

Annie's Cabin Thinning

Final Decision and Decision Rationale

Environmental Assessment Number OR080-04-20

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United States Department of the Interior
Bureau of Land Management
Oregon State Office
Salem District
Cascades Resource Area

Township 6 South, Range 3 East, Sections 7, 18, 19, 30, 31 and
Township 7 South, Range 3 East, Sections 5 and 6, Willamette Meridian
Upper Molalla River 5th field Watershed
Clackamas County, Oregon

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Table of Contents

1.0 Introduction.....	3
2.0 Decision	3
3.0 Alternatives Considered	6
4.0 Decision Rationale	8
5.0 Compliance with Direction.....	9
6.0 Public Involvement/ Consultation/Coordination.....	14
7.0 Conclusion	16
8.0 Comparison of the Proposed Action and Selected Action Units.....	21
9.0 Maps.....	22
10.0 Project Design Features	26
11.0 Compliance with Survey and Manage Direction.....	28
12.0 Response to EA Comments	35

List of Tables

Table 1: Summary of EA Proposed Action and the Selected Action.....	3
Table 2: Comparison of the Alternatives with Regard to the Purpose of and Need for Action	6
Table 3: Comparison of the Proposed Action from the EA and the Selected Action by Unit.....	21

List of Maps

Map 1: Selected Action - North Half	22
Map 2: Selected Action - South Half	23
Map 3: Fuel Treatments - North Half	24
Map 4: Fuel Treatments - South Half	25

BLM/OR/WA/PL-06/004+1792

1.0 Introduction

Bureau of Land Management (BLM) has conducted an environmental analysis for the Annie’s Cabin thinning project, which is documented in the *FY 2006 Timber Sale Thinning Environmental Assessment* (2006 Thinning EA, # OR080-04-20) and the associated project file. The Annie’s Cabin “EA Proposed Action” would thin 40-100 year old mixed conifer timber stands within the Matrix Land Use Allocation (LUA) and within the adjacent Riparian Reserve LUA. A Finding of No Significant Impact (FONSI) was signed on July 19, 2005 and the EA and FONSI were then made available for public review.

2.0 Decision

I have decided to implement the Proposed Action of the Annie’s Cabin Project as described in the EA (EA pp. 15-21, 51-54) with modifications. This decision is based on site-specific analysis in the *FY 2006 Timber Sale Thinning Environmental Assessment* (EA # OR080-04-20), the supporting project record, public comment, and management recommendations contained in the *Upper Molalla Watershed Analysis*; as well as the management direction contained in the *Salem District Resource Management Plan*, May 1995 (RMP), which are incorporated by reference in the EA. This Decision, incorporating the modifications I have decided to make, is summarized in this section of the Decision Rationale (DR), and is hereafter referred to as the “selected action”.

DR Table 1 summarizes the original Proposed Action, as described in the EA, and the Selected Action. Changes between the EA proposed action and the selected action are also displayed in *DR section 8.0 (DR Table 3)*. Maps of the Selected Action can be found in *DR section 9.0*.

Table 1: Summary of EA Proposed Action and the Selected Action

Action			EA Proposed Action	Selected Action
Timber Harvest (acres)	Commercial Thinning within	General Forest Management Area (GFMA) portion of the Matrix LUA	496	481
		Riparian Reserve LUA	70	85
		Subtotal	566	566
	Clearing for Road Rights-of-way and Helicopter Landings (acres)	3	5	
Total			569	571
Logging (Acres)	Yarding	Ground-Based	336	330
		Skyline	230	60
		Helicopter	0	176
		Subtotal	566	566
Road Work (miles)	Road Access	New road construction ¹	0.6	0.6
	Road Renovation	Road Maintenance ²	12	20
Fuel Treatments (acres)	Maintained as fuel breaks (acres) ³		184	See Fuels treatments, <i>DR Section 2.6</i> .
	Mechanical / handpiling slash and burning slash piles		168	

¹ These roads will be left in place, barricaded and seeded after use.

² Roadside brushing, blading, minor repairs, culvert replacement, spot rocking as needed, and ditch and culvert cleaning

³ EA (pp. 17, 52)

2.1 Treatments

Approximately 481 acres of commercial thinning will take place within the General Forest Management Area portion of the Matrix Land Use Allocation, and approximately 85 acres of commercial thinning will take place within the Riparian Land Use Allocation, for a total of approximately 566 acres (*DR Table 1*).

2.2 Logging Systems

- Approximately 330 acres (Units 1, 9-10, 14-15, 18-22, and portions of 11, 13, 23 and 25) will be harvested using ground-based yarding, a decrease from the 336 acres of ground based yarding under the EA proposed action. Further field verification determined that portions of units 18, 22 and 23, originally proposed as skyline yarding, could be accomplished using ground based yarding, while still meeting project design features and Salem District RMP standards and guidelines.
- Approximately 60 acres (Unit 24 and portions of units 11, 23 and 25) will be harvested using skyline yarding, a decrease from the 230 acres of skyline yarding under the EA proposed Action.
- Approximately 176 acres (Units 2-8, 12, 16, 17 and a portion of unit 13) will be harvested using helicopter yarding. These areas were proposed as ground based or skyline yarding in the EA proposed action.
- In order to accommodate the helicopter logging I am authorizing clearing approximately 5 acres of early seral habitat for the development of up to seven helicopter landings and two helicopter service landings. See Selected Action Maps (*DR section 9.0*) for helicopter landing locations.

2.3 Other Unit Changes

- The size of Units 8, 9, 11, and 12 were reduced as a result of buffering identified red tree vole sites.
- Unit 20 (18E) was described in the EA in the Helicopter Alternative only as a helicopter unit. Field verification determined that the unit can be logged using ground-based methods downhill to the existing BLM road, and is proposed as a ground-based unit.
- Final unit configuration and acreages may differ from the EA maps due to more accurate mapping; and due to adjustments made on the ground due to natural topography features, areas of fragile or unstable soils and wet areas that were identified during field work, and areas where further examination indicated that it will be better to defer treatment to a future date.

2.4 Trail System Protection

- Changing units 2-7, 8, 12, 16 and 17 from ground based and/or skyline yarding to helicopter yarding avoids disturbance to most of the Huckleberry Road.

2.5 Road Work and Haul

- Less than 1 mile of new road will be constructed to accommodate logging equipment and log transport. New road construction will occur for units 1, 18, and 23.

- The miles of road maintenance and renovation will be increased from 12.0 miles to approximately 20 miles because proposed logging systems have changed and the need to accommodate multiple helicopter landing selections require use of additional haul routes. Also, the miles of privately controlled roads that will be maintained and renovated are now included into the total mileage.
- The slide blocking the road in section 31 between units 15 and 16 will not be modified to accommodate log haul. Units 16 and 17, south of this slide, will be helicopter yarded (*DR Table 3*).
- Approximately 0.93 miles of the Huckleberry Road will be used for log transport for units 9, 13, and 15 (*Haul Route E*). This alternative route uses privately controlled roads instead of using the lower portion of the Huckleberry Road which leads to the Molalla Corridor road system.
- A temporary spur road will be built to haul logs from Unit 1 directly to pavement on Trout Creek county road (*Haul Route A*), avoiding the trail system.
- Final field verification determined the new spur road proposed in the EA (northeast corner of unit 23) is not needed for skyline logging equipment. This change also reduces the need to renovate private roads to access this location.

2.6 Fuels Treatments

- A total of approximately 210 acres in all units except Units 14, 17, and 22 will have some type of fuel treatment (*DR Maps 3-4*). The areas to be treated are located along roads, trails, and property lines. A portion of the treatment can be accomplished by falling the trees away from these areas and also through the timber purchaser's utilization and clean up.
 - Pile Burning: Treatment of slash will be determined as the units are yarded. Slash will be piled by hand/mechanically and burned, or mechanical mulched. After harvest operations are completed landing debris will also be piled, covered and burned.
 - Fuel Breaks: Fuel breaks, approximately 100 feet wide, will be maintained near residences, along major open roads, along well-used trail systems, and located above corridor camping areas. These areas will be thinned as prescribed in the selected action. Relative densities will be maintained over time by thinning trees as they increase in diameter to keep the canopy from sustaining a wind-driven fire. The understory will be treated periodically (about every 5-10 year) to remove ladder fuels and keep ground vegetation low to prevent a ground fire from becoming a canopy fire.

2.7 Fire Protection

- Fire access will be provided over the slide in T.6S. R.3E. section 31. Anticipated actions for fire access could include removing some trees and brush, minor scraping of the slide surface, and adding material (e.g. gravel) on either side of the slide. This work will take place after the completion of the timber sale. Based on fire hazard/ risk and the resource values within and adjacent to the project area, it was determined that access to section 31 for fire suppression is needed. An alternative was considered to provide fire access from the south through the Aquila Vista Educational Area rather than providing access from the north over the slide in section 31. Considering environmental impacts and public comment, it was determined there will be less impact by making a few modifications to the slide for fire access rather than having fire trucks go through the Aquila Vista education site.

2.8 Design Features

Project Design Features to be implemented are described in *DR section 10.0*, and will be included in the timber sale contract. These design features are first described in *EA sections 2.2.2* (EA pp. 17-21) and *5.1.2.2* (EA pp. 53-54).

3.0 Alternatives Considered

1. No Action - No commercial thinning will take place

All action alternatives are commercial thinning and vary by logging method and transportation system.

2. The Proposed Action as described in the EA employs conventional logging methods (ground-based and skyline) to meet the Purpose and Need as described in the EA in the most cost-effective manner.
3. A Helicopter Alternative was developed and analyzed in order to reduce or mitigate physical disturbance and interruption of recreational use to the Molalla River Shared Use Trail System that will occur under the Proposed Action. Under this alternative, helicopter yarding is proposed for units west of the Molalla River within the trail system. No portion of the Huckleberry Road will be maintained or renovated under this alternative.
4. Selected Action (Modified Proposed Action from the 2006 Thinning EA) incorporates new information acquired since the FONSI was signed, and utilizes helicopter logging methods for units 2-8, 12, 16, 17 and a portion of unit 13. Helicopter logging will reduce impacts to the most heavily-used portions of the Trail System, while retaining much of the economic viability of the proposed action.

DR Table 2 shows how the Selected Action meets the purpose and need of the project as compared to the no action and EA action alternatives (*EA section 9.1, Table 27*).

Table 2: Comparison of the Alternatives with Regard to the Purpose of and Need for Action

<i>Purpose and Need (EA Section 1.3)</i>	<i>No Action</i>	<i>Action Alternatives: Proposed Action (in the EA) Alternative 2 (Helicopter in the EA) Selected Action (Modified Proposed Action)</i>
Develop timber sales that can be successfully offered to the market place.	Does not fulfill.	Proposed Action and Selected Action: Fulfills , due to the high proportion of Douglas-fir in the proposed units. Greater economic return to Government. Alternative 2: Fulfills , due to the high proportion of Douglas-fir in the proposed units. Lesser economic return to Government.
Achieve a desirable balance between wood volume production, quality of wood, and timber value at harvest (RMP p. D-3).	Partially fulfills. Partially meets wood volume production over course of rotation. Logs at end of rotation would be smaller diameter which generally reduces quality and value compared to thinned stands.	All Action Alternatives: Fulfills. Maintains volume production over the course of the rotation. Lengthens the rotation so that logs at end of rotation would be larger diameter.

Purpose and Need (EA Section 1.3)	No Action	Action Alternatives: Proposed Action (in the EA) Alternative 2 (Helicopter in the EA) Selected Action (Modified Proposed Action)
Maintain the health and growth of developing stands.	Does not fulfill. Stand health and tree growth rates would begin to decline if stands are not thinned. Competition would result in mortality of smaller trees and some co-dominant trees in the stands.	All Action Alternatives: Fulfills. Stand health and tree growth rates would be maintained as trees are released from competition.
Retain elements that provide ecosystem diversity (snags, old growth trees, etc.) so that a healthy forest ecosystem can be maintained with habitat to support plant and animal populations (RMP p. 1, 20).	Partially fulfills. Retains existing elements, but does not enhance conditions to provide these elements for the future stand.	All Action Alternatives: Fulfills. Retains the elements described under “no action” on untreated areas of the stands in the project areas and encourages development of larger diameter trees and more open stand conditions in treated areas. This adds an element of diversity to the landscape not provided on BLM lands as soon under the No Action alternative.
Increase height and diameter to develop future large coarse woody debris, snag habitat, in-stream large wood and other elements of late-successional forest habitat (RMP p.1).	Fulfills. Average tree size would continue to increase, but at a slower rate as competition for light and nutrients increases.	All Action Alternatives: Fulfills. Would meet the Purpose and Need sooner (10-30 years) by concentrating stand growth on fewer stems.
Provide for structural and spatial stand diversity on a landscape level in the long term.	Fulfills by maintaining current trends that would develop diversity slowly.	All Action Alternatives: Fulfills by accelerating changes in some parts of some stands to develop more elements of diversity faster.
Provide appropriate access for timber harvest, silvicultural practices, and fire protection vehicles.	Partially fulfills. Roads would not be renovated or maintained for fire protection vehicles.	Proposed Action: Fulfills. Would implement maintenance of feeder roads, allowing improved access for management activities. Would renovate and maintain roads in the Annie’s Cabin Project Areas. Alternative 2: Partially fulfills. Roads in the Molalla River Share-Use Trail System would not be renovated and maintained. Selected Action: Partially fulfills. Some of the roads in the Molalla River Share-Use Trail System will not be renovated and maintained
Provide appropriate access for timber harvest, silvicultural practices, and fire protection vehicles.	Partially fulfills. Roads would not be renovated or maintained for fire protection vehicles. Existing open roads would continue to be available for travel.	Proposed Action: Fulfills. Would implement maintenance of feeder roads, allowing improved access for management activities and fire protection. Would renovate and maintain roads in the Annie’s Cabin Project Areas. Alternative 2: Partially fulfills. Roads in the Molalla River Share-Use Trail System would not be renovated and maintained. Fire suppression response would be delayed where existing roads are grown over and undriveable. Selected Action (Modified Proposed Action) Partially fulfills. Some of the roads in the Molalla River Share-Use Trail System will not be renovated and maintained. Fire suppression will be delayed to areas where existing roads that are over grown and will not be renovated to provide access.

<i>Purpose and Need (EA Section 1.3)</i>	<i>No Action</i>	<i>Action Alternatives: Proposed Action (in the EA) Alternative 2 (Helicopter in the EA) Selected Action (Modified Proposed Action)</i>
Reduce potential human sources of wildfire ignition by controlling access.	Fulfills. Access is adequately controlled by existing gates and berms.	All Action Alternatives: Fulfills. All existing gates and berms would be maintained or upgraded.
Reduce adverse environmental effects associated with identified existing roads within the project areas (RMP p. 11).	Does not fulfill. Roads not currently meeting ACS objectives would not be improved, decommissioned or closed and stabilized at this time.	Proposed Action: Fulfills. Identified roads would be renovated or improved and maintained, closed and stabilized, or obliterated. Alternative 2: Partially fulfills. Roads in the Molalla River Share-Use Trail System would not be renovated or repaired. Selected Action: Partially fulfills. Some of the roads in the Molalla River Share-Use Trail System will not be renovated or repaired.

4.0 Decision Rationale

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the Upper Molalla River Watershed Analysis, and the management direction contained in the Salem District RMP, I have decided to implement the **selected action** as described in section 2.0 of this Decision Rationale. The following is my rationale for this decision. The selected action:

- Meets the purpose and need of the project (*EA section 1.3*), as shown in *DR Table 2*.
- Complies with the Salem District Record of Decision and Resource Management Plan, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (*EA section 1.2*), (*DR section 5.0*).
- Is responsive to public concerns regarding protection of the area’s trail system and associated recreational experiences. Through implementation of the selected action, physical disturbance to the trail system and interruption of recreational use will be minimized.
- Is responsive to concerns for an economically efficient project.
- Improves fire suppression opportunities by establishing fuel breaks and breaking up the areas continuous closed canopy.
- Reduces the potential for invasive/nonnative species population increases within the project area by disturbing less ground.
- Incorporates new information on northern spotted owl (*DR section 5.2*).
- Eliminates the need for road construction to ramp over the slide on the Huckleberry road between units 15 and 16.
- Uses the minimum transportation system to facilitate implementation of the project and will have no adverse effects on listed fish in the Molalla River.
- Will not have significant impact on the affected elements of the environment (EA FONSI pp. 3-5) beyond those already anticipated and addressed in the Salem District RMP EIS.

The other alternatives were not selected for the following reasons:

- No Action alternative does not meet the Purpose and Need directly, or delays the achievement of the Purpose and Need (*EA section 1.3*), as shown in *DR Table 2*.

- Proposed Action, as described in the EA, does not address concerns about physical disturbance and interruption of recreational use to the Molalla River Shared Use Trail System that would occur under this alternative.
- Helicopter logging all units west of the Molalla River: This alternative fully addresses the concerns raised about this project and is generally responsive to the purpose and need however it was not selected because it was minimally cost efficient for an area that has a road system in place and is relatively flat (slopes less than 40%) in an area designated as matrix.

5.0 Compliance with Direction

The analysis documented in the Annie's Cabin EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). This project has been designed to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (*EA section 1.2*). All of these documents may be reviewed at the Cascades Resource Area office.

5.1 Survey and Manage Species Review

The Bureau of Land Management (BLM) is aware of the August 1, 2005, U.S. District Court order in Northwest Ecosystem Alliance et al. v. Rey et al. which found portions of the *Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (January, 2004) (EIS) inadequate. Subsequently in that case, on January 9, 2006, the Court ordered:

- set aside the 2004 Record of Decision *To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern spotted Owl* (March, 2004) (2004 ROD) and
- reinstate the 2001 *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (January, 2001) (2001 ROD), including any amendments or modifications in effect as of March 21, 2004.

The BLM is also aware of the November 6, 2006, Ninth Circuit Court opinion in Klamath-Siskiyou Wildlands Center et al. v. Boody et al., No. 06-35214 (CV 03-3124, District of Oregon). The court held that the 2001 and 2003 Annual Species Reviews (ASRs) regarding the red tree vole are invalid under the Federal Land Policy and Management Act (FLPMA) and National Environmental Policy Act (NEPA) and concluded that the BLM's Cow Catcher and Cotton Snake timber sales violate federal law.

This court opinion is specifically directed toward the two sales challenged in this lawsuit. The BLM anticipates the case to be remanded to the District Court for an order granting relief in regard to those two sales. At this time, the ASR process itself has not been invalidated, nor have all the changes made by the 2001-2003 ASR processes been vacated or withdrawn, nor have species been reinstated to the Survey and Manage program, except for the red tree vole. The Court has not yet specified what relief, such as an injunction, will be ordered in regard to the Ninth Circuit Court opinion. Injunctions for NEPA violations are common but not automatic.

The Cascades Resource Area will reexamine individual project level NEPA documents (environmental assessments) in light of any pertinent court ordered remedy and will make revisions to such documents as necessary following issuance of the court's judgment. We have provided advance notice to potential purchasers informing them that the court's ruling may result in delays in award of the sale to the high bidder or suspensions of operations. Appropriate processes are in place to provide us the ability to delay award of timber sales or issue suspensions should they become necessary.

We do not expect that the litigation over the ASR process in Klamath-Siskiyou Wildlands Center et al. v. Boody et al will affect this project, because the development and design of this project complies with the Northwest Forest Plan.

In accordance with the 2001 ROD, the Cascades Field Office conducted red tree vole surveys and provided management prescriptions implementing the applicable protocols and management recommendations. Active nests were found in units AC30A and AC31A, and the units (8, 9, 11, 12) were modified to buffer active nests according to the Management Recommendations for the Oregon Red Tree Vole, version 2.0, 2000. Information regarding effects of the project on the red tree vole has been incorporated in the following paragraph and in *DR section 11.0*. No court has yet invalidated the results of the 2001-2003 ASRs for any species besides the red tree vole.

5.1.1 Effects to Red Tree Voles:

In the short-term, it is possible that undetected nests could be disturbed during thinning. In the long term, habitat conditions for red tree voles will gradually become more suitable after thinning as canopies close and stands continue to mature and develop older forest characteristics. No adverse cumulative effects to red tree vole habitat are expected because no optimal habitat (as described in the *Management Recommendations for the Oregon Red Tree Vole*, Version 2.0 p. 7) will be lost or altered; thinned stands will attain older forest conditions sooner as a result of thinning; and undisturbed habitat in the same or similar age class with connectivity to the thinning units exists within the project area. Implementation of the selected action will not eliminate connectivity between project units and adjacent untreated stands under BLM management.

Impacts of the selected action to canopy dwelling species such as the red tree vole will be lower than the proposed action. The selected action includes an increase of 176 acres of helicopter logging, a decrease of 6 acres of ground based logging, and a decrease of 170 acres of skyline logging. This will reduce the need for skyline corridors, which result in canopy breaks to facilitate skyline yarding. Helicopter and ground based yarding result in fewer disturbances to the canopy. There will be additional clearing required for helicopter landings; however, the proposed helicopter landings are located along existing roads in early to mid seral stands that are not high quality habitat for red tree voles.

No surveys for mollusk species are required for the Annie's Cabin Project due to project location and lack of suitable habitat for Survey and Manage mollusk species (*DR Section 11.0*).

No red tree vole surveys were required on Units 1-22, 24, 25 due to lack of suitable habitat in these young (<80 years of age) stands. In Northwest Ecosystem Alliance et al. v. Rey et al the U.S. District Court modified its order on October 11, 2006, amending paragraph three of the January 9, 2006 injunction. This most recent order directs:

"Defendants shall not authorize, allow, or permit to continue any logging or other ground-disturbing activities on projects to which the 2004 ROD applied unless such activities are in compliance with the 2001 ROD (as the 2001 ROD was amended or modified as of March 21, 2004), except that this order will not apply to:

- a. Thinning projects in stands younger than 80 years old;
- b. Replacing culverts on roads that are in use and part of the road system, and removing culverts if the road is temporary or to be decommissioned;
- c. Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions; and
- d. The portions of project involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under subparagraph a. of this paragraph."

BLM has reexamined the objectives of Annie's Cabin timber sale as described in the *FY 2006 Timber Sale Thinning Environmental Assessment* (2006 Thinning EA, # OR080-04-20 p. 14). The selected action in Units 1-22, 24, 25 meet **Criterion a**: Thinning projects in stands younger than 80 years old (*DR Table 3*).

5.2 Northern Spotted Owl (NSO) Status Review:

The following information was considered in this decision: a/ *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney *et al.* 2004); b/ *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony *et al.* 2004); c/ *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and *Northwest Forest Plan – The First Ten Years (1994-2003)*; d/ *Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005). Although the agencies anticipated a decline of NSO populations under land and resource management plans during the past decade, the reports identified greater than expected NSO population declines in Washington and northern portions of Oregon, and more stationary populations in southern Oregon and northern California.

The reports did not find a direct correlation between habitat conditions and changes in NSO populations, and they were inconclusive as to the cause of the declines. Lag effects from prior harvest of suitable habitat, competition with Barred Owls, and habitat loss due to wildfire were identified as current threats; West Nile Virus and Sudden Oak Death were identified as potential new threats. Complex interactions are likely among the various factors. This information has not been found to be in conflict with the NWFP or the Salem District RMP (*Evaluation of the Salem District Resource Management Plan Relative to Four Northern Spotted Owl Reports, September 6, 2005*).

5.3 Compliance Aquatic Conservation Strategy

On March 30, 2007, the District Court, Western District of Washington, ruled adverse to the US Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA-Fisheries) and USFS and BLM (Agencies) in *Pacific Coast Fed. of Fishermen’s Assn. et al v. Natl. Marine Fisheries Service, et al and American Forest Resource Council*, Civ. No. 04-1299RSM (W.D. Wash)(PCFFA IV). Based on violations of the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA), the Court set aside:

- the USFWS Biological Opinion (March 18, 2004),
- the NOAA-Fisheries Biological Opinion for the ACS Amendment (March 19, 2004),
- the ACS Amendment Final Supplemental Environmental Impact Statement (FSEIS) (October 2003), and
- the ACS Amendment adopted by the Record of Decision dated March 22, 2004.

Previously, in *Pacific Coast Fed. Of Fishermen’s Assn. v. Natl. Marine Fisheries Service*, 265 F.3d 1028 (9th Cir. 2001)(*PCFFA II*), the United States Court of Appeals for the Ninth Circuit ruled that because the evaluation of a project’s consistency with the long-term, watershed level ACS objectives could overlook short-term, site-scale effects that could have serious consequences to a listed species, these short-term, site-scale effects must be considered. The following paragraphs show how the Annie’s Cabin Timber Sale meets the Aquatic Conservation Strategy in the context of PCFFA IV and PCFFA II.

Existing Watershed Condition

The Annie’s Cabin project area is in the 129,300-acre Upper Molalla River 5th field watershed which drains into the Molalla River. Thirty-three (33) percent of the watershed is managed by BLM, 62% is private, 2% is Forest Service, and 3% is managed by the State of Oregon. Approximately 14% of the BLM ownership is included in the Table Rock Wilderness Area. Several major forest industrial landowners own 53 percent of the watershed. The Upper Molalla River Watershed Analysis (WA) describes the events that contributed to the current condition such as early hunting/gathering by aboriginal inhabitants, road building, agriculture, wildfire, and timber harvest (WA p. 38 and Ch 4).

Federal Ownership by Forest Age Class (Derived from table of structural stages on federal lands (WA p. 71)

Forest Age (years)	% of Federal Ownership	% Age Class in Matrix ¹	% Age Class in LSR ²
Under 40	32%	48%	52%
41-80	8%	49%	51%
81-199	45%	25%	75%
200+	10%	26%	74%

¹Matrix Land Use Allocation ²Late Successional Reserve Land Use Allocation

The above table shows that late successional (= 80 years old) forest stands comprise 55 percent of the federal ownership in the watershed and that approximately 75 percent of the late successional forest is within the Late Successional Reserve Land Use Allocation. The Annie’s Cabin Timber Sale would thin approximately 126 acres of late successional forest (*DR Table 3*), approximately 0.5 % of the late successional forest in federal ownership.

Forest stands under 80 years of age comprise 40 percent of the federal ownership in the watershed. The earliest timber harvest in the watershed has been regenerated and stands are progressing towards providing mature forest structure. Most of the private industrial lands have been and will continue to be moved from mid condition class to the early condition class. Approximately 440 acres of the Annie's Cabin thinning will take place in the 40-80 year old age classes (*DR Table 3*).

The standing dead component was found to consist mostly of material in more advanced stages of decay within older stands and small diameter snags within younger stands. Large standing dead and down logs in the early stages of decay generally occurred as impulses of material after a wildfire. Fire exclusion over the last eighty years has essentially eliminated this source (WA p. 87-88).

A dominant hydrological feature in this watershed is the Mollalla River. The Molalla River is a tributary to the Willamette River, draining a northeast section of the Willamette River Basin in Clackamas County (WA p. 40) Upper Willamette River (UWR) steelhead trout and UWR Chinook salmon inhabit the Molalla River downstream of all project units, and are listed as 'threatened' under the Endangered Species Act of 1973 (ESA). The Annie's Cabin will have no effect on these fish (*DR section 6.3*).

The federal Riparian Reserve system comprises 43 % of the federal land in this watershed (WA p. 72). Approximately 50% of the federal Riparian Reserve stands are older than 80 years. Approximately 25 % of these age classes have had some structure altering by past management as commercial thinning or mortality salvage. Most of the federal Riparian Reserves are on BLM land beside the Molalla River corridor. A large portion of them were acquired by BLM in a land exchange with private industry to block up federal land along the river. These lands were all harvested before the exchange, so they are mostly made up of younger age classes (WA p. p. 44, 76).

Review of Aquatic Conservation Strategy Compliance:

I have reviewed this analysis and have determined that the project complies with the ACS on the project (site) scale. The following is an update of how this project complies with the four components of the Aquatic Conservation Strategy, originally documented in the EA, (EA p. 50, 51). This analysis concluded that the projects would comply with ***Component 1 – Riparian Reserves:*** by maintaining canopy cover along all streams, minimizing roads and landings within riparian, ***Component 2 – Key Watershed:*** by establishing that the Annie's Cabin project is not within a Key watershed, ***Component 3 – Watershed Analysis:*** The Upper Molalla River Watershed Analysis was completed in 1999. The following are watershed analysis goals and/or findings that apply to or are components of this project:

- Issue Identified: Timber Supply - The local economy is reliant on a predictable supply of forest products from the watershed.
 - Goal: Provide a sustainable and predictable supply of forest products from the watershed. (WA p. 3)
- Management priorities for potential Riparian Reserve treatment would include:
 - Areas where past management activities have altered forest stand structure or species composition;
 - Areas currently deemed to have low to moderate LWD recruitment potential;
 - Areas next to other planned timber management activities, and;

- Previously thinned stands. (WA p. 193)

Component 4 – Watershed Restoration: by maintaining more than half of the canopy cover, implementing project design features to protect aquatic and riparian resources, and creating some structural diversity, the project would not preclude future restoration projects.

In addition I have reviewed this project against the ACS objectives at the project or site scale. Section 14.2 of the 2006 Thinning EA addressed the Annie’s Cabin effects on the nine aquatic conservation strategy objectives at the project level project/ site scale at the time of the original analysis. The Annie’s Cabin project does not retard or prevent the attainment of Aquatic Conservation Objectives (ACSO) 1-9 (Table 42, EA pp. 129-132) because the project would

- Maintain and enhance the diversity and complexity within Riparian Reserves by developing conditions for stand structure typically associated with older forests. (ACSO 1 and 2);
- Retain the ability of Riparian Reserves to function as refugia and connectivity for late successional, aquatic, and riparian dependent species (ACSO 1 and 2);
- Maintain stream channel stability (ACSO 3);
- Maintain current water quality conditions and trends in the long term (ACSO 4);
- Control sediment by maintaining stream protection zones, and using project design features that control erosion (ACSO 5);
- Maintain current stream flows by retaining more than half of the existing forest cover (ACSO 6);
- Maintain current stream channels, wetlands and ponds by maintaining streamside protection zones (ACSO 7);
- Maintain structural diversity by maintaining streamside protection zones. Thinning outside these zones is expected to increase understory development and structural diversity (ACSO 8);
- Maintain habitat for riparian dependent species and restore elements of structural diversity in Riparian Reserves (ACSO 9).

6.0 Public Involvement/ Consultation/Coordination

6.1 Scoping:

A description of the proposal was included in the Salem Bureau of Land Management Project Update which was mailed to more than 1070 individuals and organizations. A letter asking for scoping input on the proposal was mailed on September 7, 2004 to adjacent landowners, known recreation users and individuals who expressed an interest in management activities in the resource area as a whole or in this area. Letters were also sent to the Confederated Tribes of Grande Ronde; Confederated Tribes of the Warm Springs Reservation of Oregon; Federal, State, County and local government organizations; Clackamas River Water Providers and Special Interest groups. On December 7, 2004 a public meeting was held in Molalla, Oregon and attended by approximately 40 individuals. Thirty-three (33) comments were taken at the public meeting and 53 comment letters and comment cards were received by mail. Scoping comments were addressed in the 2006 Thinning EA, pp. 116 – 119.

6.2 EA Comment Period and Comments:

A legal notice was placed in the *Molalla Pioneer* soliciting public input on the action with a comment period from July 20 to August 19, 2005.

One hundred seventy eight (178) letters stating that the 2006 Thinning EA was available for comment and 19 EAs were mailed to agencies, individuals and organizations on July 21, 2005. I received 12 comment letters and e-mails, and 151 post cards concerning this EA. Responses to these comments can be found in *DR section 12.0*.

6.3 ESA Section 7 Consultation

The timber sale was submitted for Formal Consultation with U.S. Fish and Wildlife Service (USFWS) as provided in Section 7 of the Endangered Species Act (ESA) of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended).

1. **U.S. Fish and Wildlife Service:** Annie's Cabin timber sale was submitted for ESA Section 7 Consultation during the programmatic consultation process on FY 2005 and 2006 habitat modification projects in the Willamette Province. The Biological Opinion (2005/2006 BO) associated with these thinnings was issued in March 2005 (reference # 1-7-05-F-0228). The 2005/2006 BO concluded that these thinnings would not jeopardize the continued survival of the spotted owl (2005/2006 BO p. 75). The 2005/2006 BO expired Dec. 31, 2006.

Due to a change in sale date, Annie's Cabin was resubmitted during the FY 2007/2008 consultation process. The Batched Biological Assessment for Projects with the Potential to Modify the Habitat of the Northern Spotted Owl, Willamette Province, FY 2007-2008 (2007/2008 BA), was submitted in July 2006. The Biological Opinion (2007/2008 BO) associated with these thinnings was issued in September 2006 (reference # 1-7-06-F-0179).

The 2007/2008 BO concluded that these thinnings would not jeopardize the continued survival of the spotted owl (2007/2008 BO p. 95).

None of the proposed units are located in Critical Habitat for the northern spotted owl. The proposed thinning and connected actions described in this EA have incorporated the applicable Management Standards that were described in the 2007/2008 BA (p. 10) and 2007/2008 BO (Section 1.2, pp. 18-19). In addition, this project will be in compliance with the general standards set forth in the 2007/2008 BA (p. 6) and the 2007/2008 BO (pp. 17-18), including monitoring and reporting on the implementation of this project and any adverse effects. The 2007/2008 BO concluded that there would be no proposed Reasonable and Prudent Measures and Terms and Conditions would not be applicable since Management Standards common to all activities were developed which included measures to reduce incidental take (2007/2008 BO p. 97). In addition, as a design feature of this project, the discretionary Conservation Measure set forth in the 2007/2008 BO (p. 97) would be implemented. This includes a seasonal restriction during the critical nesting season to delay activities associated with suitable habitat later into the nesting season.

2. **NOAA Fisheries (NMFS):** The selected action has been determined to have "no effect" on Upper Willamette River (UWR) steelhead trout or UWR chinook salmon. For action alternatives that would have "no effect" on ESA listed species, consultation with NOAA Fisheries on the potential effects of the project on those species is not required.

Potential effects of the thinning and connected actions on the listed fish species are related to sediment inputs associated with road construction/ decommissioning and culvert replacement/removal, and temperature increases associated with removal of riparian vegetation.

The selected action incorporates very little road construction (0.6 mile, none within Riparian Reserves) or decommissioning, and no live stream culvert repair or replacement. The 60' stream protection zones on perennial streams are expected to prevent any decrease in stream shade that could result in an increase in stream temperature. The determination of "no effect" is based on the factors stated above that will prevent increases in sediment input to the Molalla River, or increases in stream turbidity or temperature (*EA Section 5.2.3, DR section 7.1, # f*).

Since the release of the EA, Critical Habitat has been designated for both of the ESA listed fish species mentioned above. The project will have no effect on designated Critical Habitat for the same reasons stated in the EA that the project will have no effect on the ESA listed fish species.

7.0 Conclusion

7.1 Review of Finding of No Significant Impact

I have determined that change to the Finding of No Significant Impact (FONSI – July 2005) for the Annie's Cabin Timber Sale is not necessary because I've considered and concur with information in the EA and FONSI and this Decision Rationale. The comments on the EA were reviewed and no information was provided in the comments that lead me to believe the analysis, data or conclusions are in error or that the selected action needs to be altered. The selected action will not have effects on the affected elements of the environment (EA FONSI pp. 2-6) beyond those already anticipated and addressed in the Salem District RMP EIS.

Supplemental or additional information to the analysis in the RMP/FEIS in the form of a new environmental impact statement is not needed for the reasons described in the Finding of No Significant Impact (EA pp. 2-6) and in the following paragraphs. Effects of the selected action are similar or less than the effects described in the EA. The following describes the changes in effects between the EA proposed action and the selected action.

a. Overall/Vegetation

Vegetation changes occur because thinning allows more light to reach the forest floor and through soil disturbance opens up more seed beds for plants to become established. The selected action produces the same amount of light reaching the forest floor, but will result in less soil disturbance on the units that are helicopter logged. These effects are well within the range analyzed and documented in the EA.

b. Recreation

To minimize physical disturbance and interruption of recreational use, under the selected action, units within the Molalla River Shared Use Trail System will be helicopter logged (*DR Table 3*).

Minimize Physical Disturbance to Trail System

Visual effects to single-track trails will be less than those described for the Proposed Action because no skidding associated with removing the trees will be needed. Equipment will still be used to pile slash, but the number of passes will be much lower and trails will be avoided as much as possible.

Overall very little evidence of the thinning will be expected to be observable within one to three years. The selected action will reduce impacts to the most heavily-used and improved portions of single track trail within the trail system. The selected action identifies the following units for helicopter logging: (Units 2, 3, 4, 5, 6, 7, 8, 12, 16, 17, and a portion of 13). These units contain the majority of trail and road infrastructure (turnpikes, puncheons, signs) within the trail system. The reduction of heavy equipment within this designated trail zone by thinning or related activities will minimize ground disturbance under the selected action.

Interruption of Recreational Use

The selected action will reduce the interruption of visitor use during the high use recreational season. Visitation along the Molalla River is estimated to be 7,600 people per year and 3,750 people per year for the Molalla River Shared-Use Trail System. Most of the visitation occurs during the peak use season between the end of May and beginning of September. Under the selected action falling, yarding, and fuels treatment activities will be prohibited during the weekends or holidays when operating between Friday of Memorial Day weekend and Monday of Labor Day weekend (the peak recreational use season). Restriction of public use of the trails and roads will still occur over several weeks or months, but given that the single-track trails are closed from November 15th through May 15th, the number of trail users temporarily displaced will be much lower.

Campers and day-use visitors will experience noise disturbance associated with helicopter activity and truck hauling noise. Some sites may need to be closed if there are safety concerns associated with helicopter landings or over-flights. The number of visitors affected should be minimal given that the work will most likely occur during the spring, fall or winter when visitation is much lower.

c. Plants

Although less impacting, the selected action which includes helicopter yarding will not have a measurable impact difference to the Bureau Sensitive Species identified in the project area. The anticipated impact to the all *Cimicifuga elata* sites will remain the same as the proposed action due to population locations within and adjacent to each harvest area and to *Cimicifuga elata*'s positive reaction to ground disturbance and habitat modification.

d. Wildlife

- *Northern Spotted Owl*: Overall, effects to spotted owls and their habitat under the selected action will be very similar to those expected under the proposed action analyzed in the EA. The selected action will reduce tree densities on 126 acres of marginally suitable owl habitat, which will downgrade suitable habitat to dispersal habitat. The selected action will also reduce tree densities on 440 acres of dispersal habitat. The habitat will remain dispersal habitat after thinning. In addition, about 5 acres of dispersal habitat will be cleared for helicopter landings (*DR Table 1, DR section 2.2*).
- *Oregon Slender Salamander*: Impacts to the Oregon slender salamander whose primary habitat is CWD and duff/litter layers will be less under the selected action, due to less ground disturbance.

The selected action includes a decrease of 6 acres of ground based logging, a decrease of 170 acres of skyline logging, and an increase of 176 acres of helicopter logging. As a result, ground disturbance will be less overall than described under the EA proposed action.

- *Snag Dependent Species:* Impacts to snags will be substantially less under the selected alternative than the EA proposed action. Ground based and helicopter logging will result in fewer impacts on snags than skyline logging due to increased logging flexibility and increased ability to avoid snags where they occur. In addition, about 5 acres of early seral habitat will be cleared for helicopter landings; however, impacts are expected to be minor because the clearing will occur in young stands close to existing roads where snags and CWD are scarce or not present.
- *Red Tree Vole:* see *DR section 5.1.1.*

Fuel Breaks: Fuel treatments over time will maintain post treatment canopy closures and reduce understory ladder fuels along major open roads, well used trails, and above camping areas. No impacts to special status or Survey and Manage species are expected because no primary habitat for Special Status and Survey and Manage species will be eliminated. Fuel reduction treatments will concentrate on removal of smaller, finer material which represents the greatest risk of fire. Habitat types, seral stages, larger standing dead material, down logs, coarse woody debris will be maintained after treatment. Disturbance effects of the treatments are expected to be within current noise levels in these already highly disturbed areas.

As a result of treatment, fuels in high risk areas will be reduced, which will in turn reduce the risk of human caused fires which have the potential to degrade or destroy mid to late seral wildlife habitat, standing dead material, down logs and coarse woody debris.

e. Soils

Overall effects to soils under the selected action will be very similar to those expected under the proposed action analyzed in the EA. The selected action will include 6 fewer acres of ground based yarding. There are units that were originally proposed for skyline yarding (portions of units 9, 18, 22, 23 in the EA proposed action) and for helicopter yarding (Unit 20, and portions of unit 15 in EA alternative 2) that will now be ground based yarded. These areas will have more surface disturbance and compaction than was estimated with skyline or helicopter yarding. Disturbance and compaction on these units will remain within the 10% standard described in the EA (EA p. 18).

Those areas that were analyzed for ground based yarding in the EA proposed action but are now proposed for helicopter yarding in the selected action (Units 2-8, 12, 16, 17 and a portion of 13) will have little or no surface disturbance or risk of loss in soil productivity. Areas cleared for helicopter landings could also be partially disturbed by soil compaction and displacement. Beyond this, all effects and all BMPs will be the same as in the EA action alternatives.

f. Hydrology and Aquatic Habitat (Including T/E Fisheries)

Overall effects to hydrology, stream channels and water quality under the selected alternative will be very similar to those expected under the proposed action in the EA.

However, this action will include additional ground-based yarding and the construction of helicopter landings. These areas may be at greater risk for surface erosion and delivery of sediment to stream channels because compacted surfaces are more likely to be subject to overland flow and erosion during storm events.

The equivalent BMPs and mitigation measures that resulted in no detectable effects for sediment delivery (as discussed under the original proposal) will be implemented here and therefore outcomes will not likely be altered. These additional compacted/disturbed surfaces will be unlikely to alter any of the effects to channel conditions or stream temperature: with the same buffers along streams as in the EA proposed action there will be no change in effective shade or physical alteration of the bed or banks of the channel. Effects to hydrology will not be different because forest cover will still remain above the 50% threshold.

Fish and Aquatic Habitat: Impacts to fish and aquatic habitat under the selected action will be very similar to those expected under EA Alternative 2.

- a. West of the River: Units 2 – 8, 12, 16, 17 and a portion of 13 will be helicopter yarded under the selected action. Timber from units with conventional yarding systems (units 1, 9-11, 13-15) will be hauled to the west preventing the need to use the Molalla Forest Road near the Molalla River. Timber from unit 1 will be hauled to northwest on **Haul route A** and will have no stream crossings (*DR Map 1*). Timber from Units 9-11, 13-15 will be hauled to the west on **Haul Route E** (*DR Table 3, DR Map 2*). **Haul Route E** will have no stream crossings closer than 0.75 miles from the Molalla River. Any road related sediment generated at those crossings will be expected to settle out within 0.25 mile of the stream crossing.
- b. East of the River: Roads accessing the units on the east side of the river will not require live stream culvert replacements in order to haul timber. Timber hauling and culvert replacements from the units on the east side of the river will be conducted during dry conditions to prevent inputs to streams of road-derived sediment.

The selected action will have “no effect” on UWR steelhead trout or UWR chinook salmon. Consultation with NOAA Fisheries on the potential effects of the project on those species will not be required. The determination of “no effect” is based on project design features that will prevent increases in sediment input to the Molalla River as well as prevent increases in stream turbidity or temperature (*EA Section 5.2.3.2*).

g. Invasive Species:

Soil disturbance in open areas provides optimal habitat for invasive/nonnative species and any ground disturbing activity may lead to an increase in the invasive/nonnative plant populations known from the project area. The selected action which includes helicopter yarding will greatly reduce soil disturbance and the opportunity for invasive/nonnative population increase and spread within the project area.

7.2 Administrative Review Opportunities

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management Regulations at 43 CFR 5003, protests of this decision may be made within 15 days of the publication of a notice of decision in a newspaper of general circulation.

This notice of decision will be published in the *Molalla Pioneer* newspaper on May 30, 2007. To protest this decision a person must submit a written protest to Cindy Enstrom, Cascades Field Manager, 1717 Fabry Rd SE, Salem, Oregon 97306 by the close of business (4:30 p.m.) on June 14, 2007. The planned sale date is June 27, 2007.

The protest must clearly and concisely state the reasons why the decision is believed to be in error. Any objection to the project design or my decision to go forward with this project must be filed at this time in accordance with the protest process outlined above. If a timely protest is received, this decision will be reconsidered in light of the statements of reasons for the protest and other pertinent information available and shall serve a decision in writing on the protesting party (43 CFR 5003.3).

7.3 Implementation Date

If no protest is received within 15 days after publication of this Decision Record (Annie' Cabin DR) this decision will become final. For additional information, contact Carolyn Sands (503) 315-5973, Randy Herrin (503) 315-5924 or Rudy Hefter (503) 315-5671, Cascades Resource Area, Salem BLM, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by: Cindy Enstrom
Cindy Enstrom
Cascades Resource Area Field Manager

5/30/2007
Date

8.0 Comparison of the Proposed Action and Selected Action Units

Table 3: Comparison of the Proposed Action from the EA and the Selected Action by Unit

EA Proposed Action				Selected Action				
Unit #	Age Class ¹	Acres	Logging system	Unit #	Acres	Logging System	Haul Route ²	
AC7A ⁵	60	22	Ground based	1	23	Ground based	A	
AC7B ⁵	70	21	Ground based	2	32 ³	Helicopter	C	
AC19A ⁵	70	23	15 ac. Ground based 8 ac. Skyline	3	22	Helicopter	C or D ⁴	
AC30B ⁵	50	23	Ground based	4	11	Helicopter	C or D ⁴	
AC30BB ⁵				5	2	30 ³	Helicopter	C or D ⁴
				6,7	17	Helicopter	C or D ⁴	
AC30A ⁵	50	63	29 ac. Ground based 34 ac. Skyline	8	21	59	Helicopter	C or D ⁴
				12	38		Helicopter	C or D ⁴
AC31A ⁵	40	58	31 ac. Ground based 27 ac. Skyline	9	38	Ground based	E	
AC31AA ⁵	40	4	2 ac. Ground based 2 ac. Skyline	11	4	2 ac. Ground based 2 ac. Skyline	E	
AC31E ⁵	50	34	Ground based	10	16	34	Ground based	E
				14	18		Ground based	E
AC31B ⁵	40	13	Ground based	13	18 ³	9 ac. Ground based 9 ac. Helicopter	E	
AC31C ⁵	40	4	Ground based	15	14 ³	Ground based	E	
AC6C	40	10	Ground based	16	14	Helicopter	B or E ⁴	
AC6E	40	15	Ground based	17	10	Helicopter	B or E ⁴	
AC18D ⁵	50	6	Ground based	18	92	Ground based	C	
AC7C ⁵	70	92	75 ac. Ground based 17 ac. Skyline					
AC18C ⁶	50	7	Ground based	19	7	Ground based	C	
AC18E ⁵	50	0	Ground based	20	5 ³	Ground based	C	
AC18A ⁵	60	4	Ground based	21	5	Ground based	C	
AC18B ⁵	50	6	3 ac. Ground based 3 ac. Skyline	22	5	Ground based	C	
AC5B	100	128	Skyline	23	126	75 ac. Ground based 51 ac. Skyline	B	
AC5BB	70	8	Skyline	24	4	Skyline	B	
AC5C	50	25	22 ac. Ground based 3 ac. Skyline	25	24	21 ac. Ground based 3 ac. Skyline	B	
		566	Proposed Action		566	Selected Action		

¹ 10 year age class (2006 EA, Table 28, p. 101): For example, a forest stand with an age class of 70 is 61-70 years old.

² Haul Routes are shown on the selected action maps. HR-A on the map = *Haul Route A*

³ Unit boundaries were derived from helicopter units analyzed in the EA under Annie's Cabin Alternative 2

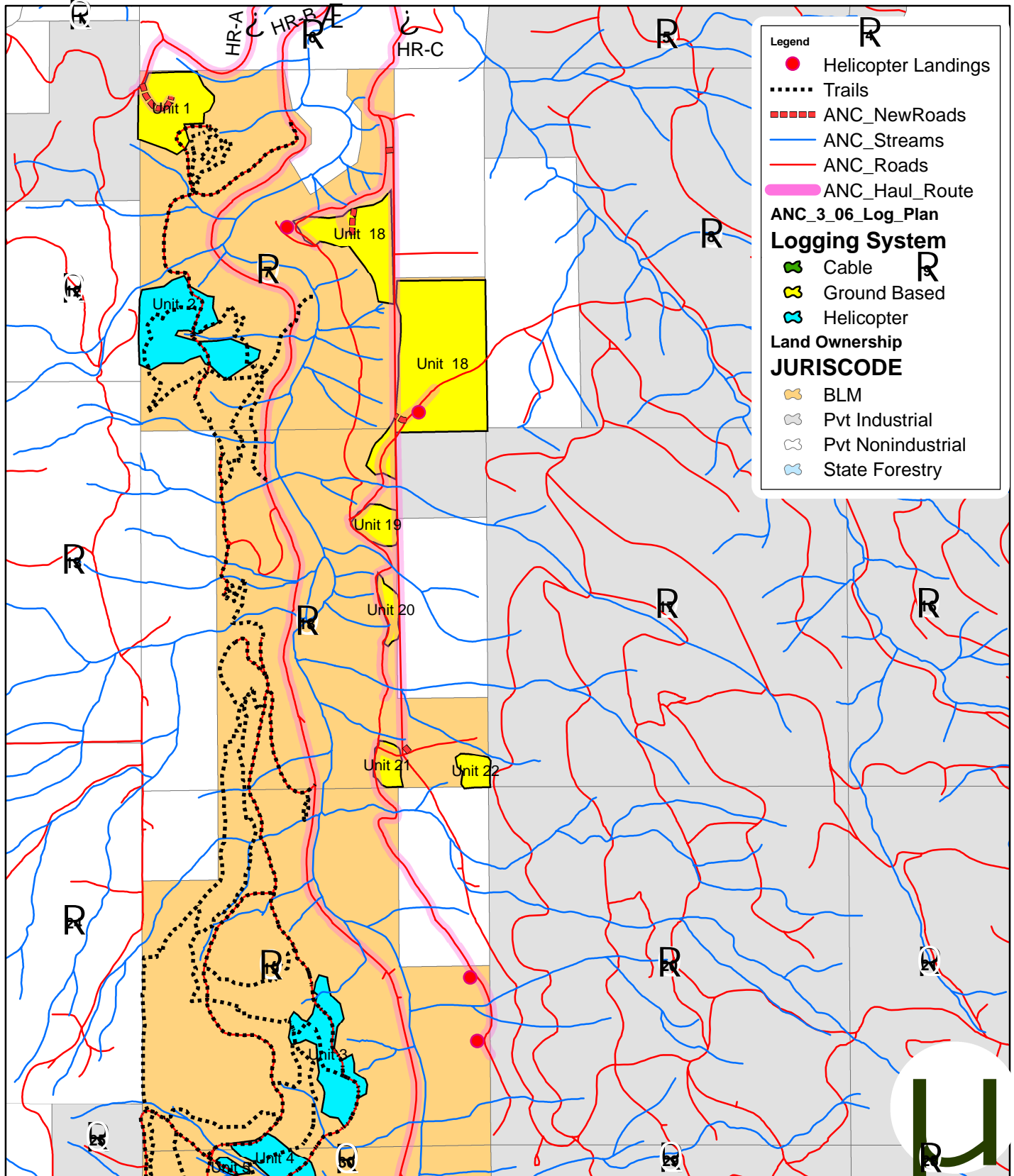
⁴ Depending on which helicopter landing is used

⁵ These stands were Private Industrial Forest land prior to being acquired by the BLM in 1992 (2006 EA, Table 28, p. 101).

Annie's Cabin

Selected Action

Sheet 1 of 2



Legend

- Helicopter Landings
- Trails
- ▬▬▬▬ ANC_NewRoads
- ▬▬▬▬ ANC_Streams
- ▬▬▬▬ ANC_Roads
- ▬▬▬▬ ANC_Haul_Route

ANC_3_06_Log_Plan

Logging System

- ✕ Cable
- ✕ Ground Based
- ✕ Helicopter

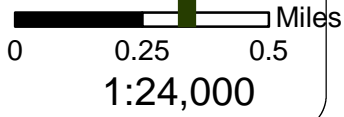
Land Ownership

JURISCODE

- ▭ BLM
- ▭ Pvt Industrial
- ▭ Pvt Nonindustrial
- ▭ State Forestry



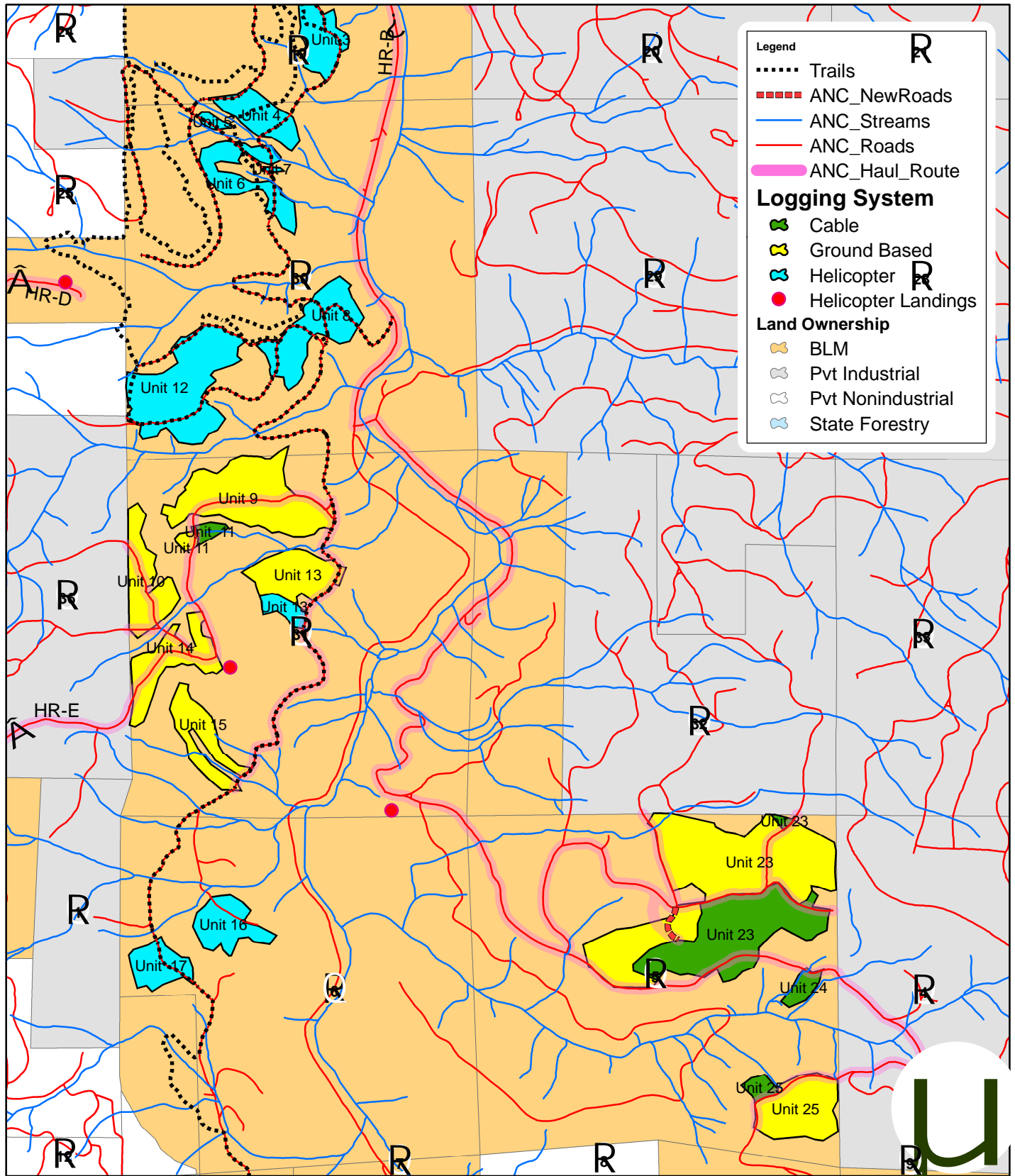
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Unit design, configuration & attributes subject to change without notice.



Annie's Cabin

Selected Action

Sheet 2 of 2



Legend

- Trails
- ANC_NewRoads
- ANC_Streams
- ANC_Roads
- ANC_Haul_Route

Logging System

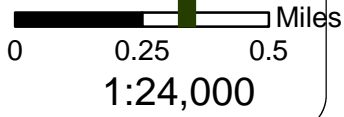
- 🟢 Cable
- 🟡 Ground Based
- 🟠 Helicopter
- Helicopter Landings

Land Ownership

- 🟠 BLM
- 🟡 Pvt Industrial
- 🟢 Pvt Nonindustrial
- 🟠 State Forestry

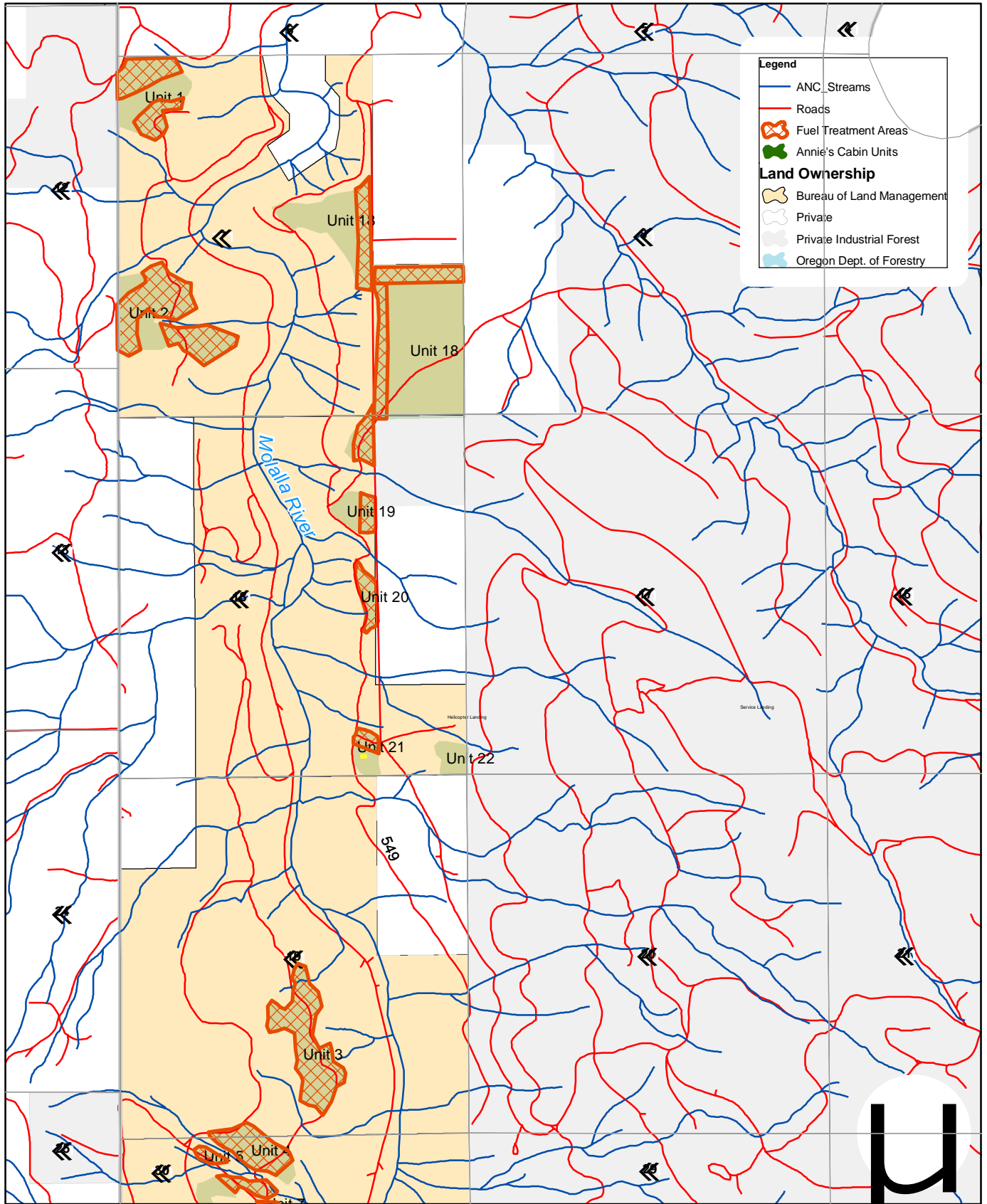


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Unit design, configuration & attributes subject to change without notice.



Annie's Cabin

Fuels Treatment Areas Sheet 1 of 2

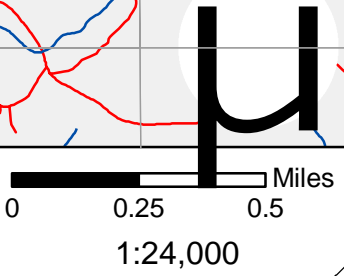


Legend

- ANC_Streams
- Roads
- Fuels Treatment Areas
- Annie's Cabin Units

Land Ownership

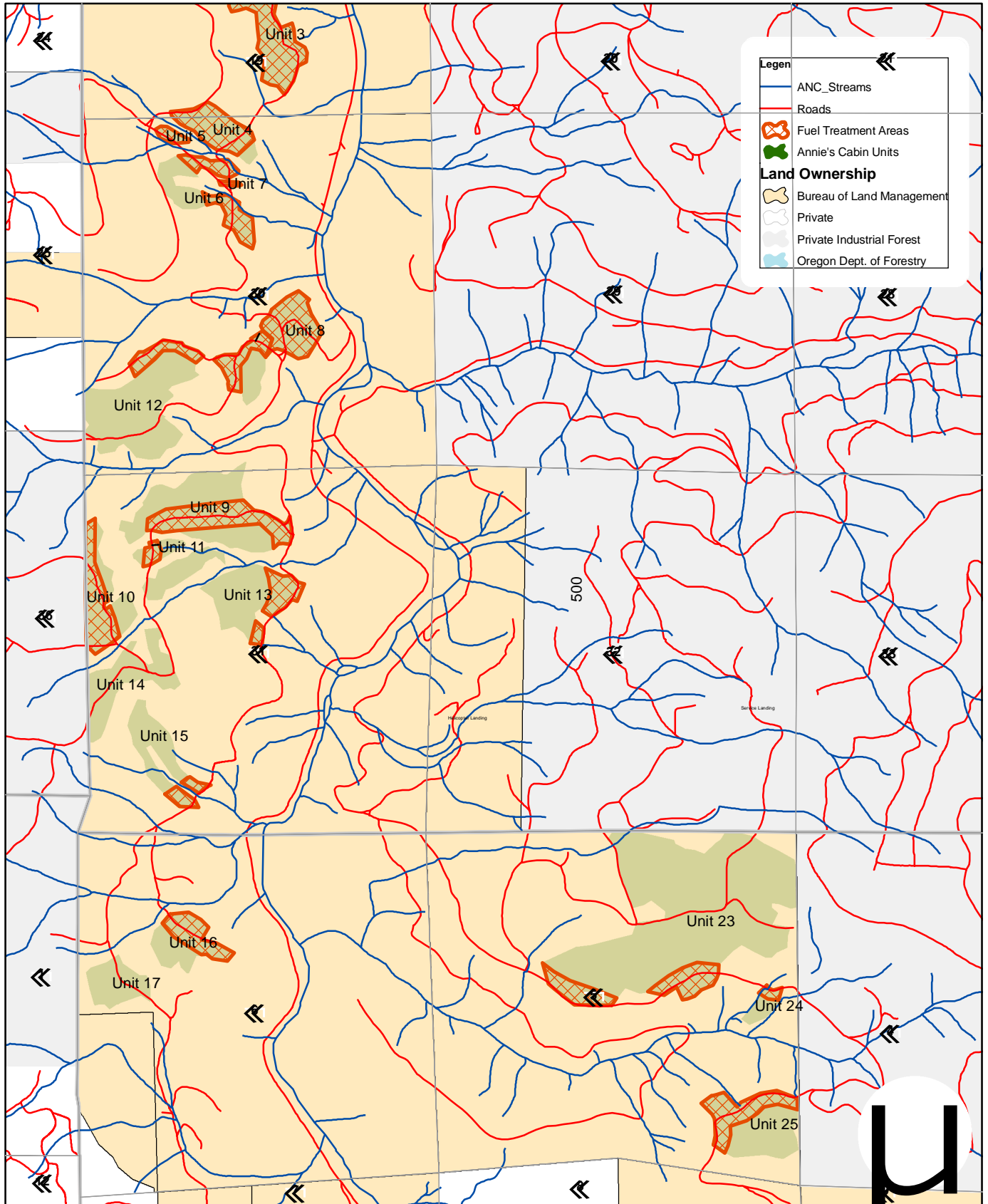
- Bureau of Land Management
- Private
- Private Industrial Forest
- Oregon Dept. of Forestry



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual or aggregate use with other data. Unit design, configuration & attributes subject to change without notice.

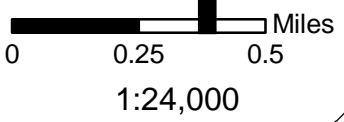
Annie's Cabin

Fuels Treatment Areas Sheet 2 of 2



Legend

- ANC_Streams
- Roads
- Fuel Treatment Areas
- Annie's Cabin Units
- Land Ownership**
- Bureau of Land Management
- Private
- Private Industrial Forest
- Oregon Dept. of Forestry



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual or aggregate use with other data. Unit design, configuration & attributes subject to change without notice.

10.0 Project Design Features

This section describes the project design features that apply to the Selected Action. Where the design feature is identical to the design feature prescribed in the 2006 Thinning EA, the EA reference is provided. Project design features for the EA action alternatives are described in *EA section 2.2.2* (Common to All Projects) and *EA section 5.2.2* (Annie's Cabin Project Area). Design features are organized by resource management objectives.

1. **Multiple Objectives:** Design features described in *EA Table 6* (EA p. 18) will be applied to the Selected Action. Examples include: a) following Best Management Practices (BMPs); b) designating skid trails prior to operations; c) designing skid trail patterns to avoid concentrating water flows; d) retaining Coarse woody debris (CWD).
2. **To minimize soil productivity loss:** Design features described under Bullet 1, EA page 18 will be applied to the Selected Action. Examples include:
 - Ground-based logging operations: a) limiting soil compaction and disturbance; b) limiting tractor skidding operations when soil moisture is high; c) placing organic debris on skid trails and limiting equipment passes on skid trails; d) locating slash piles to reduce heat damage; e) limiting slopes to 35 percent for equipment using one-end suspension and 45 percent on log transport equipment using full suspension; f) using existing skid trails; g) In Riparian Reserve LUA (RR), limiting Ground-based harvesting to slopes under 30 percent.
 - Skyline logging operations: a) requiring one end suspension of logs; b) using equipment with lateral yarding capabilities; c) designing landings to limit soil compaction and disturbance.
3. **To protect other components of Hydrologic Functions (Channels, Flows, Water Quality):** Design features described under Bullet 2, EA page 19 will be applied to the Selected Action. Examples include: a) establishing stream protection zones on perennial streams that will exclude ground-based equipment and tree removal; b) constructing and decommissioning roads during dry conditions; c) stabilizing, decommissioning, and/or blocking all new roads upon project completion.
4. **To protect and enhance stand diversity and wildlife habitat components:** Design features described under Bullet 3, EA page 19 will be applied to the Selected Action. Examples include: retaining old growth, snags, minor conifer tree species, hardwoods, and most cull and deformed trees. As a clarification:
 - “All old-growth trees will be left standing and larger snags (above 15” dbh) of all decay classes will be left standing to the greatest extent possible under standard contractual logging procedures, BMP, and Occupational Safety and Health Administration (OSHA) requirements (RMP p. D-2).”
5. **To protect against expansion of invasive and non-native plant species:** Design features described under Bullet 4, EA page 19 will be applied to the Selected Action. Examples include: cleaning ground disturbing equipment prior to entering the project area.

6. To protect the residual stand: Design features described under Bullet 5, EA page 20 will be applied to the Selected Action. Examples include: restricting operations during the spring growing season, using directional falling; locating slash piles to minimize heat damage to tree crowns or tree boles.

7. To minimize disturbance to BLM Special Status Species and other Species of Concern:

Northern Spotted owl

- A seasonal restriction will be in place from March 1 through July 15 for Units 23-25 on habitat modification activities (felling, yarding, and road building) to minimize the risk of disturbance to northern spotted owls. The seasonal restriction could be waived if surveys indicate no presence of nesting spotted owls within a disturbance range (0.25 to 0.5 miles) of the units (2007/2008 BA p. 10; 2007/2008 BO pp.17-19, 97)
- Helicopter operations will be avoided within 0.25 miles of suitable spotted owl habitat in sections 5 and 6 (in the vicinity of Units 15, 16, 17, 23, 24, and 25) between March 1 and July 15 of each calendar year of operation unless surveys determine that nesting is not occurring (2007/2008 BA pp.3, 10; 2007/2008 BO pp. 17-18).

Golden Eagle

- Helicopter operations will be avoided within one mile of the golden eagle historic nest site (in the vicinity of Units 15, 16, 17, 23, 24, and 25) between January 15 and August 1 of each calendar year of operation unless surveys determine that nesting is not occurring.

Other: Design features described under Bullet 7, EA page 20 will be applied to the Selected Action. Examples include: shutting down or restricting operations after finding plant or animal populations that need protection.

8. To reduce potential hazards to high-use recreation and rural interface areas: Design features described under Bullet 8, EA page 20 will be applied to the Selected Action. Examples include: requiring signs and barricades where necessary to ensure public safety during thinning, hauling and fuel treatment activities.

9. Units within the Molalla River Shared Use Trail System:

- To minimize physical disturbance and interruption of recreational use:
 - Any road used for log hauling will be graded as necessary after hauling is completed.
 - Use of equipment along single-track trails will be prohibited. Equipment will only be allowed to cross (approximately 12 feet in width) single-track trails where necessary and restoring trail connectivity will be required.
 - If needed, gravel no larger than 1-inch in size will be used on the top rock layer on all roads within the Shared Use Trail System.
 - Tree debris associated with the thinning activities will be piled and burned as far away as is practical from roads and trails.
 - Required brushing and pruning of haul roads will be done by hand.
 - Where necessary, disturbed roadsides and un-rocked landing will be replanted with native seed to help restore a more natural appearance.
 - During hauling activities, contractors will be required to prevent public motorized use of roads in the trail system.

- Trail system infrastructure that cannot be moved (turnpikes, footbridges, and puncheons etc.) will be repaired or replaced in kind if damaged.
 - Any designated trails disturbed by thinning or related activities will be re-established after work is completed.
 - Any vegetation debris left on roads or trails during thinning activities will be cleared away after operations are completed.
 - Trees removed will be felled and yarded away from single track trails to the extent possible. Trees to be removed, rather than residual trees will be marked with paint in harvest units associated with recreational trails.
 - A maximum stump height of six inches will be required within 25 feet of single-track trails.
 - To reduce potential public safety hazards, and minimize impacts to public access during the peak use period: Falling, yarding, and fuels treatment activities will be prohibited during the weekends or holidays when operating between Friday of Memorial Day weekend and Monday of Labor Day weekend.
- 10. To reduce potential traffic safety hazards during the peak recreation use period:** For units on *Haul Route B*, and that portion of *Haul Route E* along the Huckleberry Road, hauling activities will be prohibited during the weekends or holidays when operating between Friday of Memorial Day weekend and Monday of Labor Day weekend.
- 11. Facilities Protection:** After logging operations have been completed, access to skid trails will be blocked off by leaving logging debris to prevent OHVs from driving on skid trails.
- 12. To reduce fire hazard risk and protect air quality:** Design features described under Bullet 9, EA page 20 will be applied to the Selected Action. Examples include: a) treating activity fuels (woody debris that could contribute to fire spread) resulting from road construction and logging debris; burning in compliance with the state Smoke Management Plan; closing or gating roads to reduce fire risk on a site-specific basis.
- 13. To protect cultural resources:** Design features described under Bullet 10, EA page 20 will be applied to the Selected Action. Examples include: shutting down or restricting operations after finding cultural resources that need protection.
- 14. Summary of seasonal restrictions and permitted operational periods:** Seasonal restrictions described in Table 7, EA page 21 will be applied to the Selected Action. Examples include: restricting most logging operations and road work during owl nesting, restricting falling and yarding during bark slippage, restricting tractor operations to avoid soil damage; restricting road Construction and Decommissioning as an erosion control measure and to avoid soil damage. Seasonal restrictions are also described in this Decision Rationale, bullets 7 and 9.

11.0 Compliance with Survey and Manage Direction

2001 ROD Compliance Review: Survey & Manage Wildlife Species

Environmental Analysis File

Project Name: Annie's Cabin

Project Type: Commercial Thinning

Location: T.6S, R.3E, Secs. 7, 18, 19, 30 and 31, T.7S, R.3E, Secs. 5 and 6
Willamette Meridian

Salem District BLM – Cascades Resource Area

Prepared By: Jim England

Date: April 9, 2007

List Date: December 19, 2003

Table A. Survey & Manage Wildlife Species. Species listed below include those vertebrate species whose known range includes the Salem District according to *Survey Protocols for Amphibians under the Survey & Manage Provision of the Northwest Forest Plan v3.0* (1999), *Survey Protocol for the Great Gray Owl within the Range of the Northwest Forest Plan v3.0* (Jan. 2004), *Survey Protocol for the Red Tree Vole v2.1* (Oct. 2002) and those mollusk species that are known or suspected within the District according to the *Survey Protocol for S&M Terrestrial Mollusk Species v3.0* (Feb. 2003).

SPECIES	S&M CATEGORY	SURVEY TRIGGERS			SURVEY RESULTS			SITE MANAGEMENT?
		Within range of the species?	Project contains suitable habitat?	Project may negatively affect species/habitat?	Surveys Required?	Survey Date (month/year)	Sites Known or Found?	
Vertebrates								
Larch Mountain Salamander ¹ (<i>Plethodon larselli</i>)	A	N	N	NA	N	NA	NA	NA
Great Gray Owl ² (<i>Strix nebulosa</i>)	A	Y	N	NA	N	NA	NA	NA
Oregon Red Tree Vole ³ (<i>Arborimus longicaudus</i>)	C	Y	Y	Y	Y	April/May 2006	Y	Y (3 sites) ⁹
Mollusks								
Puget Oregonian ⁴ (<i>Cryptomasix devia</i>)	A	N	N	NA	N	NA	NA	NA
Crater Lake Tightcoil ⁵ (<i>Pristiloma arcticum crateris</i>)	A	Y	N	NA	N	NA	NA	NA
Evening Fieldslug ⁶ (<i>Deroceras hesperium</i>)	B	Y	N	NA	N	NA	NA	NA
Columbia Dusksnail ⁷ (<i>Lyogyrus</i> n. sp. 1)	A	N	N	NA	N	NA	NA	NA
Basalt Juga ⁸ (<i>Juga</i> [<i>Oreobasis</i>] n. sp. 2)	A	N	N	NA	N	NA	NA	NA

NA = Not Applicable

- ¹ In the Salem District, the range of the Larch Mountain salamander is only in the very northern portion of the Cascades Resource Area, within 14 miles of the Columbia River, east of the confluence with the Sandy River according to *Survey Protocols for Amphibians under the Survey & Manage Provision of the Northwest Forest Plan v3.0* (1999) pages 262 and 269. The project area is not within this location.
- ² Pre-disturbance surveys for great gray owls are not required within the project area. The required habitat characteristics of suitable habitat in Oregon Western Cascades Physiographic Province includes: (1) large diameter nest trees, (2) forest for roosting cover, and (3) proximity [within 200m] to openings that could be used as foraging areas (*Survey Protocol for the Great Gray Owl within the range of the Northwest Forest Plan v3.0*, January 12, 2004 pg 13). It is not necessary to survey suitable nesting habitat adjacent to natural openings smaller than 10 acres (page 5) and pre-disturbance surveys are not suggested in suitable nesting habitat adjacent to man-made openings at this time (pg. 14).
- ³ In general, the red tree vole was removed from the Survey and Manage program in the mesic zone as a result of the 2003 Annual Species Review process. In the Salem District, predisturbance surveys for red tree voles are required to be conducted only in suitable habitat of the North Mesic Zone of their range, and the project area falls within this zone. Active nests were found in units AC30A and AC31A, and the units were modified to buffer active nests according to the Management Recommendations for the Oregon Red Tree Vole, version 2.0, 2000. In addition, the Annie's Cabin units are on the edge of the red tree vole zone, with unit 1 (AC7A) outside of the red tree vole zone.
- ⁴ In the Salem District, the range of *Cryptomastix devia* is limited to Tillamook Resource Area, and Multnomah County in the Cascades Resource Area. The project area is not within this range.
- ⁵ In the Salem District, *Pristiloma articum crateris* is suspected to occur above 2,000 feet elevation in the Cascades Resource Area only. This species is "limited to perennially wet situations in mature conifer forests, among rushes, mosses and other surface vegetation or under rocks and woody debris within 10 m of open water in wetlands, springs, seeps and riparian areas, generally in areas which remain under snow for long periods in the winter." Unless these specific habitats will be disturbed, no surveys are necessary. The described habitats are not present within the project area and will not be disturbed.
- ⁶ In the Salem District, *Derocerus hesperium* has the potential to occur in all three resource areas however it is "limited to moist surface vegetation and cover objects within 30 m (98 ft.) of perennial wetlands, springs seeps and riparian areas." Unless these specific habitats will be disturbed, no surveys are necessary. Where habitat is present, equivalent-effort pre-disturbance surveys are required for this species. The described habitats are not present within the project area and will not be disturbed.
- ⁷ *Lyogyrus* n. sp. 1 is a Columbia Gorge endemic, found on both sides from east and south of Portland to Hood River, Oregon. Most sites are in Gorge tributaries; a few other sites occur in drainages originating from near Mount Hood, Oregon, to Mount St. Helens, Washington. In the Salem District, it is likely to be found only in the Cascades Resource Area, and only in cold, pure, well-oxygenated springs within a few miles of the Columbia River in Multnomah County. This project is not tributary to the Columbia Gorge. The described habitats are not present within the project area.
- ⁸ *Juga* n. sp. 1 is a Columbia Gorge endemic, and is found sporadically in springs in the central and eastern portions of the Columbia Gorge on the Oregon side only in Hood River and Wasco counties, Oregon, including sites in Mount Hood National Forest and sites in Columbia Gorge National Scenic Area. In the Salem District, it is likely to be found only in the Cascades Resource Area, and only in cold, pure, well-oxygenated springs within a few miles of the Columbia River in Multnomah County. The project is not located in Multnomah County and is not tributary to the Columbia Gorge. The described habitats are not present within the project area.
- ⁹ Management calls for 10 acre reserves around known sites (*Management Recommendations for the Oregon Red Tree Vole*, Version 2.0, September 27, 2000).

Statement of Compliance. Pre-disturbance surveys and management of known sites required by protocol standards to comply with the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004) were completed for the Annie's Cabin Thinning project. There are no known Category B, D, E, and F species within the Annie's Cabin Thinning project area.

Three known sites of a Survey & Manage species (Red Tree Vole, Category C) that require management within the project area were located. Management of active red tree vole sites calls for a 10 acre buffer around the site. To protect the active nest that was found as a result of protocol surveys, I have modified the Annie's Cabin Timber Sale by removing 30 acres from Units 8, 9, 11 and 12.

Therefore, based on the preceding information (refer to Table A above) regarding the status of surveys and site management for Survey & Manage wildlife species, it is my determination that the Annie's Cabin Thinning project complies with the provisions of the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004). For the foregoing reasons, this project is in compliance with the 2001 ROD as stated in Point (3) on page 14 of the January 9, 2006, Court order in Northwest Ecosystem Alliance et al. v. Rey et al.

Signature: Cindy Enstrom
Cindy Enstrom, Field Manager
Cascades Resource Area

Date: 5/30/2007

2001 ROD Compliance Review: Survey & Manage Botany Species

Environmental Analysis File Salem District Bureau of Land Management – Cascade Resource Area

Project Name: Annie's Cabin Timber Sale **Prepared By:** Terry Fennell

Project Type: Commercial Thinning **Date:** 04/05/2007

Location: Areas of Proposed Action in T6S-R3E-Sec.7, 18, 19, 30, 31, and T7S-R3E-Sec.5, 6

S&M List Date: December 2003

Table A. Survey & Manage Species Known and Suspected in the Salem District. Species listed below were compiled from the 2003 Annual Species Review (IM-OR-2004-034) and includes all species in which pre-disturbance surveys may be needed (Category A, C and non-fungi Category B species if the project occurs in old-growth as defined on page 79-80 of the 2001 ROD) and lists known sites of other survey and manage species that are known to occur within the project area. In addition, the table indicates whether or not a survey was required, survey results and site management.

The following survey protocols and literature were used in determining species known range, habitat and survey methodology. All field surveys were conducted using the intuitive controlled method.

Habitat:

Field Guide to the Forested Plant Associations of the Westside Central Cascades of Northwest Oregon (June 2002).

Fungi:

Survey Protocols for *Bridgeoporus* (= *Oxyporus*) *nobilissimus* (Version 2.0, May 1998)
Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan (Oct. 1999)
Handbook to Additional Fungal Species of Concern in the Northwest Forest plan (Jan. 2003)

Lichens:

Survey Protocols for Component 2 Lichens (Version 2.0, March 1998)
Management Recommendations for Survey and Manage Lichens (Version 2.0, March 2, 2000)
Survey Protocols for Survey and Manage Category A & C Lichens in the Northwest Forest Plan Area (Version 2.1 (2003)
2003 Amendment to the Survey Protocol for Survey and Manage Category A & C Lichens. (Version 2.1 Amendment, September 2003)
Survey Protocol Guidance For Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines. (March 2006).
Pseudocyphellaria perpetua Supplemental Guidance for Pre-Disturbance Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines (March 2006).

Bryophytes:

Survey Protocols for Protection Buffer Bryophytes (Version 2.0)

Vascular Plants:

Survey Protocols for Survey and Manage Strategy 2 Vascular Plants (Version 2.0, December 1998).

All species:

Rare, Threatened and Endangered Species of Oregon; Oregon Natural Heritage Information Center (May 2004).

Species	S&M Category	Survey Triggers			Survey Results			Site Management
		Within Range of the Species?	Project Contains Suitable habitat?	Project may negatively affect species/habitat?	Surveys Required?	Survey Completion Date	Sites Known or Found?	
Fungi								
<i>Bridgeoporus nobilissimus</i>	A	Yes	No	No	No ^{1,4}	N/A	No	No
Lichens								
<i>Bryoria pseudocapillaris</i>	A	No	No	No	No ²	N/A	No	No
<i>Bryoria spiralifera</i>	A	No	No	No	No ²	N/A	No	No
<i>Dendriscoaulon intricatum</i>	A	Yes	Yes	Yes	Yes	Various ⁹	No	No
<i>Hypogymnia duplicata</i>	C	Yes	Yes	Yes	Yes ⁴	Various ⁹	No	No
<i>Leptogium cyanescens</i>	A	Yes	Yes	Yes	Yes	Various ⁹	No	No
<i>Lobaria linita var. tenuoir</i>	A	Yes	Yes	Yes	Yes	Various ⁹	No	No
<i>Nephroma occultum</i>	C	Yes	Yes	Yes	Yes ⁴	Various ⁹	No	No
<i>Niebla cephalota</i>	A	No	No	No	No ²	N/A	No	No
<i>Pseudocyphellaria perpetua</i>	A	No	No	No	No ³	N/A	No	No
<i>Pseudocyphellaria rainierensis</i>	A	Yes	Yes	Yes	Yes ⁴	Various ⁹	No	No
<i>Teloschistes flavicans</i>	A	No	No	No	No ²	N/A	No	No
Bryophytes								
<i>Schistostega pennata</i>	A	Yes	Yes	Yes	Yes ⁵	Various ⁹	No	No
<i>Tetraphis geniculata</i>	A	Yes	Yes	Yes	Yes ⁵	Various ⁹	No	No
Vascular Plants								
<i>Botrychium minganense</i>	A	No	No	No	No ⁷	N/A	No	No
<i>Botrychium montanum</i>	A	No	No	No	No ⁷	N/A	No	No
<i>Coptis asplenifolia</i>	A	No	No	No	No ⁶	N/A	No	No
<i>Coptis trifolia</i>	A	No	No	No	No ⁷	N/A	No	No
<i>Corydalis aquae-gelidae</i>	A	Yes	Yes	Yes	Yes ⁴	Various ⁹	No	No
<i>Cypripedium fasciculatum</i>	C	No	No	No	No ⁷	N/A	No	No
<i>Cypripedium montanum</i>	C	Yes	Yes	Yes	Yes ⁷	Various ⁹	No	No
<i>Eucephalis vialis</i>	A	No	No	No	No ⁷	N/A	No	No
<i>Galium kamtschaticum</i>	A	No	No	No	No ⁶	N/A	No	No
<i>Plantanthera orbiculata var. orbiculata</i>	C	No	No	No	No ⁶	N/A	No	No
Category B Species (equivalent effort surveys needed if project area includes old-growth as defined in 2001 ROD glossary, p. 79-80)								
None			Yes	N/A	No ⁸	Various ⁹	No	
Additional Category B, D, E & F known sites located within the proposed project Area								
None			Yes	N/A	No ⁸	Various ⁹	No	

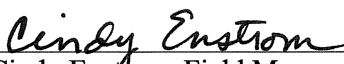
- 1 This species is only associated with large diameter true fir (above 2500' in Oregon). There is no suitable habitat within or adjacent to the project area.
- 2 This species known range within the NW Forest Plan is along the immediate coast or within the coastal fog zone within sight or sound of the Pacific Ocean. This project is not within the known range.
- 3 This species is only known from Cape Perpetua on the Oregon coast. This project is not within the known range.
- 4 This species is known to occur on Bureau of Land Management lands within the Cascades Resource Area.
- 5 This species is known to occur on Forest Service lands adjacent to the Cascade Resource Area.
- 6 This species is only known from western Washington. There are no known sites in Oregon.
- 7 This species is not known to occur on Bureau of Land Management lands within the Salem District.
- 8 Although surveys are not required for Category B, D, E, and F species, if suitable habitat is present in the proposed project area these species are addressed while conducting required botanical surveys.
- 9 Survey Dates: Aug. 10th, 11th, 12th, 13th, 16th, 17th, 18th, 19th 2004

HABITAT AND PLANT ASSOCIATIONS: The project area is comprised of young to mature conifer dominated forest. The major plant grouping as listed in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement (V.1, chapter 3, pp.29-32)* is the *Douglas-fir/Mixed Brush/Salal (D/B/SA)* grouping which occurs on the west slopes of the Oregon Cascade Mountains below 2500feet elevation.

SUMMARY OF SURVEY RESULTS: No category A, B, C, D, E or F species were identified during any survey of the proposed **Annie's Cabin Timber Sale** area.

STATEMENT OF COMPLIANCE: Pre-disturbance surveys and management of known sites required by protocol standards to comply with the 2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines (as the 2001 ROD was amended or modified as of March 21, 2004) were completed for **Annie's Cabin Timber Sale**. The **Annie's Cabin Timber Sale** also complies with site management for any Category B, D, and E species as identified in the 2001 ROD (as modified).

Therefore, based on the preceding information (refer to Table A above) regarding the status of surveys and site management for Survey & Manage botanical species, it is my determination that the **Annie's Cabin Timber Sale** complies with the provisions of the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004). For the foregoing reasons, the **Annie's Cabin Timber Sale** is in compliance with the 2001 ROD as stated in Point (3) on page 14 of the January 9, 2006, Court order in Northwest Ecosystem Alliance et al. v. Rey et al.


 Cindy Enstrom, Field Manager
 Cascades Resource Area
 Salem Bureau of Land Management

5/30/2007
 Date

12.0 Response to EA Comments

The 2006 Thinning EA was mailed to agencies, individuals and organizations. A legal notice was placed in the *Molalla Pioneer* newspaper, soliciting public input on the actions, from July 20 to August 19, 2005 (*DR section 6.2*). The major concerns raised in the comments have been consolidated and summarized.

12.1 Substantive Comments to 2006 Thinning EA (EA#OR080-04-20)

12.1.1 Aquatic Systems, Hydrology, Riparian Reserves, Fisheries

1. Riparian/ACS Objectives: *The EA p 14 description of the purpose of riparian reserves fails to account [for] the need to maintain the current functionality of riparian and aquatic systems. One of your evaluation criteria should be whether any short-term degradation of ACS objectives is off-set by long-term benefits brought about by the proposed action.*

Response to #1: *EA Section 3.2.2.1* describes measurable effects expected to occur to watershed hydrology, channel morphology, and water quality as a result of the Proposed Action. In addition, *EA Section 14.2.1* describes ACS objectives and how thinning in Riparian Reserves will increase diversity within the Reserves. This is expected to increase structural and plant diversity which will ensure protection of aquatic systems by maintaining and restoring the distribution, diversity and complexity of watershed and landscape features.

2. Landslides/Steep Slopes/Erosion: *Some fear thinning will increase the risk of premature landsliding while the trees are still small, and end up delivering fewer and smaller trees than if left unthinned. The impacts of this (sedimentation, mass wasting, habitat for an array of species, including Special Status Species) were not fully disclosed (in RR treatments). (Bark) Steep slope area(s) should be deferred because they are “potentially unstable” and should be included in the riparian reserve system. (Oregon Wild (OW), formerly ONRC)*

Response to #2: Thinning near or adjacent to perennial streams is not expected to have adverse effects on the water quality and aquatic habitat within those streams. All perennial streams have Stream Protection Zones (SPZ) that are at least 60’ wide, generally wider, to ecological or slope breaks. Near-stream ground disturbance will be limited, and the undisturbed vegetation in the SPZ is expected to absorb any sediment generated. New roads will not intersect stream channels or cause stream sedimentation.

In addition, *EA Section 14.2.1* discusses that dry season hauling will minimize sediment entering streams. Therefore it is unlikely that this proposal will lead to a measurable change in sediment regime, including increases in sediment delivery to streams, stream turbidity, or the alteration of stream substrate composition or sediment transport regime.

EA Section 3.2.2 states that tree removal, and road renovation and construction will not occur on steep unstable slopes where the potential for mass wasting adjacent to stream reaches is high. Therefore, increases in sediment delivery to streams due to mass wasting are unlikely to result from these actions.

3. Design Features: *Despite the lengthy praise given to BMPs in the EA, there is no proof of “demonstrated ability” of BMPs to be successful in diminishing harm. (Bark)*
In order to mitigate potential fire hazards, the EA/FONSI requires that pile burning take place during the wet season only. This stipulation is in direct opposition to BMPs insisting that any sediment-causing activities occur during dry months only. How do you plan to uphold both stipulations simultaneously? (Bark)

Response to #3: Best management practices (BMPs) applied to timber harvest operations and related forest management activities are the primary means of achieving state water quality standards on forestlands. To review an example, the reader can see the following EPA web site: <http://www.epa.gov/owow/nps/forestrygmt/>. BMPs are continually being evaluated both for implementation and effectiveness by federal and state agencies, researchers and private land owners. There are numerous examples in the scientific literature of studies in which BMPs have been evaluated for effectiveness at controlling non-point pollution; several of these articles were cited in the specialist report to the EAs.

For a recent example of BMP effectiveness at controlling sediment related water quality impacts the reader is directed to Effectiveness of Timber Harvest Practices for Controlling Sediment Related Water Quality Impacts (Rashin et al., Journal of the American Water Resources Association 42(5):1307-1327. “Stream buffers were effective at preventing chronic sediment delivery to streams and physical disturbance of stream channels.” (from the abstract).

Pile burning does not cause sediment. Pile burning may result in exposed soil surfaces. Exposed soil surfaces following pile burning are unlikely to result in sediment delivery to local streams, even during the rainy season because piles will be located too far from surface water for sediment delivery to occur. Pile burning takes place after an adequate amount of rain has fallen in order to prevent the fire in the pile from spreading. Piles are not located on steep slopes. In our numerous years of burning piles in the Cascades we have not seen any areas where erosion occurred because a pile was burned. There is generally unburned or charred debris (10-20% of the original pile) left on site that helps to contain any movement of ash or soil.

4. Fish: *Threatened anadromous fish populations must consider the impervious surface areas outside of project units and factor in sedimentation from this surrounding land. Sedimentation from surrounding development must be factored into the effects determination. Until this is accounted for, project activities cannot proceed. (Bark)*

Response to #4: The main impervious surface areas in the vicinity of the Annie’s Cabin units, outside of the project units are the roads. Since timber hauling is limited to periods of dry road conditions, road related sediment inputs to streams are expected to be negligible. Cumulative effects of the project are described in *EA Section 3.2.2.2*.

The project is expected to have no effect on Upper Willamette River (UWR) steelhead trout or UWR chinook salmon that are present in the Molalla River downstream of project units. The determination of “no effect” is based on project design features that include 1/ minimum 60’ stream protection zones on perennial streams, which are expected to prevent any decrease in stream shade that could result in an increase in stream temperature; 2/ very little road construction or decommissioning, none within Riparian Reserves; and 3/ no live stream culvert repair or replacement.

12.1.2 Soil Productivity

5. Organic soil components: *There are specific problems with the EA/FONSI’s total lack of information on organic soil components....*

Response to #5: Organic soil components and soil organisms are included in the effects to soils, EA section 3.2.4. EA Section 3.2.4.2 addresses the cumulative effects of the proposed action on soil. Effort to minimize any soil disturbance or compaction is outlined in EA Section 2.2.2.

6. Ground based yarding: *Our observation of serious soil damage in other ground-based logging operations raises our concerns about this logging method.. ...
Machine piling of fuels and pile burning can have serious adverse impacts on soils.
(OW)*

Response to #6: EA section 2.2.2 discusses design features to minimize soil productivity loss by ground based logging. Effects to soils are described in EA section 3.2.4.

Any machine treatments for fuels combined with ground-based operations will not exceed soil compaction or disturbance guidelines (10% of the unit area) (EA p. 18). The mechanical grinding of fuels is also a ground-based operation. Contract specifications will require low pressure based machinery. This machinery will be required to use existing skid trails and to operate on top of slash, wherever possible.

7. Soil mycorrhizae: *Without a discussion of the impacts to soil mycorrhizae, both Bark and the decision maker are precluded from making an informed decision regarding the proposed project, and the USFS cannot assert that there will be no permanent impairment of the soil. (Bark)
The EA/FONSI fails to address how past logging has affected mycorrhizae in areas within the analysis area. (Bark)*

Response to #7: Mycorrhiza is considered a component of soil and is addressed in the EA as soil. The EA addresses soil numerous times; mitigation methods have been taken into account to reduce impact such as, compaction, and erosion (EA Section 2.2.2). In addition, Mycorrhiza fungi are not listed as a Special Status Species or a Special Attention Species therefore does not require additional survey or management. If a species of Mycorrhiza is on the Special Status Species or a Special Attention Species, thinning may have an effect on Special Status Species that are not practical to survey for (EA p. 29), mainly hypogeous (underground fruiting) fungi species.

12.1.3 Wildlife Habitat and Species

8. Owl Habitat: *The project will result in 1,882 acres of (northern spotted owl) Dispersal Habitat downgraded, including the loss of 171 acres of NRF suitable habitat, which will no longer support nesting, roosting, and/or foraging behavior. (Bark)*
All stands that are late Successional old growth; in other words 80 years or older, should be excluded entirely from this project, staying completely out of LSOG stands.

Response to #8: There are no old growth stands over 200 years of age proposed for treatment in the Annie's Cabin Thinning Project. There will be 126 acres of 70 to 110 year stands (Unit 23) which qualify as marginally suitable habitat that will be downgraded as a result of the Annie's Cabin Thinning Project. Stand exams data shows these stands lack large standing dead material and down logs, and average 17 to 22 inches in diameter dbh. Such thinning treatments can have long-term benefits to spotted owls by encouraging late-successional characteristics to occur more rapidly. No dispersal habitat will be downgraded as a result of treatment. All stands proposed for treatment will be maintained as dispersal habitat after harvest. In the long term, canopy closures will increase and these stands will attain suitable habitat conditions within 10 to 40 years.

9. *New information on the Threatened northern spotted owl indicates that there are significant new uncertainties for the owl that have not been fully considered at the regional or local scale. (OW)*

Response to #9: New information on the northern spotted owl has been reviewed. The conclusions of this review are described in *DR section 5.2*.

10. Design Features: *The Proposed Action fails to adhere to conservation stipulations enacted for the protection of the northern spotted owl and therefore should be withdrawn. During the critical nesting period, while there might not be a nest located at the time of the survey, allowing logging and hauling could assure that there would not be nests there in the near future due to disturbance. (Bark)*
Just because FWS does not require surveys for Threatened spotted owls, NEPA has an independent mandate to become well-informed of the actual consequences of major federal actions.
Before deciding to log suitable habitat the agency must conduct protocol surveys for spotted owls and their prey major species. (OW)
Further, we understand that the agency took advantage of its new authority to reach an effects determination without consulting the US Fish and Wildlife Service.

Response to #10: See *DR section 6.3, # 1*.

Consultation with US Fish and Wildlife Service was completed, and the effect determinations were agreed upon by the Level I Consultation Team, which includes representatives from the US Fish and Wildlife Service. The effects determinations are described in the Biological Assessment (BA, pp. 40-41, 44-45). The Annie's Cabin Thinnings are in complete compliance with the *Biological Opinion for the FY 2007 and 2008 Habitat Modification Projects in the Willamette Province* (reference # 1-7-06-F-0179).

The Biological Opinion (BO) concluded that these thinnings will not jeopardize the continued survival of the spotted owl (p. 95). The Annie's Cabin Thinnings have incorporated the applicable general and Management Standards that were described in the BA (p. 6, 10) and BO (Section 1.2, pp. 17-19).

The Management Standard which describes when seasonal restrictions are required states "Except for hauling and the removal of hazard trees to protect public safety, no activity shall take place within the disruption distance of a known (spotted owl) activity center during the March 1 to July 15 critical nesting period, unless the habitat is known to be unoccupied or there is no nesting activity, as determined by survey to protocol (BO Section 1.2.2, p. 18)." There are no known activity centers within disruption distance of any of the proposed Annie's Cabin units. However, as a design feature of this project, the discretionary Conservation Measure set forth in the BO (p. 97) will be implemented, which includes a seasonal restriction on units 23, 24, and 25 during the critical nesting season (March 1 to July 15) to delay disturbance activities later into the nesting season. Surveys of suitable habitat in the Annie's Cabin Thinning Project are in progress, and there have been no responses thus far.

11. *Snags: We agree that large snags (>20" dbh) are the most critical to retain, but smaller snags are also ecologically valuable and efforts should be made to protect all snags >10" to the extent possible. The agency must avoid any reduction of existing or future snags and logs (including as part of this project) until the applicable management plans are rewritten to update the snag retention standards. (Bark)*
Snags should be carefully inventoried by species, size, decay status, quality, and location during project planning, and they should be treated as "special habitats" and given special protection during project planning and implementation (i.e. keep workers out of the vicinity of snags so that OSHA doesn't order them cut). (Bark)

Response to #11: Most wildlife species that utilize snags are associated with snags greater than 14.2 inches, and about a third of these species use snags >29" dbh (Rose et al., 2001). *EA Table 37* summarizes the CWD and snags within the project area. Design features common to all project areas will retain existing large snags (>20" dbh) and old growth trees (*EA Section 3.2.5.1*).

Any snags cut or incidentally knocked down, including those snags under 20" dbh, will be left on site as down logs and CWD, which is also valuable wildlife habitat and important for nutrient cycling.

In addition, by accelerating the growth of the residual trees left after treatment, larger material will be available sooner (than without thinning) to contribute additional large snags to the future stand. The BLM is not obligated to save all snags. The project meets the standards and guidelines set forth in the Salem District RMP. Changing stand retention guidelines is outside the scope of this project.

12. *Thinning analysis should have included information about impacts to wildlife, particularly T&E fish populations, from its use.*

Response to #12: The project's effects on wildlife are described in *EA sections, 3.2.5, 5.2.5, 12.1.1, 14.1* and *DR section 7.1*. Effects to fish are described in *EA sections 3.2.3, 5.2.3, 12.1.1, 14.1* and *DR section 7.1*.

13. *Microhabitat Drying: The EA/FONSI predicts that microhabitat drying will persist unabated for 10-20 years after thinning, at which time it would only begin to decrease. However, as explained in the EA, future harvest activities may restart as soon as the canopy closes (resulting in more microhabitat drying).*

Response to #13: *EA Section 3.2.5.1* (p. 43) discusses microhabitat drying. In all of the units, 60 to 200+ trees per acre will be retained and 40 to 60% canopy closure will remain, which will provide shade. Some microhabitat drying could occur at the forest floor as canopies are opened-up, however, this will be minimal due to the high green tree retention after thinning.

12.1.4 Survey and Manage Species

14. *The EA claims to protect BLM Special Status plant and animal species and relies upon statutes and regulations listed on page 3, including the 2004 Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (“2004 SEIS”) Now that the survey and manage ROD has been declared illegal by Judge Pechman, the BLM should survey for red tree voles and other survey and manage species at least in all stands older than 80 years old. (OW)*

Response to #14: Compliance with Survey and Manage direction is described in *DR section 5.1* and in *DR section 11.0*.

12.1.5 Road Building And Road Renovation

15. *Management should focus on thinning stands that are accessible from existing roads. If young stand thinning requires construction of temporary roads, the agency should do an analysis that illuminates how many acres of thinning are reached by each road segment so that we can distinguish between short segments of spur that allow access to large areas (big benefit, small cost) and long spurs that access small areas (small benefit, big cost). This can help inform the decision-maker's balancing of the costs and benefits of thinning and roading. (OW)*

Response to #15: *EA Sections 2.2.1, 2.2.2, 5.1.2* and *DR sections 2.5, 10.0* discuss road work associated with this project. Under the selected action approximately 20 miles of road will be renovated / maintained with less than a mile of new natural surface road construction taking place. In addition, effects to resources as a result of road work are described in *EA Sections 3.1, 3.2.2-3.2.6, 4.0, 5.2.2-5.2.5, 5.2.7, 9.1, 12.1-12.2, 14.1-14.2* and *DR section 7.1*.

16. *The agency assumes that temporary and semi-permanent new roads will have no effect because they are temporary. The agency has shown no scientific evidence for this assumption...*

The NEPA analysis must account for this (described in text) increased risk of temporary roads compared to permanent roads. (OW)...
Temporary roads still cause serious adverse impacts to soil, water and wildlife, and spread weeds....
Decommissioning such roads is not entirely successful and the soil compaction effects can last for decades.....
The agency should consider avoiding building spurs by treating some areas non-commercially (e.g. thin lightly, create lots of snags, and leave the material on site). (OW)

Response to #16: New roads have been minimized to less than one mile of temporary natural surface roads. Current roads will be renovated to accommodate the project (EA Section 2.2.1). No new permanent roads have been proposed. Old roads will be stabilized or decommissioned. Project design features such as constructing roads in dry seasons, decommissioning roads, re-seeding, and use of erosion mats to stabilize soil will reduce the risk of effects to soil. All ground disturbing machines are required to be cleaned so as not to spread off site soil, plant parts and seeds (EA p. 19). See response to comment 15.

12.1.6 Invasive Weeds

17. *Bark cannot support the use of herbicides on false brome given the known adverse affects of pesticides to wildlife and humans. (EA, 17) (Bark)*

Response to #17: Based on survey results and a known site data search, there are no known false brome sites within the Annie's Cabin project area or the Molalla Corridor. There are sites near some of the other timber sales included in the 2006 Thinning EA. Herbicides are only used when they can be used safely and will have no effect on wildlife or humans. Cascades Resource Area uses an Integrated Weed Management approach that is documented in the *Cascades Resource Area Invasive Non-Native Plant Management* Environmental Assessment (EA # OR-080-02-02).

18. *This EA provides very little in the way of mitigation, requiring only "Ground disturbing equipment would be cleaned as needed to be free of off-site soil, plant parts and seed (e.g. noxious weeds) prior to entering the project area" (EA, 19). (Bark)*

Response to #18: Requiring ground disturbing equipment to be cleaned is an effective way to prevent the spread of invaders from one area to another on projects.

Most of our noxious weeds are spread along roadways, but we cannot require all private vehicles to be washed before they enter BLM lands. Part of an integrated weed management program is outreach and education. The BLM works with local counties, state, Soil and Water Conservation Districts (SWCD), watershed councils, and other agencies and is a member of local Cooperative Weed Management Areas (CWMA) that all work together to provide information to the public about invasive weeds. BLM conducts weed inventories every 5 years.

12.1.7 Cumulative Effects Analysis

19. *The EA does not actually analyze the cumulative impacts of this project and other past, current, and foreseeable future projects, including timber sales, livestock grazing, herbicide use, mining projects, off-road vehicle use, and other recreation and management activities on the watershed (Bark).*

In order for the finding of no significant impact to meet the fifth stipulation listed in the EA/FONSI, future anticipated thinning projects must be factored in the cumulative effects determination. (Bark)

The EA fails to disclose the watershed consequences at all spatial scales, as necessary for informed decision-making and as required by NEPA. Adequate cumulative effects analysis cannot be achieved with so many projects spanning such a wide range in various conditions. (Proctor)

The NEPA analysis must address the significant cumulative watershed effects caused by past, present and foreseeable future road construction. (OW)

Response to #19: The interdisciplinary team evaluated the project areas in context of past, present and reasonably foreseeable actions [40 CFR 1508.27(b) (7)] (EA p. 4). Cumulative effects to resources are addressed on pages 4-5, 22-25, 33-35, 39, 44, 49, 117, 119 of the EA. *EA Section 3.2.2.2* addresses cumulative effects common to all project areas. Within this section new road construction and existing road use are reviewed for possible cumulative effects specifically pertaining to watershed hydrology, and water quality. The cumulative effects of these activities have also been addressed in the Salem District RMP.

12.1.8 Mitigation Measures

20. *Where an environmental assessment relies on mitigation measures to reach a finding of no significant impact, that mitigation must be assured to occur and must “completely compensate for any possible adverse environmental impacts.” Cabinet Mountains Wilderness/Scotchman's Peak Grizzly Bears v. Peterson , 685 F.2d 678, 682 (D.C. Cir. 1982). Until the BLM is able to substantiate its proposed mitigation measures – i.e., that they are appropriate, will be implemented, and will be effective – the agency must withdraw the proposed project.*

Response to #20: For this project, mitigation measures are not being applied after significant effects have been determined. Instead, the project has been designed to meet the standards and guidelines of the Salem District RMP. These standards and guidelines are designed to reduce the risk of effect to resources.

The project design features incorporated into the development of this project tie directly to the Salem District RMP standards and guidelines and the results of ESA consultation (e.g BMPs, seasonal restrictions). The RMP analyzed the impacts of these activities. Yearly RMP monitoring evaluates whether the design features have been implemented.

12.1.9 Thinning Prescription

21. *Thinning should always use variable retention techniques that create a variety of microhabitats and habitat gradients within and between stands. VDT will not conflict with matrix objectives. Matrix objectives include timber production as well as habitat and species diversity. Variable thinning will produce potentially more wood products in the short-term as well as significant wood products in the long-term. There is absolutely no requirement that the agencies MAXIMIZE timber production. The ecological benefits of variable density thinning are significant and should not be forgone.. We wish that you would use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation. (OW)*

Response to #21: The Matrix lands outside of the Riparian Reserves that are designated for thinning are further classified in the Salem District RMP as General Forest Management Area (GFMA). Our prescription for thinning GFMA lands meet the objectives as stated in the RMP.

The primary objectives for Matrix lands are to produce a sustainable supply of timber and other forest commodities, provide connectivity between Late Successional Reserves, provide habitat for a variety of organisms, provide for important ecological functions, and provide early successional habitat (RMP, p. 20). Further direction specifies providing coarse woody debris for species needs and ecological functions and providing snags for cavity nester habitat (RMP, p. 21). Further guidance for GFMA lands emphasizes keeping them in a productive and sustainable condition that will support the Allowable Sale Quantity (ASQ) (RMP p. 47).

The objective of a thinning in the GFMA is to allow more growing space for the reserve trees. We want the crowns to be free of competition so they can develop fully and add more growth. This opening of the stand allows more light to reach the forest floor. Variable Density Thinning (VDT) refers to a variation in the spacing of leave trees within a stand. Our prescription allows for variable spacing of the reserve trees to allow space between the crowns of the reserve trees. The marking guides for the individual units have a reserve tree spacing that varies from 13 to 27 feet depending on the size of the trees in the unit. Smaller trees have a closer spacing and larger trees have a wider spacing. Light reaching the forest floor allows understory vegetation to develop that will provide a more diverse habitat than an unthinned stand. It also provides adequate growing space for the reserve trees that will allow us to have a future sale with a subsequent thinning or regeneration harvest.

12.1.10 Multi-project EA

22. *This practice of large-scale NEPA analyses should be reserved for truly non-controversial projects, such as those in which focus exclusively on stands younger than 80 years old, minimal road construction, and using variable density thinning prescriptions. Since this project includes some controversial aspects, we are not highly supportive of the merged analysis in this case. (OW)*

Although the proposed actions may be similar for each of the 4 projects, their geographic range precludes the likelihood of similar environmental impacts. (Bark)

Response to #22: All stands proposed for thinning that are “older” have been previously thinned or originated as plantations, pastures, or natural regeneration after harvest. All aspects of the proposal are consistent with an existing EIS (RMP). Though the EA analysis covers four project areas scattered over a large area, any decision for individual project areas is independent of the others.

12.2 Comments Specific to Annie’s Cabin Project Area

12.2.1 Recreation and Visual Resources

23. *The CPO is not opposed to thinning and timber harvest. Thinning can improve forest health and timber harvest remains an important part of our regions economy. However, we strongly object to this particular proposal. We request that you refrain from doing any thinning work on the units within the multi-use trail system that the BLM and Molalla River Watch have spent many years developing. If this project cannot be halted, then the CPO will support the position of Molalla River Watch, to choose the helicopter logging alternative which will result in less damage to trails and other sensitive areas. (MCPO) Molalla River Watch is not opposed to all thinning projects and realizes that thinning can be beneficial to forest health. We believe that, within the recreational trail system, the area should be managed for recreation and large scale thinning operations are not consistent with recreational use. (Molalla River Watch)*

Response to # 23: The Annie’s Cabin project is located within the Matrix land use allocation. Management direction for the area is addressed in the Salem District RMP. The BLM manages this area for multiple uses, including recreation. The selected action is responsive to public concerns regarding protection of the area’s trail system and associated recreational experiences. Through implementation of the selected action, physical disturbance to the trail system and interruption of recreational use will be minimized (*DR sections 4.0, 7.1*). For example, in the selected action, units within the Molalla trail system within the vicinity of the improved single track trails (Units 2-8, 12) will be helicopter yarded to reduce the damage to trail tread, infrastructure, and sensitive areas. Units 16, 17, and a portion of 13 will also be helicopter yarded (*DR sections 2.2, 8.0*).

24. *Additionally, the road to the north of the landslide area has revegetated and closed in to become a trail, seemingly rarely used. We suggest it be left that way. (Proctor)*

Response to # 24: The southern section of Huckleberry Rd. has revegetated in sections creating a singletrack trail based experience for recreationists. However, the condition of Huckleberry Rd. varies widely throughout the project area. It is anticipated that vegetation management on selected sections of Huckleberry Rd. will not significantly impact a user’s recreational experience.

25. *Despite claims to the contrary (EA, page 4), logging in a recreation area is highly controversial, and therefore requires full analysis in an EIS. (Bark)*

Response to #25: The BLM understands that some people disagree with the Annie’s Cabin timber sale. However, the BLM does not find the effects to be “controversial”, which would require an EIS. The effects of this project are well documented in the EA, the Salem District RMP, and previous experience and observation; and are not significant (EA pp. 2-6). The selected action has addressed many of the concerns that have been raised by recreation users. See *DR sections 2.0-4.0, 6.0-7.0, 10.0, 12.0.*

26. *I personally witnessed the results of a thinning project... in eastern Oregon...The forested was littered with enormous amounts of future forest fire fuel. Many trees were cut down but were not harvested...
Require that all cut trees be harvested no matter the condition. (Ross)
Require that limbs be cut up so that they are not so visible and will breakdown easier if not burned. (Ross) ...
If burned, ensure that the burning is complete and don’t let them leave piles of partially burned debris. (Ross)*

Response to # 26: Contractors’ utilization of the timber is regulated by market prices. At the same time the value of coarse woody debris is known to be important to many species. This requires a balance between the leaving the larger debris and cleaning up the fine fuels which can carry a fire. We will be using contractual stipulations such as direction felling away from the trails, piling specifications and time constraints to insure that fuel reduction activities are accomplished adequately and timely. The trail tread within the Molalla River Shared Use trail system will be cleared of debris following timber harvesting activity. Outside of timber felling, no impacts to recreational access is anticipated as a result of this project.

12.2.2 Helicopter Logging

27. *Please give strong consideration to helicopter thinning for this project so as to minimize damage to habitat, trails and the ecology of this already fragile area. (Tuyls, Mazamas, Ross)...
Would like to encourage the alternative 2 – use of helicopter to move cut logs to a landing on the south end of Dickie Prairie Rd....
We will benefit from reduced fire danger to our homes without losing the recreational jewel we have in the Molalla River corridor. (SCPO)
Helicopter logging would minimize or eliminate many of Molalla RiverWatch’s concerns for the following reasons....1/create less ground disturbance within trail system, 2/ location of helicopter landings on south end of Dickey Prairie road across the river from the trail system, 3/ harvest activities to take place after labor day. 4/ eliminate log truck traffic on two sections of roadway and northern and southern ends of the trail system which have been used as trails. No vehicles use Amanada’s trail, work in that area done by hand. 5/ eliminate the need for road construction to ramp over the slide. (Molalla Riverwatch)*

Response to # 27: Helicopter logging is being proposed in portions of the single track trail system to meet recreation management objectives and to address public concerns. Helicopter logging will reduce the impacts to the Molalla Shared Use trail system; eliminate the need for new road construction over the slide that occurred on Huckleberry Rd., and decrease the duration of limited recreational access to the trail system.

12.2.3 No Action Alternative

28. *Molalla Riverwatch still supports a position of no action on units within the trail system. There is absolutely no need for logging roads; heavy machinery, chainsaws, noise, trucks or anything related disturbing activities in an area that the public has been led to believe is protected. (please note in addition these comments on the Annie's Cabin sale which is second growth, it is equally inappropriate to even consider logging any late successional stands of which there are very few left in the Molalla watershed and for that matter anywhere at all'; this disregards all scientific rationale and evidence that remaining old-growth stands need to be protected). (Thomas).*

If helicopter thinning is not chosen, then the two most northern units (#AC7A and #AC7B) and the two most southern units (Tuyls recommends dropping #AC6C and #AC6E.

Molalla River Watch recommends dropping AC6C and AC6F) should be dropped from the proposal to avoid opening to truck traffic roads that are currently closed. (Molalla River Watch, Tuyls)

...the area that would be opened up to logging from a new road (in Section 31) is not dramatically dense, and not in desperate need of restoration. If thinning needs to take place here, trees should be felled and left in place to provide needed nutrients to the forest floor. The southern units should be eliminated from the Annie's Cabin project completely. (Bark and Proctor)

...This northern section has fairly healthy sized trees that are not densely stocked. The cost to the environment and recreation are not worth any benefit in terms of reduced density. (Bark and Proctor)

This is a lovely forest that is recovering from past mismanagement. The area, which falls within the Molalla River/Table Rock Special Recreation Management Area was designated to "provide specific recreation activity and experience opportunities." New logging roads, skid trails, and thinned out forests will destroy this valuable recreation area, to say nothing of the impacts on the watershed. Please cancel this ill conceived proposed logging project (136 Preprinted Post Cards).

Response to #28: The No Action Alternative was evaluated and does not meet the purpose and need of this project (*DR sections 3.0, 4.0*). In the selected action, units 2 (AC7B), 16 (AC6C) and 17 (AC6E) will be helicopter yarded. Unit 1 (AC7A) will be ground based yarded and logs will be hauled to the northwest, avoiding the trail system. Please refer to the responses to comments # 23, 24, and 30.

The Molalla River/Table Rock Special Recreation Management Area (SRMA) includes multiple recreational resources and opportunities outside of this proposed project area. The Molalla shared use trail system is the only section of the SRMA that is within the project boundary.

All improved single track trails within the SRMA will be helicopter logged to reduce the impacts to trail tread, infrastructure, special areas, and experience opportunities.

This proposed project is consistent with the current recreation management within this area with regard to recreation activities, and experience outcomes.

12.2.4 Aquatic Systems, Hydrology, Riparian Reserves, Fisheries

29. *There is also already a high risk of sedimentation due to ongoing winter use of trails from stock and mountain bikes. In early November, there were muddy pools on many of the trails, and several were closed due to poor conditions...*

Due to problems with existing roads, and serious potential for erosion, the EA should eliminate northern & southern units from the project.

Response to # 29: The rainfall received in the area in early November was very intense, and would be expected to cause puddles on trails. Trails are closed seasonally every year to protect them from damage during wet conditions, not because they are in poor condition. The northern and southern units on the west side of the river, in the vicinity of the shared use trail system are helicopter units in the selected alternative, except for Unit 1. Helicopter logging is not expected to have adverse effects on the trail system. Unit 1 will be ground-based yarded to a new spur road off of the Trout Creek Road with minimal, if any, impacts to the trail system.

30. *T6S-R3E, Section 31: Reconstructing this road (buried culvert in T6S-R3E, Section 31) would likely have adverse hydrological impact on the area. To invest significant funds to rebuild this road and replace the culvert for a road that has become a trail and would not need to be used again as road is irresponsible and a waste of resources.*

When user groups asked to build a trail over the above landslide area, they were told by the BLM that the area was too unstable for a trail, and that any trails should be re-directed around the landslide area. However, the BLM is now proposing to punch a road right through it. Volunteers clearly took great pains to install this environmentally sound trail circumventing the slide. Under the Annie's Cabin proposal, all of this effort and goodwill will go to waste. (Bark and Proctor)

This area (landslide in Section 31) has experienced a landslide, which has washed out a stretch of road. Despite instability of this slope, the BLM is proposing to construct a new section of road to extract timber in the southern unit north of Aqua Vista area - new road building would disturb the recovery process and potentially have long term hydrological impacts. Building new roads in unstable terrain is not based on good restoration principles. (Bark)

This landslide area is re-stabilizing itself naturally through re-vegetation; new road building would disturb the recovery process and potentially have long term hydrological impacts. (Proctor)

Response to # 30: The proposed road reconstruction over the landslide in section 31 has been dropped. Units 16 (AC6C) and 17 (AC6E) will be logged by helicopter (Table 3). No disturbances to the trail improvements around the landslide in section 31 are anticipated as a result of this timber sale.

12.2.5 Soil Productivity

31. *Due to the high density of trails and their frequent use by hikers, motor bikes and horses, especially in recreation areas such as Annie's Cabin, we want assurances that trails are included to the compacted area calculation. (Bark)*

Response to # 31: Trails are not included in the calculation of compacted area. Field review of trails in the project area determined that local recreation trails are narrow (1-2 feet wide), occupy a small portion of the terrain and are generally in good condition with light to moderate compaction and retention of much of the surface duff layer. Under these circumstances trail surfaces are unlikely to have an adverse effect on soil function or surface erosion.

12.2.6 Fuels Treatments

32. *Paired with intense recreational use, increased likelihood of unauthorized access to roads, and human presence--the most common source of fire starts-- and this project will result in a more hazardous, not less hazardous, fire situation across the landscape. (Bark)*

Response to #32: EA section 3.2.6.1 states: reduction of the thinning slash along open roads and within WUI will reduce the potential for a fire start to spread rapidly and increase the probability that the fire could be contained and controlled before property or resource damage occurs. Treating the slash is an integral part of the timber sale. As recreational use within the Molalla River Corridor increases so does the likelihood that a human caused fire could occur. Reducing fuel loads within this high use recreation area will alter future fire behavior.

The primary purpose of a fuel treatment is not to stop fires, but to change the behavior of a fire entering a fuel-altered zone, thus lessening the impact of that fire to an area of concern. This change in fire behavior is often quantified as a reduction in flame length, intensity, or rate-of-spread, and manifested as a change in severity or growth of the fire.

This is best achieved by fragmenting the fuel complex and repeatedly disrupting or locally blocking fire growth, thus increasing the likelihood that suppression will be effective or weather conditions will change. (Stratton, 2004)

12.2.7 Wildlife Habitat and Species

33. *In the Annie's Cabin project area north of the intersection of the Huckleberry Trail and the Rim Tie Trail, there are numerous large trees. A few measure 10.6 feet in circumference. Many are 6 feet in circumference. These older trees are very rare in the watershed. Tree growth is achieved most successfully through thinning early seral stands, not the mid seral and late seral stands that comprise the vast majority of the planning areas. (Bark)*

Response to # 33: The vicinity of the intersection of the Huckleberry Trail and the Rim Trail is not located within any of the Annie's Cabin Proposed treatment units. No trees in this area are planned for harvest. In the Annie's Cabin selected action, all units to be thinned west of the river and within the Molalla River Shared Use Trail System are under 80 years old (DR Table 3) and average 12-19 inches in diameter (EA Table 28). None of these units contain late seral stands.

BLM acquired these stands in 1992 from Cavenham Industries and prior to 1992, these stands were managed as industrial forest land. No large trees were found within the units during stand exams or field reconnaissance. However, if any old growth trees are found within the harvest units, they will not be cut (EA p. 19). Instead they will be retained as reserve trees.

34. *Although we appreciated the inclusion of helicopter logging alternative in the Annie's Cabin proposal, we still feel the impacts to the area would be greater than the habitat and wildlife can reasonably handle.*(Bark)

Response to # 34: The impacts to wildlife are described in *EA Sections 3.2.5, 5.2.5, 10.3, 12.1.1* and in *DR Sections 5.0, 6.3, 7.1, 11.0*. The Annie's Cabin Thinning Project will not have impacts to wildlife beyond those already anticipated and addressed in the Salem District RMP EIS and the selected action is in compliance with the Wildlife Sections of the RMP (pp. 24-27, 28-32).

35. *Where are the environmental impacts assessed for this repeated reentry in this EA on wildlife, particularly on Special Status terrestrial species?* (Bark)

Response to # 35: One of the proposed fuel treatments is the maintenance of a fuel break approximately 100 feet wide along some of the roads within the project area (*EA pp. 17, 52, and DR section 2.6*). The area will be thinned for this project to residual tree densities of 35 to 45 percent. This density in Douglas fir has been correlated through studies to reduce the likelihood of a crown fire. Keeping the stand in the 100 foot area along the roads at this density can be achieved through future thinnings or through coarse woody debris recruitment. The idea is to reduce the density of the crowns so a fire cannot move through the crowns. The other part in a fuel break is to increase the distance between surface fuels and tree crowns and remove ladder fuels, thus preventing a surface fire from becoming a more severe crown fire. The effects of this fuels treatment are described in *EA pp. 47, 62 and DR section 7.1*.

36. *Concerns about unit 9 and red tree vole and Oregon slender salamander* (post cards as a result of the BARK field trip).

Response to # 36:

Red Tree Vole: The portions of the units with active red tree vole nests were dropped from the sale. *DR section 11.0* states that "Three known sites of a Survey & Manage species (Red Tree Vole, Category C) that require management within the project area were located. Management of active red tree vole sites calls for a 10 acre buffer around the site.

To protect the active nest that was found as a result of protocol surveys, I have modified the Annie's Cabin Timber Sale by removing 30 acres from Units 8, 9, 11 and 12. Twenty acres have been dropped from unit 9 (*DR Table 3*).

After receiving these postcards and a follow up e-mail, we checked our survey records for Annie's Cabin and found that the trees you refer to were trees with some kind of visible nest like structure identified during ground surveys of the proposed unit. The flagging on the trees identifies the tree number and survey date, and coordinates were taken so the tree could be relocated by the climbers. Those trees were climbed and confirmed to not to be red tree vole nests.

Oregon slender salamander: The Oregon slender salamander is a Bureau Sensitive Species. It is not a Survey and Manage Species thus surveys and protection buffers are not required. However, some surveys were conducted in the Annie's Cabin area, and Oregon slender salamanders were also found in units 6, 16, 17, and 18.

12.2.8 Invasive Weeds

37. *There is an existing problem with Scot's Broom, which will be exacerbated by logging and hauling.* (Bark and Proctor)

Response to # 37: Scot's broom has been treated in the past along the road and trail system and additional treatments are being planned. The BLM conducts periodic inventories to determine treatment needs across the Resource Area.