees may be felled in these areas to create or enhance habitat but trees will not be commercially removed.
 - Prescriptions for tree marking have been designed to create variable spacing of remaining trees and protection of existing snags to the extent possible. Examples include occasionally leaving clumps of trees and clearing around large limbed trees, and varying the spacing to select a tree of particular species and/or growth form.
- ➤ The following harvest methods (Table 2) will be applied across the project area:

Harvest Method	Estimated Acreage
Cable	115
Ground Based	40
TOTAL	155

Table 2. Upper Umpqua Harvest Method Acreage

- Approximately four and a half (4.5) miles of rocked road will be used for timber haul. A total of 4.4 miles of existing road will be renovated.
- Approximately 1,100 feet (Spurs #1 and #2) of temporary road will be constructed. Approximately 2,800 feet of existing old road beds 25-7-9.1 segment E, 25-7-3.0 segment B, and 25-7-3.1 segment B will be renovated as temporary roads. All of these temporary roads will be decommissioned, which will include subsoiling, at the conclusion of timber harvest.
 - Spur #1, and temporary road 25-7-3.0 segment B will not be rocked and will only be used from July 1st to October 15th as set forth below under Project Design Features.
 - Spur #2 and temporary roads 25-7-3.1 segment B and 25-7-9.1 segment E could be rocked at the purchaser's request and expense to allow use during wet season in accordance with conditions as set forth below under Project Design Features.
- Approximately 40 acres of underburning will occur in Unit 3A and 17 acres will be handpiled and burned along roads as well as landing slash piles.
- ➤ Snags and coarse woody debris (CWD) will be retained or created as described in the Project Design Features.

Compliance and Monitoring

Compliance with this decision will be ensured by frequent on the ground inspections by the Contracting Officer's Representative. Monitoring will be conducted as per the direction given in the RMP (Appendix I).

SECTION 2 – PROJECT DESIGN FEATURES

The following project design features and best management practices (BMPs) are adopted as part of the implementation of this decision to reduce adverse environmental impacts. They are designed to avoid, minimize or rectify impacts on resources. These measures will also help projects meet the objectives of the Aquatic Conservation Strategy.

Seasonal Restrictions

Seasonal restrictions will be applied based on consultation criteria to reduce impacts to federally listed species and in accordance with BMPs to reduce sedimentation impacts to aquatic species, and to reduce soil compaction in order to maintain soil productivity. These restrictions are further described below. The season for operation by project type is shown in the following table

Table 3. Seasons of Operation by Project Type

Project Type	Season of Operation
Road Construction, Improvement and Renovation, Ground Based Logging	July 1 to August 5 (with Daily Operating Restrictions) ¹ * August 5 to Wet Season (Normally October 15)
Stream Culvert Replacement	July 15 to August 5 (with Daily Operating Restrictions) August 5 to September 15 (No Restrictions)
Timber Felling Cable Yarding Timber Hauling	July 1 to August 5 (with Daily Operating Restrictions) 1* August 5 to October 15 (No Restrictions except Fire) October 15 to March 1 (Wet Season Haul Conditions)

Northern Spotted Owl Restrictions may be dropped prior to July 1 depending on nesting status.

Project Design Features to Minimize Effects to Wildlife Threatened & Endangered Species

The following project design features from the Letter of Concurrence for the Roseburg District FY 2003-2008 Management Activities (Ref. No. 1-15-05-I-0511) and from the Disturbance Distance Modification (Ref. No. 1-15-05-I-0596) apply to TheIncredibleHolt density management decision:

➤ Bald Eagle

There are no restrictions for bald eagles based on no known bald eagle nest sites within one mile of the project area.

Northern Spotted Owl

Disturbance

• Activities will be scheduled to avoid implementing projects within 65 yards (as amended) of any known nest site or activity center from March 1- June 30, unless protocol surveys have determined the activity center to be not occupied, non-nesting, or failed in their nesting attempt. Waiver of the seasonal restriction will be valid until March 1 of the following year.

^{*} Bark slip restrictions might be applied from March 15 – July 15

• Prescribed burn plans scheduled during the nesting season and which would burn within 0.25 miles of known nest sites or activity centers will be designed to reduce or avoid disturbance and smoke impacts.

➤ Marbled Murrelet

Disturbance

- This project is within the Marbled Murrelet Inland Management Zone 2 (35 to 50 miles from the coast). For **unsurveyed suitable habitat within 1.3miles of the Umpqua River**, seasonal restrictions will apply within 100 yards or less during the critical nesting period (April 1 August 5). DORs would be applied between August 6 and September 15.
- DORs will apply within 100 yards or less of all **unsurveyed suitable habitat outside of 1.3 mile of the Umpqua River** from April 1 until August 5.
- Prescribed burn plans scheduled during the nesting season and which would burn within 0.25 miles of occupied sites or unsurveyed suitable habitat will be designed to reduce or avoid disturbance and smoke impacts.

Hahitat

In accordance with Level 2 consultation team guidance (August 4, 2004
Memorandum), project design criteria for maintaining suitable habitat conditions
include the following:
☐ Residual trees within mid-seral stands and adjacent habitat have been
evaluated on the ground to determine their relationship with the
surrounding stand in order to adjust thinning prescriptions.
□ Potential structure as defined in the guidance will not be removed or
damaged during thinning operations.
☐ Thinning within 200 feet (one site potential tree height) of potential
structure will protect and improve future habitat conditions. Thinning will
aid limb development and the development of adjacent cover.
☐ One-quarter acre gap openings will not be created within 200 feet of
potential structure.

- ➤ Snags will be retained or created in the following manner in accordance with the LSRA guidance:
 - Snags greater than 20 inches DBH and 16 feet tall will be located and counted on a stand-by-stand basis.
 - Tree marking will be designed to protect existing snags to the extent possible.
 - Those that pose a safety concern will be cut and left for coarse woody debris (CWD).
 - If there are less than three snags on north slopes and one snag on south slopes, snags will be created on a per acre basis from the larger diameter class of existing live trees to meet the minimum interim needs.
- ➤ Within Late-Successional and Riparian Reserves, CWD will be retained or created in the following manner in accordance with the LSRA guidance:
 - All existing CWD will be retained.
 - Approximately two trees per acre could be felled for additional CWD based on post harvest evaluations

Project Design Features to Minimize Erosion and Sedimentation Effects to Aquatic Species

- > To protect aquatic resources within riparian areas a variable width streamside no-harvest buffer has been established along all streams. In general, the buffer width averages about 40 feet from the outer edge of the active stream channel for all non-fish bearing streams. The buffer width varies to include areas of instability, wide areas of riparian vegetation, or sensitive areas identified during site review. Variation in the non-fish bearing stream buffer was based on site level review of soils, hydrology, fisheries, vegetation, and riparian habitat. Soil was reviewed for the presence or absence of steep slopes, potential erosion, sedimentation, and soil displacement issues; hydrology was reviewed for overland and groundwater flow conditions (perennial, seasonal, ephemeral classification, wetlands, seeps, and springs); fisheries was reviewed for the influence non-fish bearing streams have on downstream aquatic habitat; vegetation was reviewed for diversity and crown characteristics (ground cover, vegetative composition, stream shading, etc); riparian habitat was reviewed for the presence of key habitat components (aspect, vegetative composition and structure, snags, downed wood, etc). At the very minimum, one-tree retention has been maintained along the stream bank for bank stability. Minimum buffer widths have been used primarily on first or second order, ephemeral or highly interrupted intermittent streams, which lack riparian vegetation and where riparian habitat components, soil stability issues, and potential impact to downstream fisheries are also absent. Management within the buffer could include selected felling and/or girdling of trees where doing so will benefit riparian habitat. Trees will not be commercially removed from this buffer area. Use of the buffer will provide the following benefits:
 - Maintain canopy cover for stream shading
 - Maintain a non-disturbed vegetative filter for sedimentation
 - Provide protection to the stream channel and banks
 - Trees treated or felled in this zone will have riparian habitat benefits
- Stream channels and riparian habitat will be protected from logging damage by directionally felling trees that are within 100' of streams generally away from the streams and yarding logs away from or parallel to the streams. Because of the no- harvest buffers, yarding corridors parallel to non-fish bearing streams will be at least 40 feet away from the edge of the active streams.
- ➤ Skyline yarding will be required where cable logging is specified. This method will limit ground disturbance by requiring at least partial suspension during yarding. In some limited, isolated areas partial suspension (outside no-harvest buffers) may not be physically possible due to terrain or lateral yarding. Excessive soil furrowing will be waterbarred and covered with slash. For all cable yarding, corridors generally less than 15 feet in width will be utilized.

Project Design Features to Minimize Effects of New Road Construction and Road Use

- ➤ Temporary New Roads All new roads will be constructed in upland Late-Successional Reserves. None will occur within riparian areas. Roads will be available for use during the commercial harvesting contract. These roads will be decommissioned for hydrological purposes upon completion of the harvesting contract.
- The new road construction will be located away from streams and not present sedimentation risks. Roads will be located on ridge tops and or stable slopes that do not exceed 50 percent. All new road construction would occur during dry periods of the year, generally between May 15 and the onset of regular fall rains or as determined by weather patterns.
- ➤ Erosion control measures (waterbarring, seeding, mulching, straw bales, bioengineering, etc.) will be applied where needed on newly constructed roads, improved roads, or decommissioned roads where they are within 200 feet of streams and on replaced or removed culverts. Specifically, to decrease the chance of sedimentation into streams, the contract will specify sediment fences and straw bales at six stream crossings on road 25-7-9.1. The addition of cross drains during road improvements will minimize sedimentation.
- ➤ Prior to the wet season, all new road construction not surfaced with rock will be waterbarred and blocked to traffic during the same dry season as construction.
- Over-wintering an unsurfaced road for use the following dry season will be allowed in limited cases when the unit size and degree of seasonal restrictions make completing harvest within one dry season impractical. Over-wintering roads will also require at a minimum waterbarring and blocking to traffic and could include other measures listed above.
- All haul routes used during wet season hauling will be inspected prior to haul activities to assess the current conditions of those roads as they pertain to sedimentation concerns to adjacent streams. Where winter haul occurs along a gravel route with defined stream crossings, project design features specify sediment fences, gravel lifts, and weather dependant operation specifications designed to prevent sediment contribution to live streams. Activities will be suspended when conditions are such that stream sedimentation will occur. The suspension will be lifted when conditions improve or remediation measures are implemented.

Project Design Features to Minimize Soil Compaction

- ➤ Conduct ground-based operations only when soil moisture conditions limit effects to soil productivity (these conditions generally occur between May 15 and the onset of regular fall rains or may be determined by on-site examination).
- ➤ No ground-based yarding will occur within the no-harvest buffer. Crossing stream channels with equipment will be limited to existing roads.

- Forwarder trails will be designated. Harvesters will delimb trees in front of the machine tracks or tires in order to reduce compaction. The forwarder will operate on the branch and limb covered areas traversed by the harvester.
- Forwarder trails and landings will affect less than 10 percent of the ground-based harvest unit. A main skid trail is defined as a trail in which the duff and slash is displaced such that approximately 50 percent or more of the surface area of the trail is exposed to mineral soil.
- > Ground based operations will be limited to slopes generally less than 35 percent.
- ➤ Skid trails that were created prior to the adoption of the RMP will be re-used to the extent practical.
- To mitigate for previous soil compaction, approximately one mile of old skid trails and haul roads will be subsoiled.
- > Trails resulting from ground-based yarding will be waterbarred and covered with slash as necessary to limit erosion and prevent sedimentation into streams.

Project Design Features to Minimize Effects from Noxious Weeds

- ➤ Project level weed surveys and watershed level weed inventories have been performed.
- ➤ Prior to ground disturbance, the existing Scotch Broom weed infestation at proposed project site will be treated.
- ➤ Construction and logging equipment/machinery associated with ground disturbance will be cleaned prior to moving into the proposed project site to remove weed seed and help control or prevent the spread of noxious weed seed.
- Areas of ground disturbance will be reseeded with native grass seed or a suitable alternative in a timely fashion following ground disturbance.

Miscellaneous Project Design Features

- ➤ Hazardous materials (particularly petroleum products) will be stored in durable containers and located so that any accidental spill will be contained. All landing and work site trash and logging materials will be removed. All equipment planned for instream work will be inspected beforehand for leaks. Accidental spills or discovery of the dumping of any hazardous materials will be reported to the Sale Administrator and the procedures outlined in the "Roseburg District Hazardous Materials (HAZMAT) Emergency Response Contingency Plan" will be followed.
- ➤ Cultural resources A cultural resource inventory was completed (SW0409). No resources were identified. Stipulations will be placed in the contracts to halt operations in the event of inadvertent discoveries of new cultural resource sites (e.g. historical or prehistorical ruins, graves, fossils or artifacts).

SECTION 3 – THE DECISION RATIONALE

The **No Action alternative** was not adopted because it would not meet the purpose and need as outlined in the EA (pgs. 1-2) to accelerate stand development of late-successional characteristics, to contribute timber for the local and regional economy, to reduce fine sediment input into streams and improve aquatic habitat. Project-by-project planning and NEPA documentation would not implement projects in a cost effective manner.

Although Alternative 2 would meet much of the purpose and need, it was not adopted because the amount of moderate residual density thinning would limit the variability across the landscape. Moderate residual density thinning will require a greater number of future thinnings to develop habitat for late-successional associated species. It would also take longer to develop late-successional habitat.

The adoption of a scaled back version of **Alternative 3** better meets the purpose and need and provides a broader range of management options than Alternative 2 to accomplish the goals of the EA. This alternative provides greater variability across the landscape than Alternative 2 since a larger amount of low residual density thinning will be applied. The stands designated for low residual density thinning will also have a greater amount of variability within each stand than the Alternative 3 described in the EA because of the application of the project design features described on page 8-9. Where low residual density thinning is applied, late-successional characteristics will develop more quickly which will in turn improve the quality of dispersal habitat for the spotted owl, as well as provide future nesting habitat for the northern spotted owl and marbled murrelet.

This decision implements the guidance provided in the Upper Umpqua Watershed Plan Decision signed October 8, 2003 for the portion of the plan covered in TheIncredibleHolt project area. It incorporates the harvest activity changes as described in the Upper Umpqua Watershed Plan decision

A cultural resource inventory was completed. No resources were identified. No consultation was required. BLM has completed its Section 106 responsibilities under the 1997 National Programmatic Agreement and the 1998 Oregon Protocol.

Consultation with the National Oceanic and Atmospheric Administration (NOAA - fisheries) is not required for the Oregon Coast coho salmon since it is currently "proposed" for listing as "threatened". The Roseburg District has prepared a Biological Assessment (BA) that made a determination that this project would result in a "may effect, not likely to adversely affect [NLAA]" for the Oregon Coast coho salmon. Informal conferencing with NOAA - fisheries resulted in a Letter of Concurrence (April 26, 2005) with BLM's NLAA determination. Federal agencies are required under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) to consult with NOAA Fisheries regarding actions that are authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). Activities associated with the proposed project would not adversely affect EFH for coho and chinook salmon therefore consultation is not required. The Letter of Concurrence (pg. 11) concluded that the conservation measures included as part of the proposed action are adequate to offset any potential effects to EFH.

Consultation with the U.S. Fish and Wildlife Service has been completed. The programmatic Biological Opinions (Ref No. 1-15-05-I-0511 and 1-15-05-I-0596) concluded that the action is "... not likely to adversely affect the bald eagle, spotted owl, spotted owl critical habitat, murrelet, and murrelet critical habitat" (pg. 30).

Project level surveys for Kincaid's lupine have been performed and none were found.

Project level assessments for the additional Special Status botanical and wildlife species have been conducted. The required clearances and site management are designed to be consistent with the conservation needs of the Special Status Species and ensure that actions do not contribute to the need to list any species under the provisions of the Endangered Species Act. The northern spotted owl and American peregrine falcon sites within the vicinity of the project area will be monitored annually.

This decision is based on the fact that the actions implement the Standards and Guidelines (S&Gs) as stated in the NFP and the Management Actions / Directions of the RMP. The project design features listed above will minimize soil compaction, limit erosion, protect slope stability, wildlife, air, water quality, and fish habitat, as well as protect other identified resource values. This decision recognizes that impacts could occur to some of these resources, however, the impacts to resource values will not exceed those identified in the *Final - Roseburg District Proposed Resource Management Plan / Environmental Impact Statement* (PRMP/EIS). This decision provides timber commodities with impacts to the environment at a level within those anticipated in the RMP/EIS.

As a result of this decision, the thinning actions that will be undertaken to accomplish terrestrial habitat objectives are only initial steps in a very long-term process. These actions set management of the affected blocks of land on a trajectory, the final outcome of which is not absolutely certain. This is an integral aspect of the adaptive management concept built into the Northwest Forest Plan and the Roseburg Resource Management Plan. This decision addresses only the initial steps in this long-term process. It is fully expected that additional silvicultural treatments of the affected stands will be required at some point in the future. However, this decision neither determines the nature of those future actions, nor places constraints on them. Additional actions will be undertaken to repair, restore, or upgrade many existing structures and developments in the watershed. On-the-ground results of many of these actions are expected to be seen in a relatively short time frame.

I have reviewed the public comments from the EA (see Section 4). My predecessor provided additional time for interested parties to develop input and to participate in a field tour of the project area. This interactive participation resulted in substantive adjustments in the proposed action initially presented in the EA.

SECTION 4 – PUBLIC INVOLVEMENT

For the Upper Umpqua Watershed Plan Environmental Assessment, comments were solicited from affected tribal governments, adjacent landowners and affected State and local government agencies. No comments were received from these sources. During the seventy-five day public review period, comments were received from four individuals or organizations. Comments provided information that helped in the formulation of the Upper Umpqua Watershed Plan decision, however no new information was provided that would alter the conclusions of the analysis.

The Roseburg District received three letters as well as approximately six emails during the public review period. The following highlights the chronology of public input to this process.

- 1. The general public was notified via the *Roseburg District BLM Planning Update* (Spring, 2003), which was sent to approximately 150 addressees. These addressees consist of members of the public that have expressed an interest in Roseburg District BLM projects.
- 2. Notification was provided to certain state, county and local government offices.
- 3. A 30-day public comment period was established on June 17, 2003 for review of this EA. A Notice of Availability was published in the *News Review*.
- 4. On June 17, 2003, an overview of the Upper Umpqua Watershed Plan was presented to the Umpqua Basin Watershed Council and the public. This group includes representatives from agriculture, timber, business and environmental segments of the Umpqua Basin. A summary and copies of the EA were given to interested members of the public during that presentation.
- 5. During the 30-day public review period, discussions developed over certain aspects of the EA. As a result of those discussions, the public review period was extended for an additional forty-five days through September 1, 2003.
- 6. The discussions led to a public tour on August 11, 2003. The tour visited sites within Upper Umpqua watershed to illustrate different aspects about the EA.
- 7. Subsequently, the Upper Umpqua Watershed Plan decision was signed October 8, 2003 with the commitment to give the public notice of pending follow-up decisions through the *Roseburg District BLM Planning Update* in the quarter preceding the planned sale. Specific harvest unit locations and mitigating measures for specific programs, including special status species, would be incorporated and made available to the public at that time. This has been done for TheIncredibleHolt timber sale which was featured in the Winter 2004 *Roseburg District BLM Planning Update*.

Public involvement for the Upper Umpqua Watershed Plan has been extensive and has influenced the development of this decision. Public comments that were received indicate support for thinning to meet terrestrial habitat needs as well as projects to reduce sedimentation and improve aquatic habitat needs. The comments also support thinning and using the resulting forest products for the benefit of the local and regional economies. Along with this support, however, concerns were raised. The following is a recap of the general areas from the Upper Umpqua Watershed Plan that are relevant to this timber sale decision and how they were addressed:

- ➤ Harvesting older/larger residual trees.
- Some harvest units don't meet the need for thinning.
- The effects of thinning to low residual densities and the desire for variable densities.
- ➤ The amount of snags and coarse woody debris remaining in Late Successional Reserves after harvest is completed.

- > The overall effects of new road construction.
- New road construction effects on habitat fragmentation.
- ➤ The size of patch openings in Late Successional Reserves.
- > The spread of noxious weeds.

Harvesting Older/Larger Residual Trees

Public comments were received that expressed concern over harvesting older/larger residual trees.

Consideration Given: BLM recognizes that there is controversy associated with harvesting older/larger residual trees. The RMP provides for the harvest of these types of trees in GFMA and Connectivity/Diversity Block land use allocations. Analysis has shown that the amount of these types of trees to be harvested under this EA is incidental. Small numbers of these types of trees would be harvested for the greater purpose of accelerating late-successional habitat within Late Successional and Riparian Reserves and Connectivity/Diversity Blocks at the forest stand level. Although harvest units containing a greater amount of older/larger trees were adjusted (see next concern) for reasons other than concern about harvesting these types of trees, these adjustments would nonetheless also meet the concern about harvesting older/larger residual trees.

Adjustments Made: Adjustments will be made in the field design of new road construction to minimize harvesting of older/larger trees. These adjustments will be completed while also minimizing impacts to water quality through the project design features.

Harvest Units Don't Meet the Need for Thinning

Public comments were received that expressed concern over thinning some forest stands that do not meet the purpose and need of the EA.

Consideration Given: Within the GFMA land use allocation, harvest units were reviewed against the objective of "...maintain[ing] healthy growth rates and contribut[ing] timber for the local and regional economy ...". It was decided that this objective would be better met with a different type of harvesting prescription and therefore would be covered under a separate EA. Within the Late Successional and Riparian Reserves and Connectivity/Diversity Block land use allocations, harvest units were reviewed against the objective of "...accelerate stand diversity and development of late-successional characteristics ...". It was decided that some harvest units are already adequately moving toward this objective and would not need to be treated.

Adjustments Made: Approximately 120 acres of GFMA forests in the 50 to 80 year age class will be dropped from consideration under this EA.

Approximately 500 acres in Late Successional and Riparian Reserve forests are dropped from consideration for thinning for the following reasons:

- Mid-seral forest stands that are currently exhibiting late-successional type characteristics were evaluated and dropped from consideration because density management would not meet the purpose of, "accelerat[ing] stand diversity and development of late-successional characteristics ...".
- > Some mapping errors that included larger blocks of late-successional forest types instead of mid-seral forest types have been corrected. Mapping errors will continue to be corrected as unit boundaries are refined in the field.
- ➤ The control area for the Little Wolf Density Management Study will not be harvested to allow for continuation of the long-term study.

Approximately one mile of new road construction was dropped from consideration when these harvest units were dropped.

Thinning to Low Residual Densities and the Desire for Variable Densities

Public comments were received that expressed concern that low residual density thinning would harvest too many trees in Late Successional and Riparian Reserves and would not leave enough trees for late-successional habitat development. Related to this concern has been the public's desire to leave more variable densities after harvest within each forest stand.

Consideration Given: In considering this concern, BLM has reviewed the purpose and need to accelerate the development of late-successional habitat. The analysis determined that northern spotted owls less frequently used the larger blocks of dense mid-seral forests. The analysis also determined that thinning these stands to lower densities would achieve multiple layered canopies and other late-successional characteristics more quickly. An alternative was considered that would have thinned the majority of the midseral Late Successional Reserves throughout the project area to low densities. This alternative differed from Alternative 3 in that more acres would have been thinned to low densities. Specifically, the Rader Wolf and Cougar subwatersheds were included in this alternative, which contain a large proportion of late successional habitat and northern spotted owl nest sites in adjacent late-successional forest stands. However, due to the smaller size of these mid-seral stands and their proximity to existing late successional habitat, on the ground logistics of implementing a low density prescription would not have been practical without potentially affecting the integrity of adjacent suitable habitat. This alternative was therefore dropped from consideration. The need for accelerating the development of late-successional habitat in the larger blocks of mid-seral forest stands remained. The need for variable densities within stands was considered and resulted in the following adjustments.

Adjustments Made: The application of low residual density thinning would be guided by project design features to meet long-term late-successional habitat and stand variability. Examples of what would create variable stand density and reduce the amount of low residual density thinning include:

- No-harvest buffers or high residual density thinning will be placed adjacent to contiguous blocks of existing late-successional habitat that are outside the harvest boundaries. No harvest means that some trees may be felled in these areas to create or enhance habitat but trees will not be commercially removed.
- > One hundred foot no-harvest buffers will be placed around fish bearing streams

- ➤ Variable no-harvest buffers will be placed around non-fish bearing streams
- No-harvest buffers or high residual density thinning will be placed around areas of slope instability and around special habitat areas.
- ➤ Prescriptions for tree marking will be designed to create variable spacing of remaining trees. Examples include occasionally leaving clumps of unthinned trees, thinning around large limbed trees, and varying the spacing to select a tree of particular species and/or growth form.

Snags and Coarse Woody Debris

Public comments were received that expressed concern about the amount of snags and coarse wood left after harvest is completed.

Consideration Given: The South Coast-Northern Klamath Late-Successional Reserve Assessment (LSRA) was reviewed. In reviewing the LSRA, the purpose of snags and coarse woody debris in the short and long-term development of late-successional habitat was considered. Language in this Decision clarifies what would be done to retain and create snags and coarse woody debris.

Adjustments Made:

Within Late-Successional and Riparian Reserves, snags will be retained or created in the following manner in accordance with the LSRA guidance:

- ➤ Snags greater than 20 inches DBH and 16 feet tall will be located and counted on a stand-by-stand basis.
- > Tree marking will be designed to protect existing snags to the extent possible.
- Those that pose a safety concern will be cut and left for coarse woody debris (CWD).
- ➤ If there are less than three snags on north slopes and one snag on south slopes, snags will be created from the larger diameter class of existing live trees to meet the minimum interim needs.

Within Late-Successional and Riparian Reserves, CWD will be retained or created in the following manner in accordance with the LSRA guidance:

- ➤ All existing CWD will be retained.
- Approximately two trees per acre will be felled for additional CWD.

New Road Construction Overall Effects

Public comments were received that expressed concern about new roads and their impact to hydrology, weed dispersal, landslide risk, and sedimentation.

Consideration Given: An alternative was considered with no new road construction. A SEDMODL comparison of no new road construction compared to the road construction in Alternatives 2 and 3 showed that there was only a 1% analytical difference in sediment delivery rates to streams. For road planning the RMP, page 130, gives the objective: "To plan road systems in a manner that meets resource objectives and minimizes resource damage." The LSRA, page 95, also gives a road management guideline to, "Avoid construction of new roads or upgrading of naturally closed roads through large contiguous stands unless there are no feasible alternatives." These objectives do not

preclude road construction but seek to balance the resource and implementation needs. The timber sale planner in coordination with the other interdisciplinary team members developed a combination helicopter, cable and ground based logging plan that is practically feasible and meets the RMP objectives. It also meets the need of being cost effective. The project design features for new road construction prevent impacts to hydrology, weed dispersal, landslide risk, and sedimentation.

Adjustments Made: No adjustments have been made other than those described above.

New Road Construction Effects on Habitat Fragmentation

Public comments were received that expressed concern about how new roads fragment latesuccessional habitat.

Consideration Given: Analysis showed that fragmentation of late-successional habitat would be very small in comparison to the total project area. Short-term effects of new roads to threatened and endangered species was considered in the EA and mitigated with project design features.

Adjustments Made: No adjustments have been made other than those described above.

Patch Opening Size

Public comments were received that expressed concern about creating patch openings in Late Successional and Riparian Reserves greater than one-quarter acre as recommended in the LSRA.

Consideration Given: In considering this concern, the LSRA guidance was reviewed as well as recent research about patch size openings in old growth forests. As per the guidance from the LSRA, the maximum patch opening size within Late-Successional and Riparian Reserves would be one-quarter acre. If research shows that larger patch openings are more in line with late-successional forest habitat, then exemptions to the one-quarter acre limit would be sought through the proper administrative channels. A recent review has shown that patch openings in late-successional forests average about one acre and range between one-quarter and two acres in size (pers. comm. Chris Langdon). The LSRA is considered guidance to be supplemented by research. Seeking exemptions to the guidance in line with research is appropriate for activities in Late-Successional and Riparian Reserves.

Adjustments Made: No adjustment has been made to the decision. Most applications of patch openings will not exceed the one-quarter acre size. However an exemption will be sought through the Regional Ecosystem Office if project design of any thinning seeks patch-opening sizes that are greater than one-quarter acre.

Noxious Weeds

The presence and spread of noxious weeds has been expressed as a concern in public comments received for this EA.

Consideration Given: The EA addressed this concern through the application of project design features to prevent the spread of noxious weeds as well as pre-project surveys to locate and treat noxious weed infestations.

Adjustments Made: No adjustment has been made to the decision.

As provided for in the Upper Umpqua Watershed Plan decision signed October 8th, 2003; the public was given notice through the Winter 2004 *Roseburg District BLM Planning Update* of the pending decision for TheIncredibleHolt density management timber sale. In addition, a letter and map of TheIncredibleHolt was sent to Umpqua Watersheds, Inc. (UW). A letter was received from UW. Two concerns were noted. One concern was that snags would not be adequately protected and that decommissioned spurs should be planted with trees.

Snag Protection

Response: Tree marking was designed to protect existing snags to the maximum extent possible. It has been the normal practice for tree markers to reserve mark trees near snags to provide some minimal level of protection. In many cases there are no trees nearby that could be marked (e.g., the snag is in a gap opening). Buffers could be marked around each snag but this would make the unit impractical to log. The BLM has had success in retaining as many of these trees as possible in recent logged sales. Additionally, units are marked to "thin from below" which means that the smallest trees are removed and the larger trees retained. This prescription will result in the larger trees being provided for future snag recruitment.

Tree Planting of Decommissioned Spurs

Response: The spurs to be decommissioned will not be planted with tree seedlings but will only be mulched with native grass. Due to the natural seed-in of conifer species, it is expected that these spurs will become naturally stocked with trees.

SECTION 5 – PROTEST PROCEDURES

As outlined in 43 CFR § 5003 Administrative Remedies, protests may be filed with the authorized officer within 15 days of the publication date of the Notice of Decision in the *News Review*. Protests shall be filed with the authorized officer (Marci Todd) and shall contain a written statement of reasons for protesting the decision and specifically state which portion or element of the decision is being protested and cite applicable Code of Federal Regulations (CFR) pertinent to the point(s) of protest. Protests received more than 15 days after the publication of the Notice of Decision are not timely filed and shall not be considered. Upon timely filing of a protest, the authorized officer shall reconsider the decision to be implemented in light of the statement of reasons for the protest and other pertinent information available to him. The authorized officer shall, at the conclusion of his review, serve his decision in writing to the protesting party. Upon denial of a protest the authorized officer may proceed with the implementation of the decision.

Forest Management Regulation 43 CFR 5003.2 states that "[w]hen a decision is made to conduct an advertised timber sale, the notice of such sale shall constitute the decision document." This decision does not include the advertisement of any timber sales. The specific timber sale notices will be placed in *The News Review* at the time of advertisement and an opportunity to protest will be provided at that time.

For further information, contact Marci Todd, Field Manager, Swiftwater Field Office, Roseburg
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440-4931.

Marci L. Todd, Field Manager
Swiftwater Field Office

Date