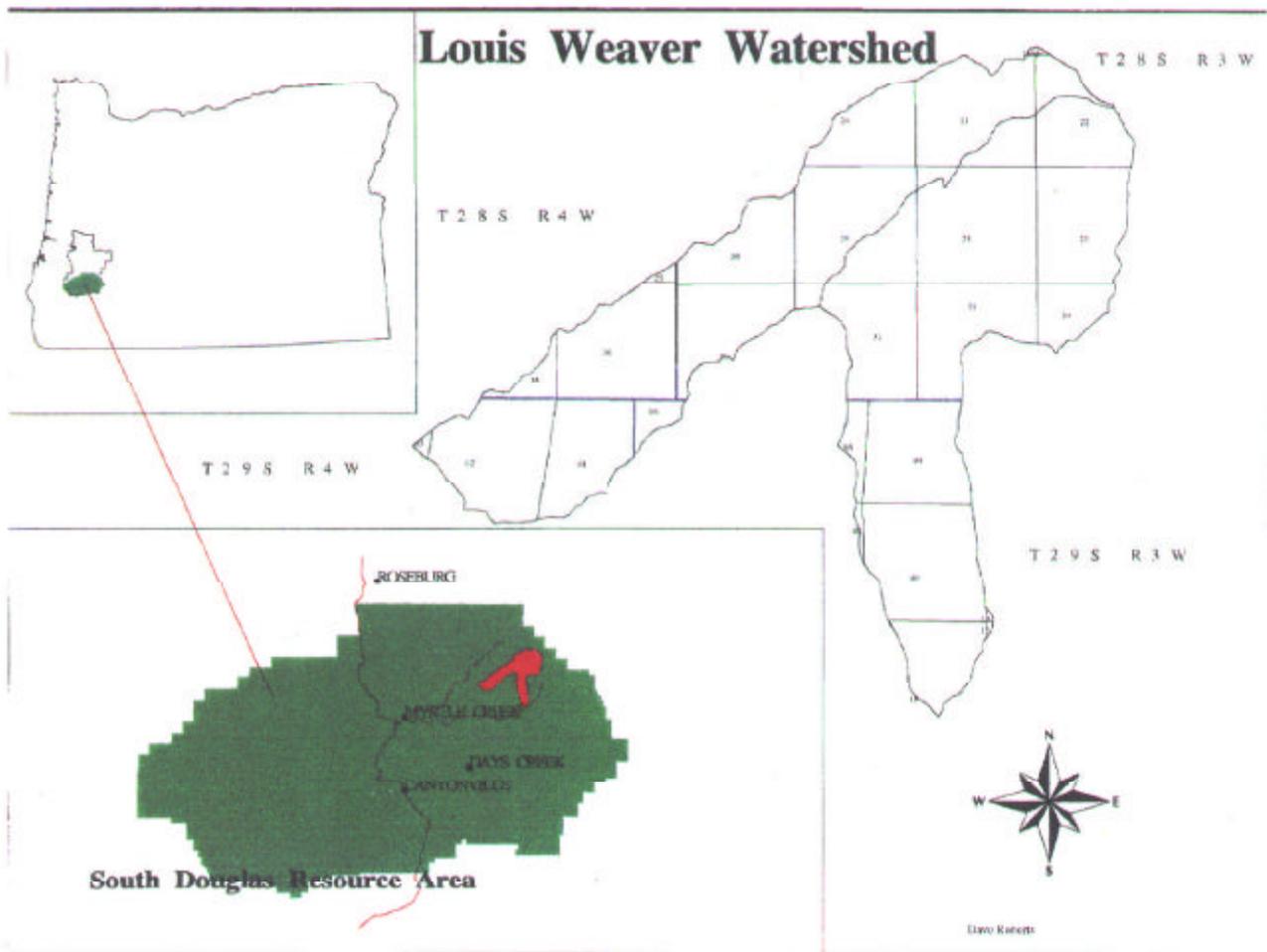


LOUIS WEAVER TIMBER SALE

Environmental Assessment
OR105-96-04

South Douglas Resource Area
Roseburg District BLM

T28S R3W Sections 20,21,22,29,30,31,32



February 7, 1996

Table of Contents

Chapter 1

Purpose of and Need For Action	1
I. Decisions To Be Made	1
II. Scope of Analysis	1
III. Permits, Licenses, and Related Laws	2

Chapter 2

Discussion of Alternatives	
I. Process Used to Formulate Alternatives	2
II. Alternative Considered but Eliminated from Detailed Analysis	3
III. Project Design Features	3
IV. Description of Alternatives	4
Table 1-Comparison of Alternatives	5

Chapter 3

Existing Environment	
I. Wildlife	
A. Special Status Species	5
Table 2-Northern Spotted Owl Suitable Habitat-Prior to Harvest	6
II. Special Status Plants	7
III. Vegetation/Timber Resources	7
IV. Water Resources/Riparian/Fish	7
V. Soils	9
VI. Cultural Resources	9

Chapter 4

Environmental Consequences	
Alternative 1-No Action	9
Alternative 2-Proposed Action	
I. Wildlife	
A. Special Status Species	10
Table 3-Northern Spotted Owl Suitable Habitat-Consequences	11
II. Special Status Plants	11
III. Vegetation/Timber Resources	12
IV. Water Resources/Riparian/Fish	12
V. Soils	13
Cumulative Impacts of the Proposed Action	13
Monitoring	13

Chapter 5

List of Preparers 14

Chapter 6

List of Agencies and Persons Contacted 15

Appendix A-Maps

Original Proposal A-1

Alternative Considered and Eliminated A-2

Alternative 2-Proposed Harvest Areas A-3

Appendix B-Critical Elements of the Human Environment Checklist B-1

Literature Cited 16

Chapter 1

PURPOSE AND NEED FOR ACTION

The South Douglas Resource Area of the Roseburg District of the Bureau of Land Management (BLM), proposes a timber harvest in the Upper South Myrtle Watershed Analysis Unit (USMWAU) of the South Umpqua Basin. The watershed consists of the Upper Louis, Letitia and Weaver Creek(s) sub-watersheds. The legal description is T28S R3W Sections 20, 21, 22, 29, 30, 31, & 32 (reference vicinity map, front cover). The proposed project area is located within the Matrix land allocation as described in the April 13, 1994, Standards and Guidelines (S & G's) for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl and Record of Decision (ROD). The S & G's state that most timber harvest and other silvicultural activities would be conducted in that portion of the matrix with suitable forest lands, according to the standards and guidelines. Scheduled timber harvest which contributes to the allowable sale quantity (ASQ), occurs in the Matrix lands. The purpose of this sale is to meet the ASQ for the resource area. The objectives in Matrix are stated in the Roseburg District Record of Decision and Resource Management Plan (ROD/RMP, p. 33).

I. Decisions To Be Made

- A. Which areas should be harvested to best meet the above harvest objective of 6-10 MMBF?
- B. What site specific project design features would be necessary to meet ROD/RMP requirements and meet the director's overall objective of maintaining "Healthy Ecosystems"?

II. Scope of Analysis

The areas proposed for regeneration harvest have been selected following an interdisciplinary screening process that looked at minimizing the impact on active northern spotted owl sites and maintaining older forest habitat connectivity. The proposed harvest will meet the requirement to retain 15% of federal lands as late-successional forest (ROD/RMP, p. 34). In the USMWAU, Riparian Reserves alone comprise 22% late-successional forest. There would be no harvest in reserves for this proposal.

There are no *Survey Strategy 1* (manage known sites) sites for *Special Attention Species* (ROD/RMP, Appendix H, Table H-1) in the project area. Protocols for monitoring are being designed and are to be implemented in 1997 and later for all ground disturbing activities.

The Interdisciplinary Team (IDT) members brought forward concerns related to resources that had the potential of being affected by the proposed action. All concerns were determined to not be significant issues because they would be mitigated through project design and application of Best Management Practices (BMP's), listed in the ROD/RMP (Appendix D). The Critical Elements of the Human Environment were considered and are addressed in Appendix B.

III. Permits, Licenses, and Related Laws

1. The U.S. Fish and Wildlife Service (USFWS) requires consultation for potential effects to threatened and endangered species in the project area, specifically the northern spotted owl.
2. The National Marine Fisheries (NMFS) has been contacted concerning potential effects to the proposed, endangered Umpqua River cutthroat and threatened coastal coho salmon. If the species are listed, consultation will be required for "may affect" actions.
3. The State Historic Preservation Office (SHPO) has been contacted for concurrence of archaeological evaluation for the project as it relates to the National Historic Preservation Act.
4. The contractor would be required to comply with State and Federal laws and regulations concerning storage, handling, use, and disposal of industrial chemicals and other hazardous substances. This would include that all chemicals (including petroleum) be stored in durable closed containers and when necessary provide secondary containment.
5. Pacific yew would be tallied as the sale is cruised. All yew would be reserved from harvest. Prior to site preparation, all yew marketable for taxol production, would be protected.

Chapter 2

DISCUSSION OF ALTERNATIVES

I. Process Used to Formulate Alternatives

The IDT developed a proposed action. There was one alternative developed beyond the proposed action which was "considered and eliminated". Mitigation has been determined and would be incorporated in layout and implementation of the project. The no action alternative will also be analyzed in this EA.

II. Alternative Considered but Eliminated from Detailed Analysis

The proposal was to harvest timber in the USMWAU. Through the "screen" (mentioned in the *Scope of Analysis* section), seven harvest areas were proposed (Reference map-Appendix A-1). Additional acres were proposed by the IDT after field review, because a portion of the originally proposed acres fell within Riparian Reserves and therefore, do not contribute to the volume intended to meet the ASQ for this project. Four additional harvest areas were analyzed. Following is a summary of the status of each of those additional areas:

(Reference map-Appendix A-2)

- Area A - added as unit 7
 - Area B - added as unit 8
 - Area C/D - added as unit 9
 - Area E - dropped due to slope steepness and unstable soils. Harvest would be deferred until the retention trees in the draws are large enough to contribute to soil stability and survive harvest activities.
- Original
- Area 7 - dropped because of slope steepness, and the fact that it primarily consisted of small trees with low volume. These smaller trees had the potential for damage due to the falling of larger trees.

III. Project Design Features

The following features would be incorporated into layout/implementation of the chosen alternative:

- A. The project would be designed to meet the Aquatic Conservation Strategy (ACS) objectives (ROD/RMP, p. 19-20) in Riparian Reserves and Matrix land allocations.

RIPARIAN RESERVES

1. All perennial and intermittent streams, including associated unstable or potentially unstable areas, within the harvest units, would be included in Riparian Reserves. The Reserves would have a width of approximately 160 feet, slope distance, (based on a site potential tree height), on each side of the channel for nonfish-bearing streams and 320 feet for potentially fish-bearing, and fish-bearing streams (Reference maps-Hydrology/Fisheries Report-EA file).

MATRIX

2. Retain 6-8 (GFMA) and 12-18 (Connectivity) green trees/acre greater than 20 inches, diameter breast height (DBH), irregularly scattered and/or grouped.
3. Reserve at least 1.2 existing snags per acre as required in the Proposed Resource Management Plan/ Environmental Impact Statement (PRMP/EIS), Vol. I, 1994, p.4-43).

4. Retain coarse woody debris (minimum of 120 linear feet/acre, greater than or equal to 16 inches (large end) and 16 feet in length (Instruction Memorandum (IM-95-028, 11/94)).
5. Road construction & maintenance would meet standards and guidelines as stated in the S & G's (p. C-32 & 33) and the BMP's listed in the ROD/RMP, p. 129-143.
6. If bats are found, the species would be identified and determination would be made as to the reason the site is being used by the bats. As an interim measure, timber harvest would be prohibited within 250' of sites containing bats (S & G's, C-43).

B. The Reasonable and Prudent Measures outlined in the biological opinion from the USFWS (due no later than April 26, 1996) would be implemented.

IV. Description of Alternatives

Alternative 1-No Action

Harvest would not occur in this location at this time. Harvest would occur in another location within the Matrix lands in order to meet harvest obligations.

Alternative 2-Proposed Action

This alternative consists of nine units located in the southwest quarter of T28S R3W (Reference map, Appendix A-3). Approximately 9.0 million board feet (MMBF) would be cable harvested from 293 acres in GFMA, and 21 acres in Connectivity. There would be 1.1 miles of unsurfaced, temporary roads constructed and decommissioned after use. Decommissioning would include tilling with a winged subsoiler, revegetation for erosion control and restoration of site productivity. There would be approximately 10 miles of road renovation for this alternative including clean-up of the slide on the 29-4-11.0 road. No roads would be constructed in Riparian Reserves. Table 1 (p. 5) summarizes the alternative.

Broadcast burning would be done in units 1, 2, 7, & 9 for site preparation in order to increase plantability and reduce competition to seedlings by providing short term brush control. Prescribed fire treatments would be planned in order to minimize: intensity of burns, consumption of litter and coarse woody debris, damage to residual live trees and snags, and impacts to air quality (PRMP/EIS, Vol. II, Appendix L, p. 63).

Harvest units would be planted within one year of the completion of site preparation. The need for plantation protection, maintenance, and release, would be determined through survival surveys, in order to meet stocking standards.

**Table 1
COMPARISON OF ALTERNATIVES**

NOTE: All values are approximate.

ACTION	ALT #1	ALT #2
ACRES HARVESTED/PLANTED:		
28-3-20	0	42
21	0	18
22	0	55
29	0	39
30	0	81
31	0	57
32	0	21
TOTAL	0	314
TIMBER VOLUME YIELD (MMBF)	0	9.0
TEMPORARY ROAD CONSTRUCTION (Miles) (will be decommissioned)	0	1.1
ROAD RENOVATION (Miles)	0	10
# OF ROAD STREAM CROSSINGS	0	0
ACRES TO BE BROADCAST BURNED	0	205
ACRES TO BE HAND CLEARED	0	109

Chapter 3 EXISTING ENVIRONMENT

This chapter will summarize the existing environment in the project area, prior to project implementation. It will describe the resources site specific to the project area, that may be affected by the alternative.

I. WILDLIFE

About 298 wildlife species (birds, mammals, reptiles, amphibians) are known or suspected to occur in the Roseburg District (PRMP/EIS). An overview of the potential wildlife species in the area has been addressed in the PRMP/EIS (Vol. 1, Chapter 3-24 to 40).

A. SPECIAL STATUS SPECIES

Special Status Animals within the Roseburg District consist of seven (7) mammals, seventeen (17) birds, eight (8) amphibians, and four (4) reptiles and are identified in Table 3-19 of the

PRMP/EIS Vol. 1, Chap. 3-35. Many of the Special Status animals are suspected to occur in the project area although little or nothing is documented on their populations or degree of use in the area. Alteration of habitat through the removal of vegetation would have affects on these animals though specifics are unknown. Only the Northern Goshawk has been surveyed for in 1995 in the vicinity of the project. No birds were detected.

Federally threatened species known to occur in the Roseburg District include the bald eagle, northern spotted owl, and marbled murrelet. The endangered species in the district include the American peregrine falcon, and Columbian white-tailed deer (CWTD). The project area is beyond the range of the murrelet and the CWTD. Feeding habitat for the bald eagle is limited and nesting habitat for the falcon does not exist in the project area (reference Wildlife Biologist Report-EA file).

Of the five threatened or endangered species, only the northern spotted owl is known to occur within the project area. Five owl sites are within 1.2 miles of the project area. There are no harvest acres planned within the 0.7 mile range of the sites. These owl sites are located outside of critical habitat, and were established prior to January 1, 1994. All five sites have designated 100 acre core areas. Based on field surveys, Master Sites Numbers (MSNO) 0292, 0294 and 1811, are occupied and MSNO's 0293 and 1814 are unoccupied (Wildlife Biologist Report, EA file).

Suitable habitat acres on BLM lands within 1.2 miles (median home range of the Cascade Province) of each Master Site center prior to the proposed harvest is shown in the following table:

**Table 2
NORTHERN SPOTTED OWL SUITABLE HABITAT
WITHIN THE 1.2 MI. HOME RANGE
PRIOR TO HARVEST**

MASTER SITE NUMBER	SUITABLE HABITAT
0292	1055 Acres
0293	1032 Acres
0294	726 Acres
1811	1272 Acres
1814	1450 Acres

 = Occupied owl site

Sixty-one percent of the federal land in the SW quarter of T28S R3W is dispersal habitat. The SE quarter is 76 percent dispersal habitat. The two quarter townships are above the 50 percent level needed to meet the standard for dispersal habitat (reference Wildlife Biologist

Report, p. 3-EA file).

The snag component of the stands in the project area is estimated to be below the minimum 1.2 snags per acre requirement (PRMP/EIS 4-43) prior to harvest. Numerous woodpecker and bat species known or suspected to occur in the project area are dependent on snags as a part of their habitat requirements. No suitable bat roosts or hibernacula sites (caves, mines, wooden bridges or other structures) were located during field reviews.

II. SPECIAL STATUS PLANTS

The following list of Special Status Plants have been documented in the South Douglas Resource Area and have the potential to occur in the project area: Aster vialis, Astragalus umbraticus, Cypripedium montanum, and Polystichum californica. This list is not all inclusive, other Special Status plants could occur.

III. VEGETATION/TIMBER RESOURCES

Douglas-fir is the predominant overstory species in all units. Incense cedar, sugar pine and grand fir are also present. Hardwoods present in the units include madrone, chinkapin and big leaf maple. Brush and ground vegetation includes; canyon live oak, ocean spray, huckleberry, manzanita, salal, Oregon grape, sword fern and bear grass. Down woody debris is present in most of the units. Madrone fuelwood harvesting and mortality salvage have occurred in unit 1. There are two Douglas-fir plus trees present in units 3 and 5 (#'s 4039 and 4513 respectively). Tree #4513 is marked for cleaning which entails cutting adjacent trees and brush from around the plus trees in order to alleviate competition, enhance cone production and limit access to the cones by squirrels.

IV. WATER RESOURCES/RIPARIAN/FISH

The Upper South Myrtle Watershed Analysis (USMWA) has been completed for the area in which the project is located. The proposed activity is outside of the Coastal Zone Management Area. There are no registered water rights within one mile downstream of the proposed project area.

The Upper South Myrtle Watershed contains approximately 159 miles of streams that are considered to be perennial and fish-bearing. There are approximately 94 miles of intermittent streams (USMWA). The watershed contains 176 miles of roads and trails with a total of 98 miles on BLM land. Road density within the watershed is 4.2 miles/sq. mile for all lands, and 3.9 miles/sq. mile for BLM land. Elevations range from 1000 to over 4500 feet. The Upper South Myrtle Watershed is divided into eight sub-watersheds. Approximately 298 acres of the 314 project acres are located in the Upper Louis Creek sub-watershed and approximately eight acres each are located in the Weaver Creek and Letitia Creek sub-watersheds.

Upper Louis Creek sub-watershed-The upper portion of this sub-watershed is managed by BLM and the lower portion is intermingled (private and BLM) ownership. Louis Creek is a fourth-order fish-bearing stream with perennial and intermittent tributaries. Fish surveys in June 1995 indicated presence of cutthroat trout in the headwaters of Louis Creek. Data indicates that coastal coho salmon also utilize this sub-watershed. Phankuch surveys (June 1995) indicated sediment within the pools, riffles and stream bottom. Road density in this sub-watershed is currently 5.52 miles per square mile and there are 2.07 stream crossings per stream mile. Based on field reviews, ditches along the roads have diverted water into intermittent and ephemeral draws causing downcutting and increased sedimentation. There is a slide blocking the 29-4-11.0 road which is a source of sediment to Louis Creek. In addition to sediment from roads, alluvial and colluvial fans along the floodplain suggest that, historically, small landslides have contributed sediment into this stream channel. The slides are found in both harvested and non-harvested areas and along roads in this sub-watershed.

Past timber harvesting in this sub-watershed does not appear to have significantly increased peak flows. There is a wide intact floodplain and waterflow does not appear to have overtopped the streambanks nor exceeded channel capacity. Vegetative cover along the stream banks is also in good condition. No stream temperature data has been collected.

Of the approximately 298 proposed harvest acres within this sub-watershed, approximately 160 acres are within the Transient Snow Zone (TSZ; is defined as the elevation range between 2000 and 5000 feet). Timber harvest in the TSZ has the potential to increase peak flows due to rain-on-snow events. In 1990, the Umpqua National Forest developed Hydrologic Recovery Procedures (HRP) which are used in *estimating* cumulative effects of peak flows in the TSZ. According to the HRP, if more than 25% of a sub-watershed has been harvested in the TSZ, there is a *potential* for cumulative impacts due to peak flows. Currently, the HRP results indicate that this watershed is 67% recovered assuming site class III, and 61% assuming site class IV (both site classes occur in the project area).

Weaver and Letitia Creek sub-watersheds-The upper portion of Weaver Creek sub-watershed is managed by BLM and the lower portion is intermingled ownership. The Letitia Creek sub-watershed is approximately two-thirds privately owned with the remainder being BLM ownership. Both Weaver and Letitia Creeks are fifth-order fish-bearing streams. Coho and cutthroat are present in these sub-watersheds, however there are no fish-bearing streams within the harvest areas. Past management activities have affected these two sub-watersheds in ways similar to Upper Louis Creek, with regards to sedimentation, due to roads, timber harvest, and presence of granitic soils. During electroshocking surveys in June and July of 1995 in both streams, large amounts of sediment filling pools in the headwaters were observed. All of the approximately 16 proposed harvest acres within these two sub-watersheds are within the TSZ.

Other Sensitive Fish Species-The Umpqua chub (*Oregonichthys kalawatseti*) is a Federal Candidate 2 (FC 2) species, with the *need for additional information* in order to propose this species for listing as *threatened* or *endangered* under the ESA (ONHP 1993). In the Markle study (1989), no chub were collected within the boundaries of the USMWAU. However, the existence of the chub within the mainstem of the South Umpqua suggests the potential for this species to utilize the accessible lower gradient tributaries located within the USMWAU.

V. SOILS

The harvest area is within the Klamath Mountain Geologic Province. The geology is mapped as Jurassic Volcanic Rocks. This includes andesitic breccias and flow rocks of the Galice Formation, Rogue Formation and Dothan Formation.

Units 1-6, 8 ~~and 9~~ are comprised of granitic soils. These sandy loam, loam, and gravelly loam soils are on slopes that are steep (35-65%) and very steep (65-90%). The soils are normally well drained. Deep seated unstable areas and shallow seated unstable areas are common in these sections.

Unit 7 is comprised of a mixture of soils from colluvium and residuum from volcanic and granodiorite. These gravelly loam soils are also steep and very steep.

Eroding and/or malfunctioning ditchlines and eroding cutbanks on both surfaced and unsurfaced roads are contributors of sediment to the stream system. Refer to the South Douglas Hydrologist report for more detailed information on existing road conditions.

VI. CULTURAL RESOURCES

There are no known cultural resources affected by this action. SHPO concurrence is pending.

Chapter 4

ENVIRONMENTAL CONSEQUENCES AND RECOMMENDED MITIGATION

This chapter is the scientific and analytic basis for the alternative comparisons.

Alternative 1 - No Action

No regeneration harvest would be conducted. Existing habitat conditions would be maintained for mature or old-growth species. There would be no anticipated impacts to potential populations of plant species other than by natural selection. The stands would continue to age with concurrent growth in diameter and height. Stand damage resulting in small natural openings would continue to occur as a result of minor disturbances such as wind, insects and disease. If very little growing space is released through disturbance, vigorous residual trees would soon occupy available space and prevent the establishment of new seedlings. Cumulative, small scale disturbances may create site conditions that are favorable for the regeneration of conifers, hardwoods and brush that would initiate a secondary canopy layer. Depending on available growing space, this new layer may soon

become suppressed and remain on the forest floor stratum as advanced regeneration or may grow to become a major component of the overall stand (Oliver 1990). If major disturbance such as fire continues to be excluded, conditions over time could be conducive to a stand replacement fire.

This project follows the district RMP management direction and if not harvested at this time, it would be within 10-50 years, under the guidelines of this plan. No roads would be constructed or renovated. Soil surface erosion, slope stability and Riparian Reserves within harvest units, would not be affected beyond existing conditions. The existing road system would continue to degrade and not comply with ACS objectives. There would be no increase in peak flows in this WAU, above current levels. There would continue to be hydrologic recovery in the TSZ.

Alternative 2 - Proposed Action

I. WILDLIFE

Habitat manipulation is the primary influence which impacts all animal species inhabiting or using the project area. The impacts which could be anticipated from timber harvest activities are discussed in the (PRMP/EIS, p. 4-36 to 47).

Road construction would impact wildlife by direct elimination of vegetation within the right-of-way. Indirect impacts to wildlife could also be anticipated due to increased human access (PRMP/EIS, p. 4-38 & 39). It is recommended that road construction in the project area be limited to temporary spurs. This would minimize disturbance to wildlife in the long term.

A. SPECIAL STATUS SPECIES

Because the murrelet, CWTD, bald eagle, and peregrine falcon have not been found or are not expected to occur in the project area, impacts to these species are considered a "no affect".

This alternative would minimize the impacts of the removal of suitable spotted owl habitat within the home ranges of the owl sites in the project area. The harvest units are generally located near the outer limits of the home ranges. Unit placement allows for the remaining suitable and dispersal habitat to have a high level of connectivity between the Upper South Myrtle and Upper North Myrtle watersheds.

The proposed action would remove 314 acres of suitable owl habitat and impact five owl sites which would result in a "may affect" determination within the 1.2 mile provincial home ranges. For MSNO's 0292, 0293, 0294 and 1811, a "*may affect-likely to adversely affect*" determination has been made because habitat would be reduced below the 1182 acre (40%) threshold. For MSNO 1814, a "*may affect-not likely to adversely affect*" determination has been made. This site will remain above the 1182 acre threshold.

This alternative would result in the reduction of the snag component of the stands in the

project area. This would result in loss of foraging, roosting and nesting habitat, for woodpeckers, bats and other cavity-dependent species. Protection of snags within the units and along boundaries should be emphasized. As a mitigation to replace snags lost during harvest, one to two additional large, green, cull trees per acre should be added to the required 6-8 retention trees to provide for further snag recruitment in the short and long term. Retention tree placement to protect snags which are not a safety hazard, would minimize the loss of snags during project completion.

Table 3
NORTHERN SPOTTED OWL SUITABLE HABITAT
WITHIN THE 1.2 MI. HOME RANGE
CONSEQUENCES
 (Acres)

**NOTE: All values are approximate.

MASTER SITE NUMBER	SUITABLE HABITAT WITHIN 1.2 MILES PRIOR TO HARVEST (ACRES)	SUITABLE HABITAT REMOVED FROM HOME RANGE (ACRES)	SUITABLE HABITAT REMAINING AFTER HARVEST (ACRES)	MAY AFFECT-	MAY AFFECT-NOT LIKELY TO ADVERSELY AFFECT	MAY AFFECT-LIKELY TO ADVERSELY AFFECT
0292	1055 ¹	80	975	X		X
0293	1032 ¹	109	923	X		X
0294	726 ¹	56	670	X		X
1811	1272	157	1115 ²	X		X
1814	1450	79	1371	X	X	

 = Occupied owl site

¹ These acres are below the 1182 acre incidental take threshold.

² These acres (after harvest) would be below the 1182 acre threshold.

Dispersal habitat will remain above the necessary 50% level after removal of 259 acres from the SW quarter of T28S R3W and 55 acres from the SE quarter of that township.

The above impacts fall within the range expected, as described in the ROD/RMP, and as such are not considered significant issues.

II. SPECIAL STATUS PLANTS

Field surveys would be conducted during the blooming season, prior to harvest to verify occurrence. Special Status plant populations would be buffered to protect them from timber

harvest and surface disturbance.

III. VEGETATION/TIMBER RESOURCES

All impacts have been analyzed in the PRMP/EIS Vol. I, Chapter 4-33 (Effects on Vegetation) and 4-79, 4-80 (Effects on Timber Resources).

Additional recommended mitigation includes selecting a natural species mix of retention trees to include; Douglas-fir, sugar pine, grand fir, and incense cedar, as well as occasional large madrone, chinkapin and big leaf maple. Retention trees in units 3-6 and 8 should be selected with consideration as to which are potentially good seed producers (good form and full crowns). These units have limited site preparation options and this would increase the natural regeneration component for reforestation.

Where topographically feasible, large reproduction pockets should be firetrailed "out" to avoid damage during broadcast burning. Retention trees could also be clumped in all units, around the pockets in order to minimize damage during falling/yarding. Directionally fall timber away from reproduction pockets in all units to maintain the integrity of the existing regeneration.

Units 1, 2, 7 & 9 would be broadcast burned in order to increase the number of potential planting spots, reduce competition to seedlings, and provide short term brush control. Units 3-6 & 8 would be hand cleared (3'x3' area) down to mineral soil, for individual planting spots. Regeneration would occur through planting and/or natural seeding. Utilization of planting stock with well developed root systems would enhance survival. Planting stock would include: Douglas-fir, sugar pine, grand fir and incense cedar. Paper mulching seedlings at time of planting would suppress grass and other competing ground vegetation.

IV. WATER RESOURCES/RIPARIAN/FISH

No significant direct impacts to the hydrologic system are expected. Road densities would not be increased, and indirect impacts due to road construction should not be significant because roads would be decommissioned in the same season. Riparian Reserves should protect the draws from harvest activities. Green retention trees would be left adjacent to wet areas less than one acre in size (reference map-Hydrologist/Fisheries report-EA file).

Cumulative impacts could include increased peak flows during rain-on-snow events from harvest in the TSZ in the Upper Louis sub-watershed. This potential increase in peak flows could cause downcutting in stream channels, and transport sediment downstream which is currently stored in the channel. These impacts are not expected to be significant due to the fact that only a portion of this sub-watershed is in the TSZ and there is no evidence that previous management activities have increased peak flows to alter stream morphology to a significant level. In the Weaver and Letitia Creek sub-watersheds the limited harvest acres (8 acres per sub-watershed) minimize the potential for significant impacts related to peak

flows.

After harvest, assuming site class III the area would be 55 percent recovered based on the HRP, and 50 percent recovered assuming site class IV. Within the next 10 years, the Upper Louis Creek sub-watershed could be recovered to 76 percent (site class III) and 68 percent (site class IV), assuming no additional harvest.

As stated in the PRMP (Chapter 4-49), with regards to fisheries, "the Final SEIS concluded that Alternative 9 would result in a strong likelihood of providing sufficient aquatic habitat to support stable, well distributed populations of these races/species/groups". By applying the standards and guides outlined in Alternative 9 of the Final SEIS and the BMPs for road construction and timber harvest (ROD/RMP 1995), the ACS objectives should not be compromised by the proposed land management activities and the fisheries resource should be protected. The impacts discussed above for fisheries and water resources have been analyzed in the PRMP/EIS (Vol. I, Ch. 4) and as such are not considered significant.

V. SOILS

Site specific mitigation includes; dry season harvest with full suspension on units 3-6, 8 and 9 and one end suspension where full suspension is limited due do topography. Green retention trees would be left adjacent to draws, headwalls, depressions, drainageways, and unstable areas that do not qualify for a Riparian Reserve (reference map-Soils Report-EA file). Also, fell and yard harvested trees away from these areas, as well as Riparian Reserves, to help maintain and protect the integrity of these areas.

With the application of PDF's and the above mitigation, there would be no impacts beyond those already analyzed in the PRMP/EIS (Vol. I, Ch. 4). Refer to Soils (4-12 to 17), Water Resources (4-17 to 22), Riparian Zones (4-34 through 36) and Timber Resources (4-75 through 81).

Cumulative Impacts of the Proposed Action

The PRMP/EIS (Vol. I, Ch. 4-7 to 4-100) discusses cumulative impacts of activities implemented collectively throughout the district. These impacts result from past, present, and reasonably foreseeable activities on BLM lands and other lands (other public & private).

There are other BLM harvest activities (approximately 700 acres) planned in the USMWAU in the reasonably foreseeable future.

Monitoring

Monitoring would be done in accordance with the ROD/RMP (p. 84).

Chapter 5

LIST OF PREPARERS

Name	Title	Resource or Discipline	Signature	Date
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Todd Kuck	Forester/ Hydrologist	Hydrology	<i>Todd Kuck</i>	2-9-96
Frank Oliver	Wildlife Biologist	Wildlife/T & E Species	↓	↓
Melanie Roan	Wildlife Biologist	Wildlife/T & E Species	<i>Franklin M. Oliver</i> <i>Melanie Roan</i>	2/9/96 2/8/96
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Gary Basham	Special Status Plant Coordinator & Natural Resource Specialist	Special Status Plants & Soils	<i>Gary Basham</i>	2/8/96
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Jay Besson	Plans Forester	Planning	<i>Jay Besson</i>	2/8/96

Analysis Compiled By: *Sigrid Barron* 2/8/96
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 Environmental Coordinator

Chapter 6

LIST OF AGENCIES AND PERSONS CONTACTED

This project will be included in the Roseburg BLM Project Planning Update (Winter 1995-96).

1. Agencies & Persons Contacted:

- Coast Range Association
- Confederated Tribes of Grand Ronde
- Confederated Tribes of Siletz Indians
- Cow Creek Band of Umpqua Tribe of Indians
- Lone Rock Timber Company
- National Marine Fisheries Service
- Oregon Department of Fish and Wildlife
- Pacific Rivers Council
- Seneca Jones Timber Company, LTD.
- Umpqua Watersheds
- US Fish and Wildlife Service

2. The following agencies, organizations, and individuals would be notified of the completion of the EA/FONSI:

- Lynda Blumenthal
- Division of State Lands
- Douglas County Board of Commissioners
- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Land Conservation & Development
- US Environmental Protection Agency
- US Fish and Wildlife Service
- Umpqua Regional Council of Governments

A notice of decision would be published in the News Review if the decision is made to implement the project.

LITERATURE CITED

Markle, Douglas F., et. al. 1989. Taxonomic status and distribution survey of the Oregon chub - A Final Report Submitted to the Oregon Department of Fish and Wildlife. Corvallis, Oregon. Department of Fisheries and Wildlife, Oregon State University.

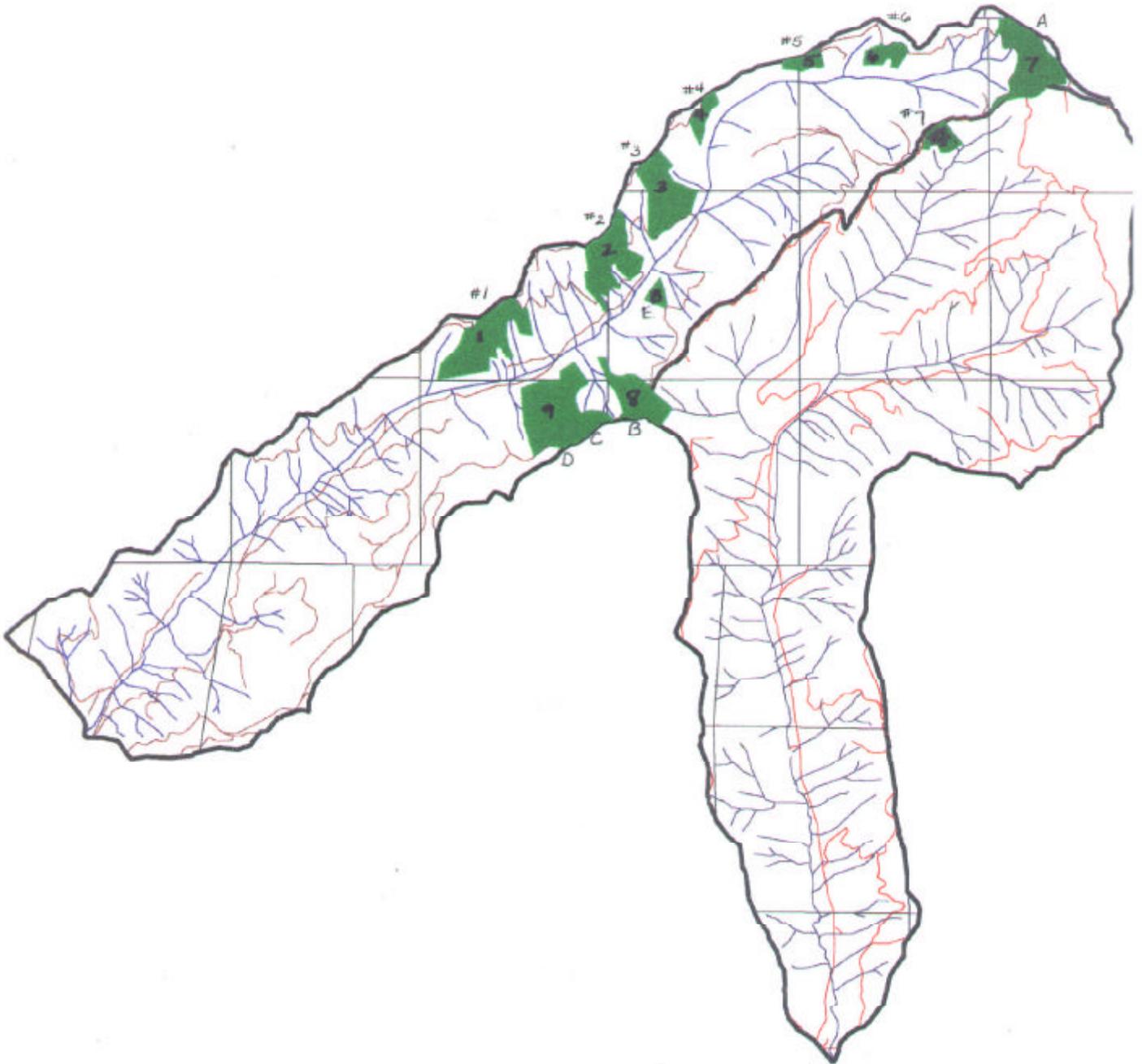
Oregon National Heritage Program. 1993. Rare, Threatened and Endangered Plants and Animals of Oregon. Oregon National Heritage Program. Portland, Oregon.

Oliver, Chadwick D. and Larson, Bruce C. 1990. Forest Stand Dynamics.

Umpqua National Forest. 1990. Standard and Guideline Procedures for Watershed Cumulative Effects and Water Quality. Prepared by the Umpqua National Forest. Roseburg, Oregon.

APPENDIX A

MAPS

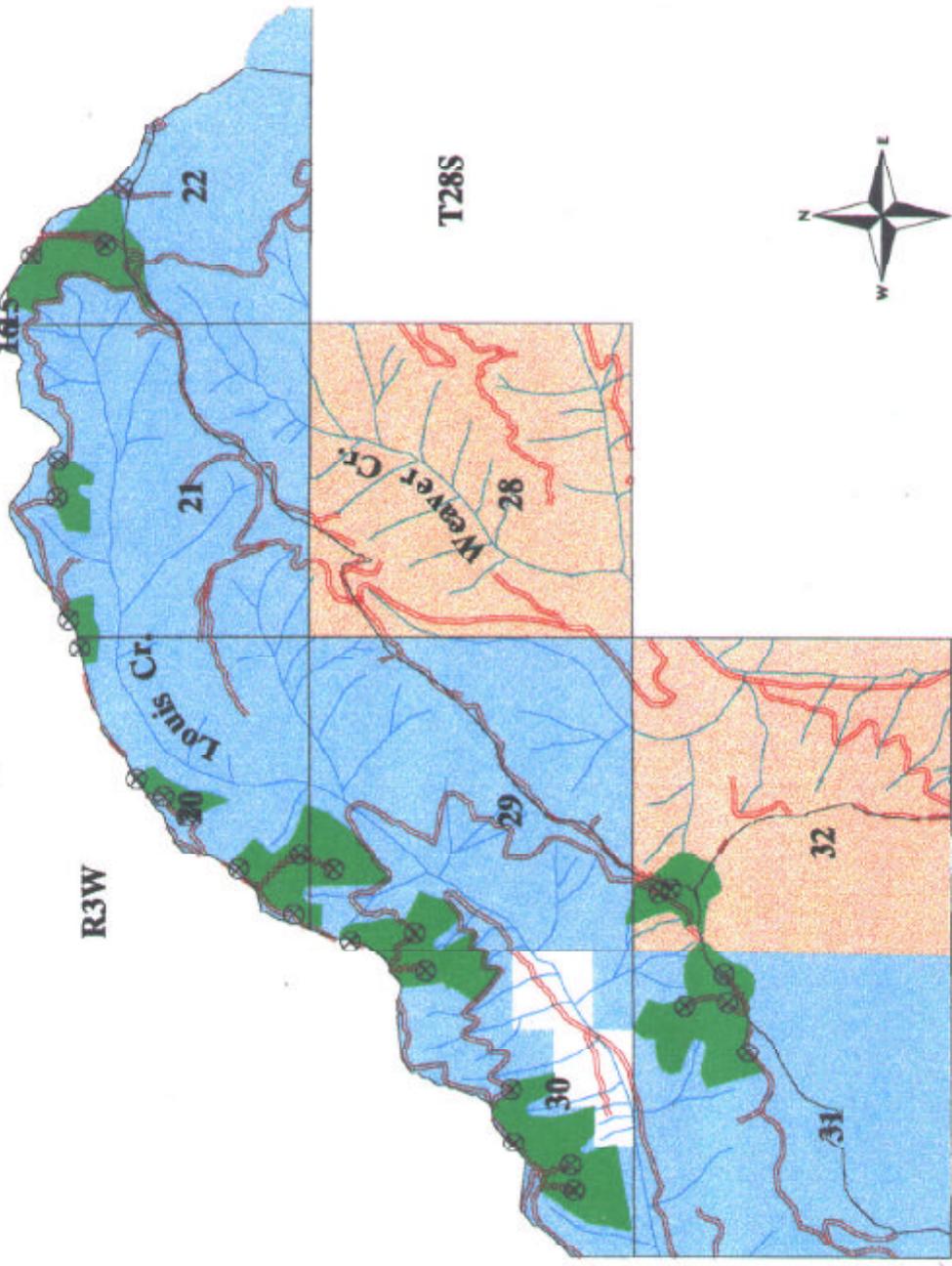


Proposed Harvest Areas



Legend

- GFMA
- CONN
- Proposed Units
- Streams
- Roads
- New Const.
- ⊗ Landings



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APPENDIX B

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order.

These resources or values are either **not present** or **would not be affected** by the proposed actions or alternative, unless otherwise described in this EA. This negative declaration is documented below by individuals who assisted in the preparation of this analysis.

ELEMENT	NOT PRESENT	NOT AFFECTED	IN TEXT	INITIALS	TITLE
Air Quality		X		WFA	Fuels Mgmt Specialist
Areas of Critical Environmental Concern	X			ES	Env. Coord.
Cultural Resources	X			AKS	District Archaeologist
Farm Lands (prime or unique)	X			DEA	SOIL SCIENTIST
Floodplains		X		DEA	SOIL SCIENTIST
Native American Religious Concerns		X		JSB	Plans Forester
Threatened or Endangered Wildlife Species			X	MRRR FCH	Wildlife Biologist FISHERIES BIOLOGIST
Threatened or Endangered Plant Species			X	JSWB	Special status plants
Wastes, Hazardous or Solid			X	SAW	HAZMAT COORD.
Water Quality Drinking/Ground		X		R	FORESTER/HYDROLOGY
Wetlands/Riparian Zones		X		DEA	SOIL SCIENTIST
Wild & Scenic Rivers	X			ES	Env. Coord.
Wilderness	X			ES	" "
Visual Resource Management		X		DBM	Outdoor Rec. Planner