

FINAL DECISION DOCUMENTATION and DECISION RATIONALE

**Split Finger Timber Sale Harvest and Reforestation Plan**

Environmental Assessment Number OR080-98-24

Tract No. 00-501

USDI - Bureau of Land Management  
Oregon State Office, Salem District, Cascades Resource Area

Section 25, Township 6 South, Range 1 East;  
Sections 7, 17, 25, 27, 35 Township 7 South, Range 2 East, Willamette Meridian

Marion County, Oregon

I. BACKGROUND

In 1998, an IDT (interdisciplinary team) analyzed approximately 382 acres managed by the Cascades Resource Area, Salem District, BLM (Bureau of Land Management) for a timber harvest proposal.

These stands analyzed are located within section 25, Township 6 South, Range 1 East, and sections 7, 17, 25, 27, 35 Township 7 South, Range 2 East, Willamette Meridian; Marion County, within the Abiqua and Butte Creek Watersheds. All stands analyzed are within the GFMA or Riparian Reserve allocations.

An environmental analysis was conducted and documented in the Split Finger Environmental Assessment (EA) Number OR080-98-24. Approximately 126 acres were eliminated from further consideration based on field reconnaissance (EA pp.10). The Environmental Assessment documented a proposal to harvest approximately 254 acres within the Matrix lands and approximately 2 acres in a Riparian Reserve. The proposed action also included topping trees to create snag habitat in the uplands and riparian reserves. Temporary road construction, road renovation, and road decommissioning were also part of the proposal. A Finding of No Significant Impact was signed on August 11, 1998 and the EA and FONSI were made available for public review on August 12, 1998.

Since the release of the EA, the interdisciplinary team has identified the need to update some information due to the March 1999 listing of the upper Willamette steelhead trout and chinook salmon, the results from component 2 (“Survey and Manage”) surveys, and further field reconnaissance. These changes to the proposed action are described in the following section which also describes any changes to the analysis and determination of effects as presented in the August 11, 1998 EA.

## II. MODIFICATIONS TO THE PROPOSED ACTION / CHANGES TO AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

### 1. Changes to the Proposed Action

- a. *Unit acres* - Unit acres have been finalized based on unit traverse and sale layout. Acres were further reduced after identifying additional “Survey and Manage” reserves based on the component 2 (Survey and Manage) survey results. See Appendix B for the “Survey and Manage” Species Survey Summaries. **Table 1a** shows the changes in unit numbers and acres.

Unit Numbers			Unit Acres			
Current	EA	Harvest Method	Current	EA	Change	
1	25AA	Regeneration Harvest	9	6	3	
2	7C	↕	9	13	-4	
7	27D	↕	6	9	-3	
Rd R/W	(PC units 3-6,8-9)	↕	2	0	2	
DROPPED	25A	↕	0	11	-11	
DROPPED	27A	↕	0	7	-7	
DROPPED	35B	↕	0	13	-13	
3	17A	Partial Cut - Single tree / group selection (une ven-aged m anagement)	11	22	-11	
4	27B	Partial Cut - Thinning	35			
5	↕	↕	35			
6	↕	↕	5			
8	↕	↕	12			
<i>subtotal Units 4-6, 8</i>	↕	↕	87	152	-65	
9	35D	↕	20	21	-1	
8R	27F	Partial Cut - density mgt - Riparian)	2	2	0	
<i>Regeneration Harvest</i>	<i>Regeneration (Regen.) Harvest - Units 1, 2 and 7</i>		24	26	59	-35
	<i>Clearing Roads Rights-of-Way</i>		2	0	2	
	<i>Partial Cut (PC) Single tree / group selection - Unit 3</i>		11	120	22	-11
	<i>Partial Cut (PC) Thinning - Units 4-6, 8,9</i>		107	173	-66	
	<i>Density Management (Riparian Reserve) - Unit 8R</i>		2	2	0	
<b>Total</b>			146	256	-110	

- b. *Timber volume* - Final timber volume estimates for the sale have been determined through a field timber cruise. Cruise volumes have decreased from 5692 to 4159 hundred cubic feet for an overall decrease of 1533 hundred cubic feet. **Tables 4a and 4b** in Appendix A show unit volumes.
- c. *Reserved Green Trees*: The EA stated that there would be 10-12 reserve green trees per acre in Regeneration Harvest Units. Currently, 346 green trees would be reserved in units 1, 2 and 7, approximately 14 reserve green trees per acre.
- d. *Logging Systems* - Logging Systems have also changed due to the location of additional “Survey and Manage” reserves based on the component 2 (Survey and Manage) survey results. The original EA stated that approximately 205 acres would be logged using ground based systems and 51 acres would be logged using cable systems. There has been a decrease in ground based and cable acres (see **Table 1b**).

Unit Number	Ground Based Yarding			Cable Yarding			Total		
	Current # (EA #)	Current	EA	Change	Current	EA	Change	Current	EA
1 (25AA)	9	6	3				9	6	3
2 (7C)				9	13	-4	9	13	-4
7 (27D)	6	9	-3				6	9	-3
Rd R/W	2	0	2				2	0	2
DROPPED (25A)	0	11	-11				0	11	-11
DROPPED (27A)				0	7	-7	0	7	-7
DROPPED (35 B)	0	8	-8	0	5	-5	0	13	-13
3 (17A)	11	22	-11				11	22	-11
4 (27B)	25			10					
5 (27B)	35								
6 (27B)	5								
8 (27B)				12					
subtotal Units 4, 8 (27B Cable)				22	24	-2	22	24	-2
subtotal Unit 5, 6, (27B Ground Based)	65	128	-63				65	128	-63
9 (35D)	20	21	-1				20	21	-1
8R (27F)				2	2	0	2	2	0
<b>Total</b>	<b>113</b>	<b>205</b>	<b>-92</b>	<b>33</b>	<b>51</b>	<b>-18</b>	<b>146</b>	<b>256</b>	<b>-110</b>

- e. *Road Construction* - Further field reconnaissance and road traverses revealed that there would be a 415 foot decrease in new road construction, a 5770 foot increase in existing road renovation or improvement (brushing, blading and rocking), and an 293 foot increase in road decommissioning from the Environmental Assessment (**Table 2**).

Unit Number Current # (EA #)	New Road Construction			Renovation/ Improvement <sup>1</sup>			Road Decommissioning		
	Current	EA	Change	Current	EA	Change	Current	EA	Change
1 (25AA)	0	0	0	792	300	492	0	0	0
2 (7C)	0	0	0	1531	1000	531	2200	2200	0
7 (27D)	0	0	0	2587	1500	1087	2587	2250	337
DROPPED (25A)	0	500	-500	0	0	0	0	500	-500
DROPPED (27A)	0	0	0	0	1500	-1500	0	0	0
DROPPED (35 B)	0	0	0	0	0	0	0	0	0
3 (17A)	105	200	-95	634	600	34	105	200	-95
4, 5, 6 (27B)	1080	900	180	4066	1000	3066	2059	2600	-541
8 (27B)	270	300	-30	370	0	370	2140	1800	340
9 (35D)	230	200	30	1690	0	1690	952	200	752
<b>Total</b>	<b>1685</b>	<b>2100</b>	<b>-415</b>	<b>11670</b>	<b>5900</b>	<b>5770</b>	<b>10043</b>	<b>9750</b>	<b>293</b>

- f. *Fuels Treatment* - The EA states that 7000 feet of fire trails would be constructed. The units with broadcast burning treatments (Units 25A, 27A, and 35 B) have been dropped from the proposed action, therefore no fire trails are needed. Fuels treatments on the other units remain the same. Approximately 35 acres (**Table 1a**) in units 1, 2, 3, and 7 would have slash handpiled, the piles covered and then burned during the rainy season. (EA pp.7, 13).
- g. *Recreation* - No existing horse trails in Unit 3(EA Unit 17C) would be mapped and maintained because upon further investigation of the area, the existing trails are located on adjacent private land and not within the unit boundary.

## 2. Changes to the Project Design Features/Mitigation Measures

### a. *Seasonal Restrictions*

<sup>1</sup> Blading, Brushing and Rocking within the road prism

- 1) Great Horned Owl: The seasonal restriction for the Great Horned Owl was changed to January 1 through June 30.

This change was recommended by the area wildlife biologist to better protect the species during its nesting season.

b. *Reserve Trees:*

- 1) Angle cut the ends of wildlife trees, if felled for safety, to identify that they should be left for coarse woody debris.

c. SEIS Special Attention Species

- 1) *Survey and Manage Buffers:* Variable radius buffers (see Appendix B) have been placed around all “Survey and Manage” mollusks and around population centers of fungi as identified during surveys.
- 2) *Mollusks:* The number of know mollusk sites identified for protection changed. **Table 3** shows these changes.

<b>Table 3: Changes in Mollusk Sites</b>				
Current Unit	EA unit	Current	EA	Reasons for Change
Unit 1	25AA	3	0	Discovery of additional sites
Unit 2	7C	0	1	The previously identified site was outside of the final unit boundary
Unit 3	17A	0	3	These previously identified three sites were outside of the final unit boundary
Dropped	Unit 25A	N/A	2	Unit was dropped because of mollusks and fungi
Unit 9	35D	1	2	These other two sites were located in riparian buffers outside of the final unit boundaries

- d. *Skid Roads* - With ground based logging, use existing skid roads, where feasible. New skid roads would be at a least 150 feet apart. All new skid roads would be ripped. Ripping of tractor skid roads would be expanded to existing skid roads (from previous projects) used for this project. This change will apply to Unit 25-AA (Unit 1). Additionally, tractor skid roads will not be ripped in commercial thinning Unit 35-D (Unit 9) because, in this area , it would be expected to reduce site productivity by damaging roots of future crop trees.

- e. *Road Decommissioning and Road Rights-of-Way* - The method of decommissioning would change to replace the spreading of logging slash on the ripped running surface to seeding with locally adaptive native seed, annuals or short lived and non invasive species. This change was proposed since ripping would not take place until after logging and site preparation and the log loader needed to spread the slash would not normally be on site. Roads Rights-of-Way on the new construction would also be seeded with locally adaptive native seed, annuals or short lived and non invasive species.

3. Changes to the Environmental Consequences

- a. *Changes in Acres, Road Construction and Decommissioning, and fire trail construction:*

- 1) **Wildlife** - It is anticipated that due to the reduction in final harvest units and acres there will be less loss of hiding and thermal cover for wildlife species. The effect of roads will remain the same.

- 2) **Fisheries**

Activity	Biological Assessment	Modified Proposed Action
Regeneration Harvest Acres	53	26
Partial Cut Acres	203	120
New road construction	2250'	1685'
Existing road decommissioning	9200'	8358'
Road Renovation	0	11670'

Road renovation may involve brushing, grading, spot rocking and cleaning ditch relief culverts. The roads for which renovation is planned are ridgetop or near ridgetop roads, and have no live stream crossings.

None of the changes listed above would increase the effects of the project on Upper Willamette River steelhead or Upper Willamette River chinook salmon, or Critical Habitat for either species.

- 3) **Soils and Water**

- i) **Cable Yarding:** Reducing the number of cable yarded acres from 51 in the EA to 33 in the modified proposed action would reduce non-mitigated compaction and loss of productivity on the proposed sale area by up to 0.9 acres.

- ii) Ground Based Yarding: Ground based logging would be reduced from 205 acres to 113 acres. However, ground based yarding roads would be ripped after completion of yarding under either proposal and residual compaction negligible.
  - iii) Roads: Under this modification, new roads would be reduced by 415 feet. The decommissioning of an additional 293 feet of road would decrease compaction on approximately 0.15 acres above what was estimated in the original EA. Roaded mile per section totals for the sub-watersheds would remain approximately the same as estimated in the EA, 3.6 miles per section.
  - iv) Water Quality: No change in water quality or riparian shade would be anticipated under the listed modifications.
  - v) Cumulative Impacts: Cumulative impacts would be lower under this modification than originally analyzed in the EA. When compared to the EA, changes in Water Available For Runoff (WAR), and Equivalent Clearcut Acreage (ECA) would be reduced by up to 40 percent.
- b. *Road Construction and Decommissioning* - Placing logging slash on the ripped road bed was proposed in the original EA for two reasons, one to reduce ORV use and the other to help in soil stabilization. The impact of ORV use should be adequately mitigated by barricading the approaches with a trench and berm and seeding would be a viable alternative to slash for soil stabilization. No changes in impacts are anticipated with these change in road decommissioning specifications.

### III. DECISION

The decision to be made by the Cascades Resource Area Manager is whether or not to prepare an environmental impact statement, and whether to approve the Split Finger timber sale as proposed, not at all, or to some other extent.

Based on site-specific analysis in the Environmental Assessment, the supporting project record, management recommendations contained in the Watershed Analysis (Abiqua/Butte Creek) dated August 10, 1994, as well as the management direction contained in the RMP (*Salem District Resource Management Plan*), dated May, 1995, I have decided to implement Alternative A of the Split Finger Environmental Assessment (EA # OR080-98-24) (EA pp. 5-20) with the modifications in Section II -1 and 2, above, hereafter referred to as the “selected action” (see attached map). Management Activities by Harvest Method can be in **Tables 4a and 4b** in Appendix A. The following is a summary of this decision.

1. Harvest approximately 146 acres from GFMA and Riparian Land allocations for an

expected yield of 4159 hundred cubic feet (CCF) (2476 MBF). The following is a description of harvest acres and timber volumes by harvest method.

- a. *Regeneration harvest* of approximately 24 acres of Matrix lands from 3 units (Units 1, 2, 7) within the GFMA land use allocation. It is expected that this will yield approximately 1955 hundred cubic feet (CCF).
- b. *Commercial thinning* (Partial Cut) of approximately 107 acres of Matrix lands from 5 units (Units 4-6, 8, 9). It is expected that this will yield approximately 1761 hundred cubic feet (CCF).
- c. *Single tree / group selection (uneven-aged management)*: Partial cut approximately 11 acres from 1 unit (Unit 3). It is expected that this will yield approximately 285 hundred cubic feet (CCF).

Unit 3 is the first entry of an uneven-aged management treatment containing both single tree and group selection treatment areas. The goal is to maintain a forest vegetation cover in this Rural Interface area. The two group selections are 1 acre in size, have several green trees retained and will be reforested. The next and subsequent entries will be on 10 year cutting cycles. This will be the first uneven-aged treatment to be implemented in Cascades Resource Area.

- d. *Riparian Reserve: Density Management* of approximately 2 acres within a Riparian Reserve in unit 8 (Unit 8R). It is expected that this will yield approximately 27 hundred cubic feet (CCF).<sup>2</sup>
  - e. *Road Rights-of-Way*: Harvesting the timber from 2 acres of road rights-of-way in units 3-6, 8, 9 for an expected yield of approximately 131 hundred cubic feet (ccf).
2. *Tree Topping*: Approximately 96 trees would be topped within the project area for snag creation.
  3. *Road Construction*: Approximately 1685 feet of temporary new road would be constructed.
  4. *Road Renovation*: Road maintenance or renovation (brushing, blading, or rocking ) would occur on approximately 11,670 feet of existing road. These activities would take place within the current road prism.

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<sup>2</sup> Does not count toward Allowable Sale Quantity (ASQ)

5. Road decommissioning: Approximately 10,043 feet of new road construction (1685 feet) and existing roads (8358 feet) would be decommissioned then blocked or gated.
6. Compliance with Direction

The selected action is consistent with applicable land use plans, policies, and programs (EA, pp. 5).

- a. Programmatic documents covering this proposal are the:
  - *Salem District Resource Management Plan (May 1995)*
  - *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 1994)*
  - *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional Forest Related Species Within the Range of the Northern Spotted Owl (SEIS, February 1994)*
  - *Western Oregon Program-Management of Competing Vegetation Final Environmental Impact Statement (VMFEIS, February 1989) and the Western Oregon Program-Management of Competing Vegetation Record of Decision (August 1992).*
  - *Environmental Assessment to Change the Implementation Schedule for Survey and Manage and Protection Buffer Species (October 1998)*
  - *Plan Maintenance Documentation: Decision to Delay the Effective Date for Surveying 7 "Survey and Manage" and Protection Buffer Species (March 2000)*All of these documents may be reviewed at the Cascades Resource Area office.

- a. Survey and Manage: The Component 2 surveys for this project are in compliance with the Stipulation for Order Dismissing the Action (August 2, 1999) in the ONRC Action lawsuit<sup>3</sup>. See Appendix B and the project file for "Survey and Manage" survey results.
- b. Monitoring activities related to this sale will be done as described in Appendix J of the RMP (May, 1995).

## II. DECISION RATIONALE

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the Abiqua Butte Watershed Analysis, and the management direction contained in the RMP, I have decided to implement the selected action as described above. My rationale for this decision follows:

The selected action addresses the identified purpose and need for action in that it will:

- a. Meet the need for forest products and forest habitat as described in the *Salem District*

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<sup>3</sup> Oregon Natural Resources Council v. United States Forest Service and Bureau of Land Management, Civil No. 98-0942WD

- Resource Management Plan* (RMP, 1995, p. 1 and 2) by proposing thinning harvest;
- b. Provide social and economic benefits to local communities through the supply of approximately 4159 hundred cubic feet of merchantable timber to local mills and some contract work by proposing regeneration and thinning harvest;
  - c. Address the need to “Establish and grow large conifers in Riparian Reserves” (Abiqua/Butte Watershed Analysis pp. 6) by proposing a density management treatment in one of the Riparian Reserves;
  - d. Increase the quality and quantity of snags in the long term by topping trees to create snags; and
  - e. Decrease road densities by decommissioning and blocking roads.

In addition, the density management in Unit 8R is expected to:

- f. Promote accelerated growth rates on the residual trees and to promote increased horizontal and vertical stand structure; and
- g. Increase lineal feet per acre of Class 1 coarse woody debris within riparian reserve in that 2 acre area (EA pp. 15 ).

This project also provides an opportunity to incorporate uneven-aged management into a harvest proposal (unit 3). Forest management could continue in this unit over time because it maintains a forested vegetative cover. This silvicultural method addresses local land owners desire to maintain a forested appearance in this unit.

*Alternative B:* This alternative proposed to thin unit 3. This alternative was not selected because commercial thinning is an even-aged silvicultural method. Even-aged managed in this unit would not continue over time because the next logical treatment would be regeneration harvest, which would not meet the concerns of adjacent landowners.

*Alternative C:* The “no action” alternative was not selected because it does not address the purpose and need for action.

### III. PUBLIC INVOLVEMENT/ CONSULTATION/COORDINATION

#### 1. Scoping

A description of the proposal was included in the Salem Bureau of Land Management *Project Update* which is mailed to more than 900 individuals and organizations four times each year. A letter asking for scoping input on the proposal was mailed on April 16, 1998 to 31 adjacent landowners and individuals who have expressed an interest in management activities in the resource area as a whole or in this drainage.

Letters were also sent to the Cities of Scotts Mills and Silverton, Confederated tribes of the Grande Ronde, Friends of Abiqua, the National Marine Fisheries Service, Northwest Environmental Defense Center, Oregon Natural Resources Council, Oregon Department of Forestry, Oregon Wildlife Federation, Oregon Department of Fish and Wildlife, and Pacific

Rivers Council.

A public meeting of local residents in section 17 (unit 3) shared their concerns about regeneration harvest in unit 17 (unit 3) and it led to the development of an uneven-aged management prescription for this unit.

## 2. Comment Period and Comments

The EA was mailed to approximately 26 agencies, individuals and organizations on August 12, 1998. A legal notice was placed in the Silverton Appeal-Tribune and Molalla Pioneer soliciting public input on the action from August 12 to September 11, 1998. No comments were received as a result of either action.

## 3. Consultation/Coordination

The Split Finger timber sale was submitted for Formal Consultation with U.S. Fish and Wildlife Service on August 12, 1998 as provided in Section 7 of the Endangered Species Act of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended) . Consultation was concluded on September 29, 1998 (Service Log #98-F-381). As a result of consultation, the U.S. Fish and Wildlife Service found that the sale would not likely jeopardize the continued existence of the spotted owl.

At the time of completion of the Environmental Assessment for the Split Finger Timber Sale in August, 1998, Upper Willamette River (UWR) steelhead and UWR chinook salmon were species proposed for listing as threatened by the National Marine Fisheries Service (NMFS) under the Endangered Species Act. UWR Steelhead were listed on March 25, 1999, and UWR chinook salmon were listed on March 24, 1999.

The Split Finger Timber Sale was determined to be 'may affect, not likely to adversely affect' UWR steelhead and UWR chinook salmon. Concurrence by the NMFS with that determination was received by Salem District BLM in a letter dated August 6, 1999. The selected action, as described in this decision documentation, is not expected to result in any additional effects to listed fish species from those described in consultation with NMFS.

## IV. CONCLUSION

I have determined that change to the Finding of No Significant Impact (FONSI) for the Split Finger Timber Sale is not necessary for these reasons:

The existing EA for the Split Finger Timber Sale, along with additional information contained in this document, fully covers the project as modified by the proposed mitigation and adjustments required by the surveys conducted for Survey and Manage species, and Section 7 consultation. The action, as amended, is within the scope of the alternatives identified in the original EA, and the environmental impacts are within those described in the original EA and are less than or the same as those anticipated for the proposed action in that assessment.

There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed action or its impacts which were not addressed in the EA. The EA anticipated protecting Survey and Manage species in accordance with the Record of Decision for the Northwest Forest Plan and the Salem District. The surveys conducted for this sale complete the survey requirements for this sale as amended by the *Plan Maintenance Documentation: Decision to Delay the Effective Date for Surveying 7 "Survey and Manage" and Protection Buffer Species*, which was approved March 13, 2000, and fulfills the Survey and Manage S&G commitment identified in the EA.

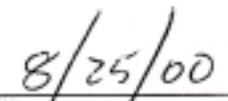
### Protests

In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published "in a newspaper of general circulation in the area where the lands affected by the decision are located". Protests of this sale must be filed within 15 days of the first publication of the notice. For this project, the Notice of Sale will be published in the *Salem Statesman Journal* on or around September 1, 2000. The planned sale date is September 27, 2000.

### Contact Person

For additional information concerning this decision or the BLM protest process, contact Carolyn Sands (503) 315-5973 or Bob Hershey (503) 315-5931, Cascades Resource Area, Salem BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by:   
Robert Ratcliffe  
Acting Cascades Area Manager

  
Date

APPENDIX A: Unit Information and Project Design Features of the Selected Action by Harvest Method

<b>Table 4a: Unit Information and Project Design Features of the Selected Action - Regeneration harvest</b>					
Unit Information	Unit 1	Unit 2	Unit 7	Rd R/W (Units 3-6, 8-9)	Total
Stand Age	55 yr.	77 yr.	95 yr.	see units 3-6, 8-9	
Dominant Species	Douglas-fir, western hemlock, red alder				
Harvest Method	Sanitation Harvest <sup>4</sup>	Regeneration Harvest		clearing roads rights-of-way	
Unit Acres and Volume					
Harvest Acres	9	9	6	2	26
Cruised Volume (ccf - hundred cubic feet)	480	833	642	131	2086
Cruised Volume (mmbf - million board feet)	.292	.513	.438	.077	1.32
Logging Systems Acres					
Cable (with one end suspension)	0	9	0	0	9
Ground Based	9	0	6	2	17
Site Preparation					
Handpiling slash and burning slash piles	9	9	6	0	24
Reforestation					
Stock Type	Will be planted with Big leaf maple, incense cedar <sup>5</sup>	Will planted with a combination of Douglas-fir, noble fir, western hemlock and western redcedar.		Seeded seeding with locally adaptive native seed, annuals or short lived and non invasive species.	0
Tree Planting Acres	9	9	6	0	24

<sup>4</sup> Unit 1 has a regeneration harvest in order to stop the spread of laminated root rot disease (Phellinus Weirii).

<sup>5</sup> Disease resistant species to laminated root rot

<b>Table 4b: Unit Information and Project Design Features of the Selected Action</b>									
<b>Partial Cut</b>									
Unit Information	Unit 3	Unit 4	Unit 5	Unit 6	Unit 8	Unit 9	Unit 8R Riparian	Total	
Stand Age	89-96yr.	45-65yr.				60 yr.	60 yr.		
Dominant Species	Douglas-fir, western hemlock, red alder								
Harvest Method	Single Tree / Group Selection <sup>6</sup>	Commercial Thinning				Density Management <sup>7</sup>			
Unit Acres and Volume									
Harvest Acres	11	35	35	5	12	20	2	120	
Cruised Volume (ccf - hundred cubic feet)	285	514	641	69	163	374	27	2073	
Cruised Volume (mmbf - million board feet)	.175	.276	.362	.040	.092	.196	.015	1.156	
Logging Systems Acres									
Cable (with one end suspension)	0	10	0	0	12	0	2	24	
Ground Based	11	25	35	5	0	20	0	96	
Site Preparation									
Handpiling Slash and burning piles	2	0	0	0	0	0	0	2	
Reforestation									
Stock Type	Underplanting with a combination of Douglas-fir, noble fir, western hemlock and western redcedar. <sup>8</sup>								
Tree Planting Acres	2								2

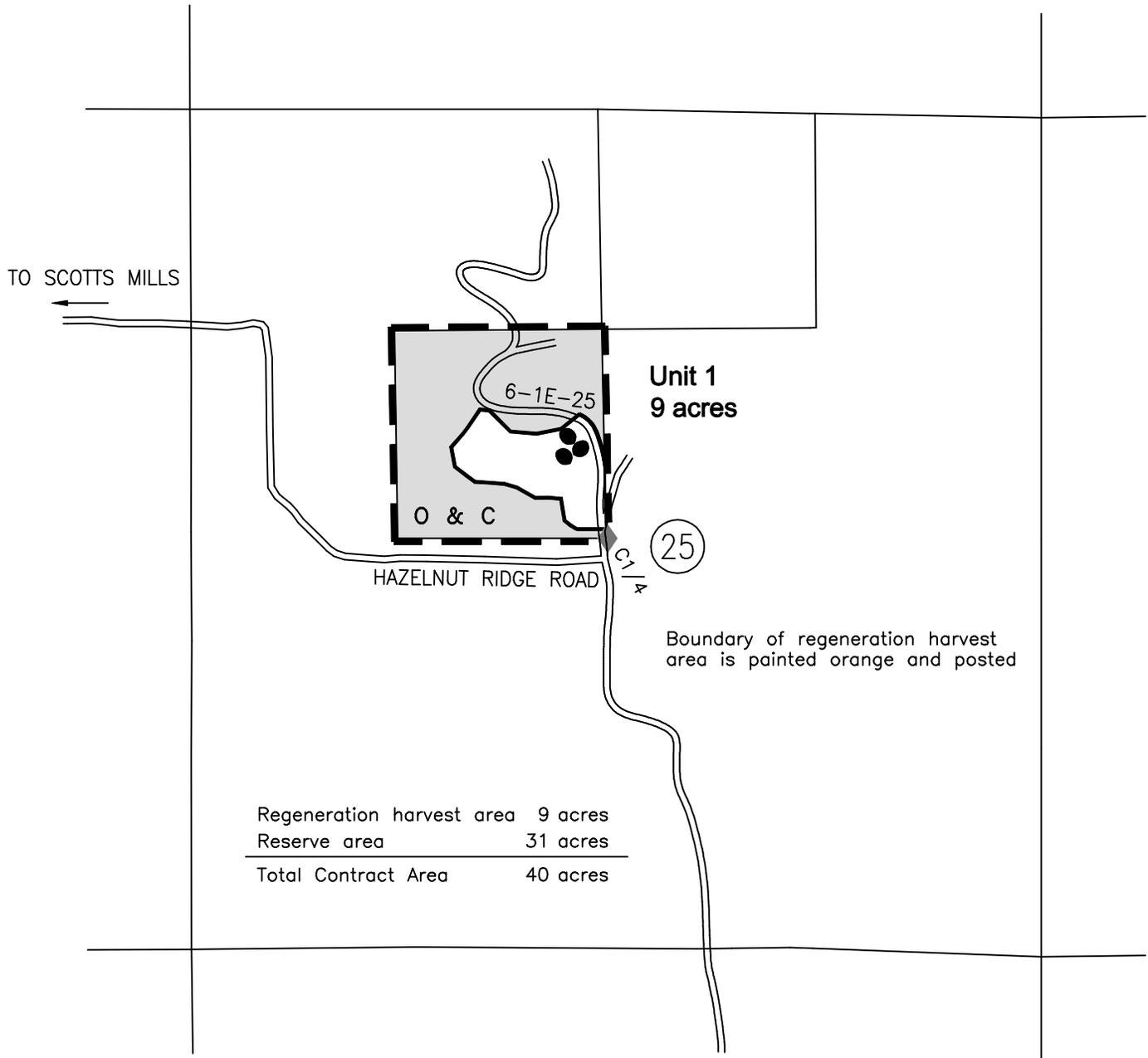
<sup>6</sup> This mature stand would be partial cut because this is the first entry of an uneven-aged management prescription.

<sup>7</sup> Thinning within a Riparian Reserve

<sup>8</sup> Handpiling and planting will take place in the group areas

TIMBER SALE CONTRACT MAP Contract No. OR080-TS0-501  
Section 25, T. 6 S., R. 1 E., W.M. SALEM DISTRICT - OREGON

EXHIBIT A



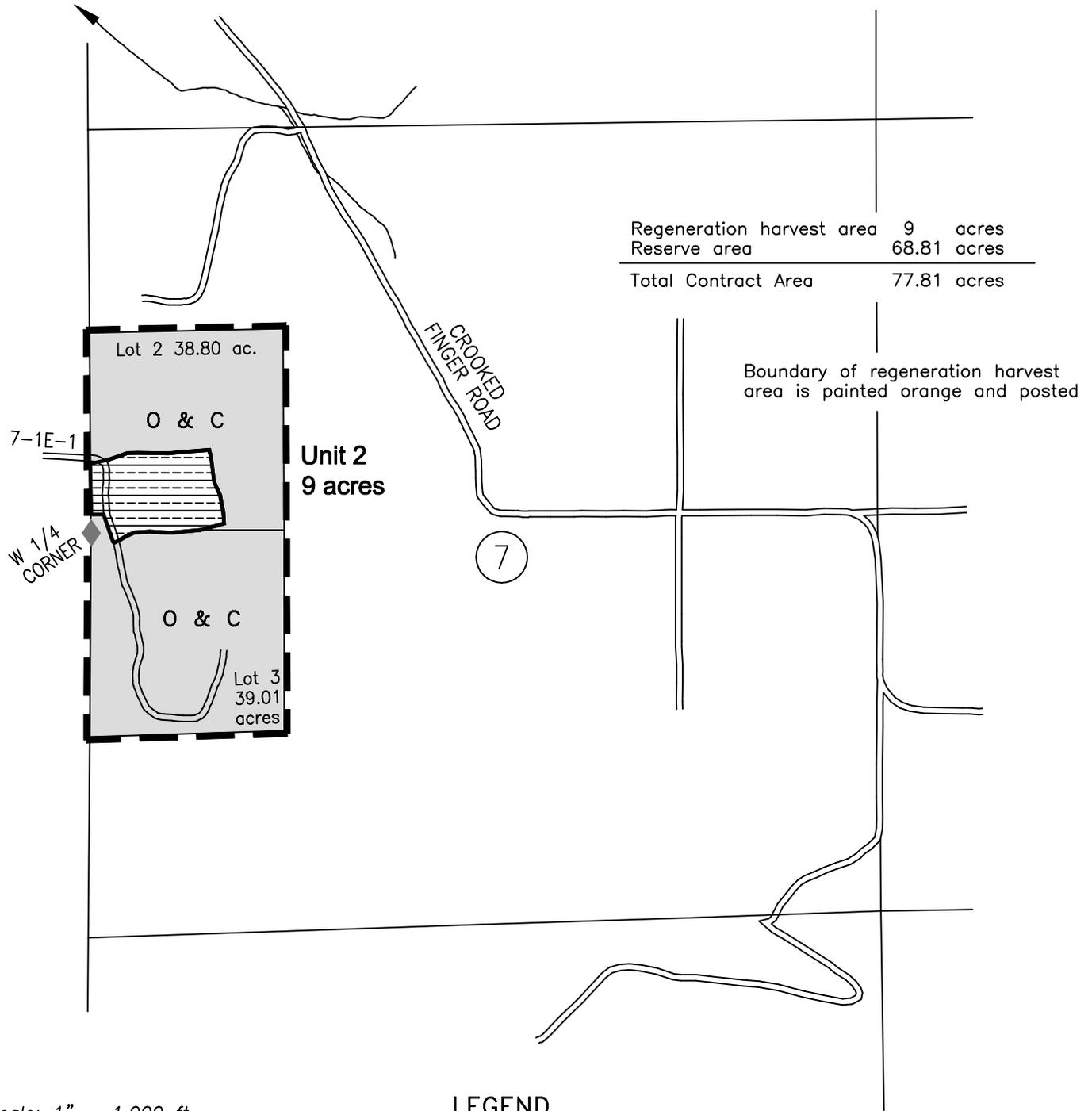
Scale: 1" = 1,000 ft.

LEGEND

- Regeneration harvest area
- Green tree retention area - reserved
- Reserve area
- Existing road
- Boundary - Contract area
- Boundary - Cutting area
- Corner found

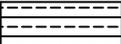
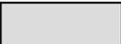
TIMBER SALE CONTRACT MAP Contract No. OR080-TS0-501  
Section 7, T. 7 S., R. 2 E., W.M. SALEM DISTRICT - OREGON

EXHIBIT A



Scale: 1" = 1,000 ft.

LEGEND

- |   |                           |  |                          |
|---|---------------------------|--|--------------------------|
|  | Regeneration harvest area |  | Existing road            |
|  | Cable yarding area        |  | Corner found             |
|  | Reserve area              |  | Boundary - Contract area |
|  | Stream                    |  | Boundary - Cutting area  |

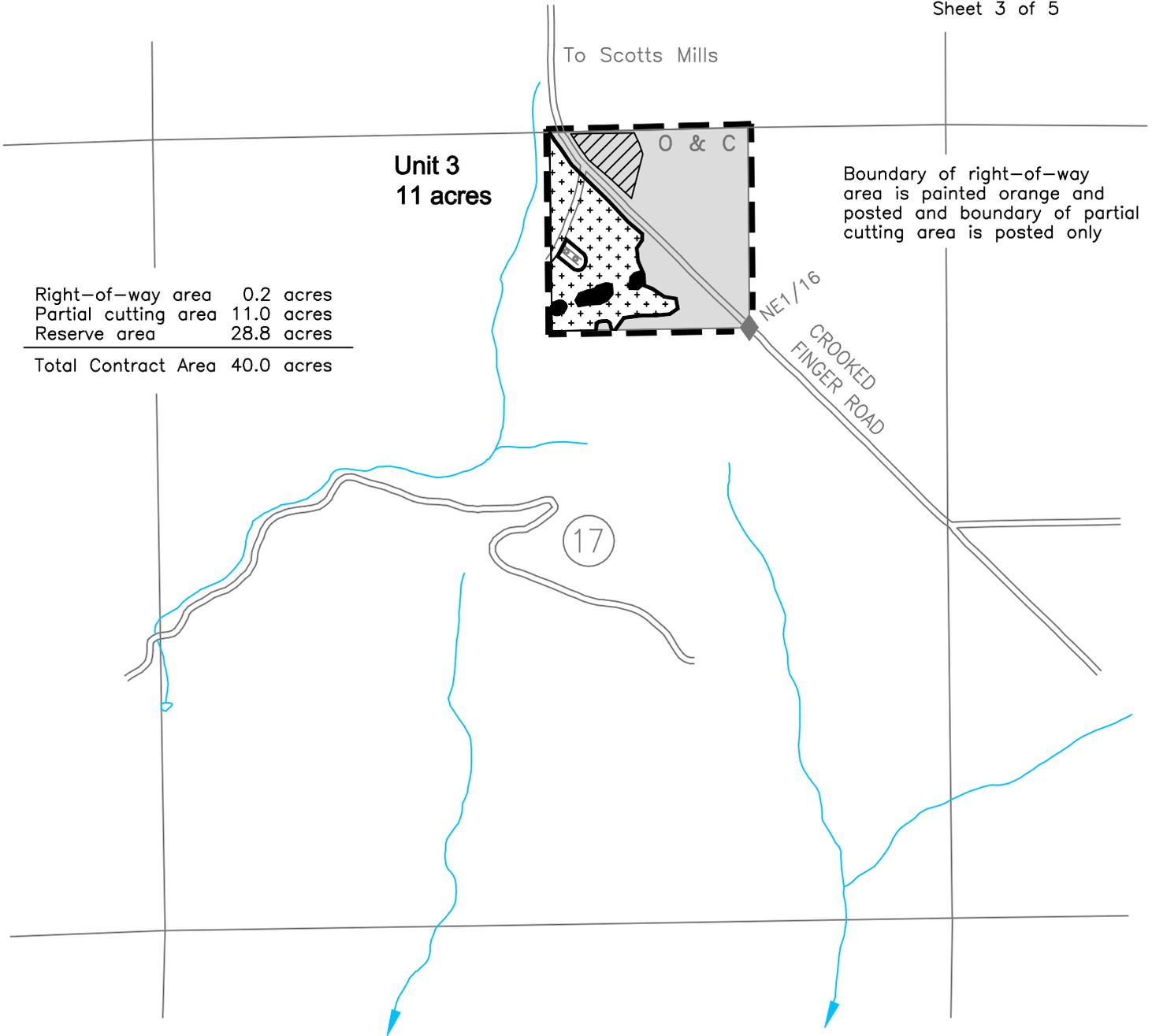
U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

Tract 00-501  
**Split Finger**

**TIMBER SALE CONTRACT MAP** Contract No. OR080-TS0-501  
**Section 17, T. 7 S., R. 2 E., W.M. SALEM DISTRICT - OREGON**

**EXHIBIT A**

Sheet 3 of 5



Right-of-way area	0.2 acres
Partial cutting area	11.0 acres
Reserve area	28.8 acres
<b>Total Contract Area</b>	<b>40.0 acres</b>

To Scotts Mills

**Unit 3**  
**11 acres**

Boundary of right-of-way area is painted orange and posted and boundary of partial cutting area is posted only

NE1/16  
CROOKED FINGER ROAD

17

Scale: 1" = 1,000 ft.

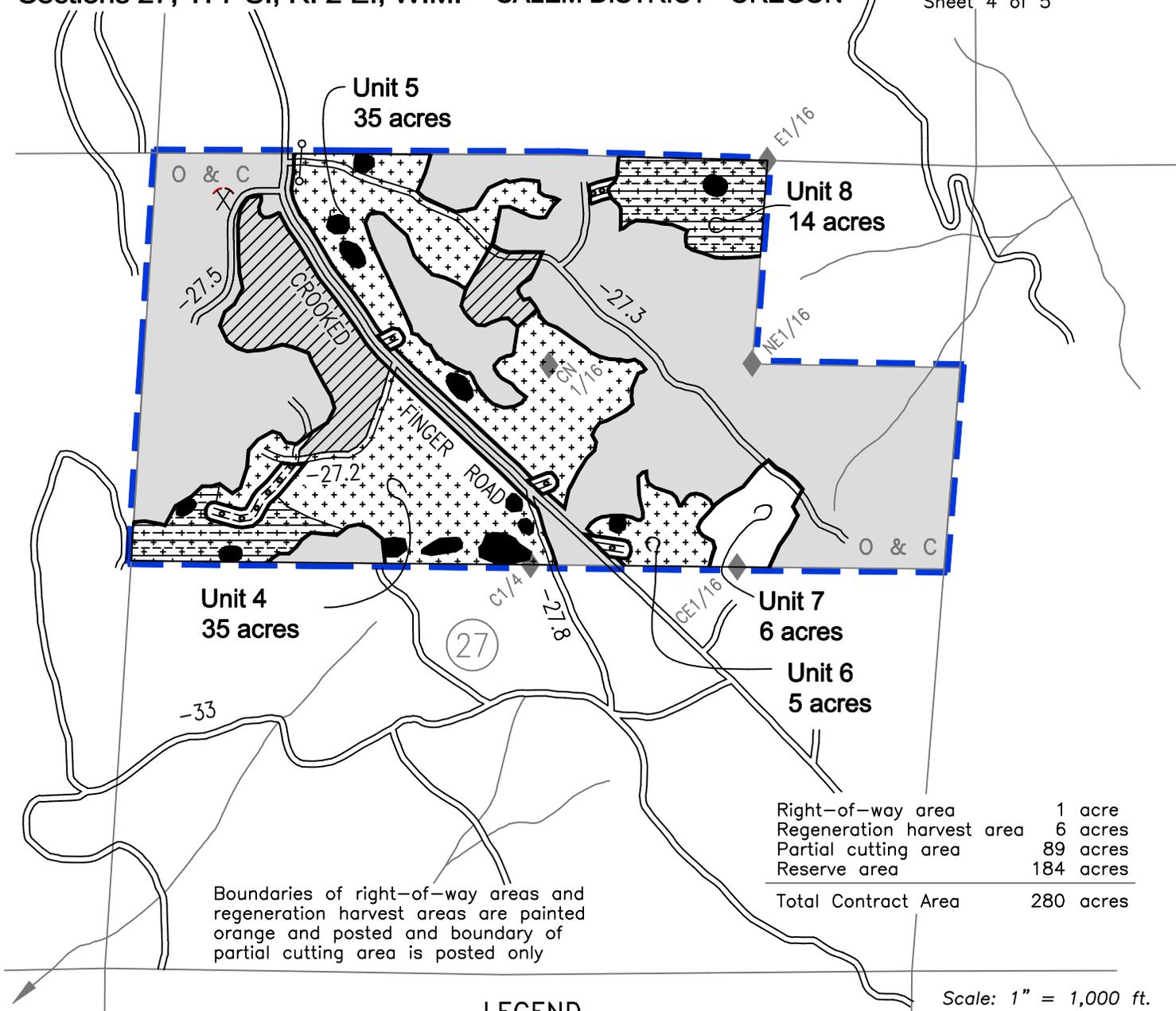
**LEGEND**

- |  |  |  |                          |
|--|--|--|--------------------------|
|  | Right-of-Way area                                    |  | Existing road            |
|  | Partial cutting area                                 |  | Boundary - Contract area |
|  | Green tree retention area - reserved                 |  | Boundary - Cutting area  |
|  | Reserve area   |  | Stream                   |
|  | Area previously marked, deleted from sale - reserved |  | Corner found             |

TIMBER SALE CONTRACT MAP Contract No. OR080-TS0-501  
Sections 27, T. 7 S., R. 2 E., W.M. SALEM DISTRICT - OREGON

EXHIBIT A

Sheet 4 of 5

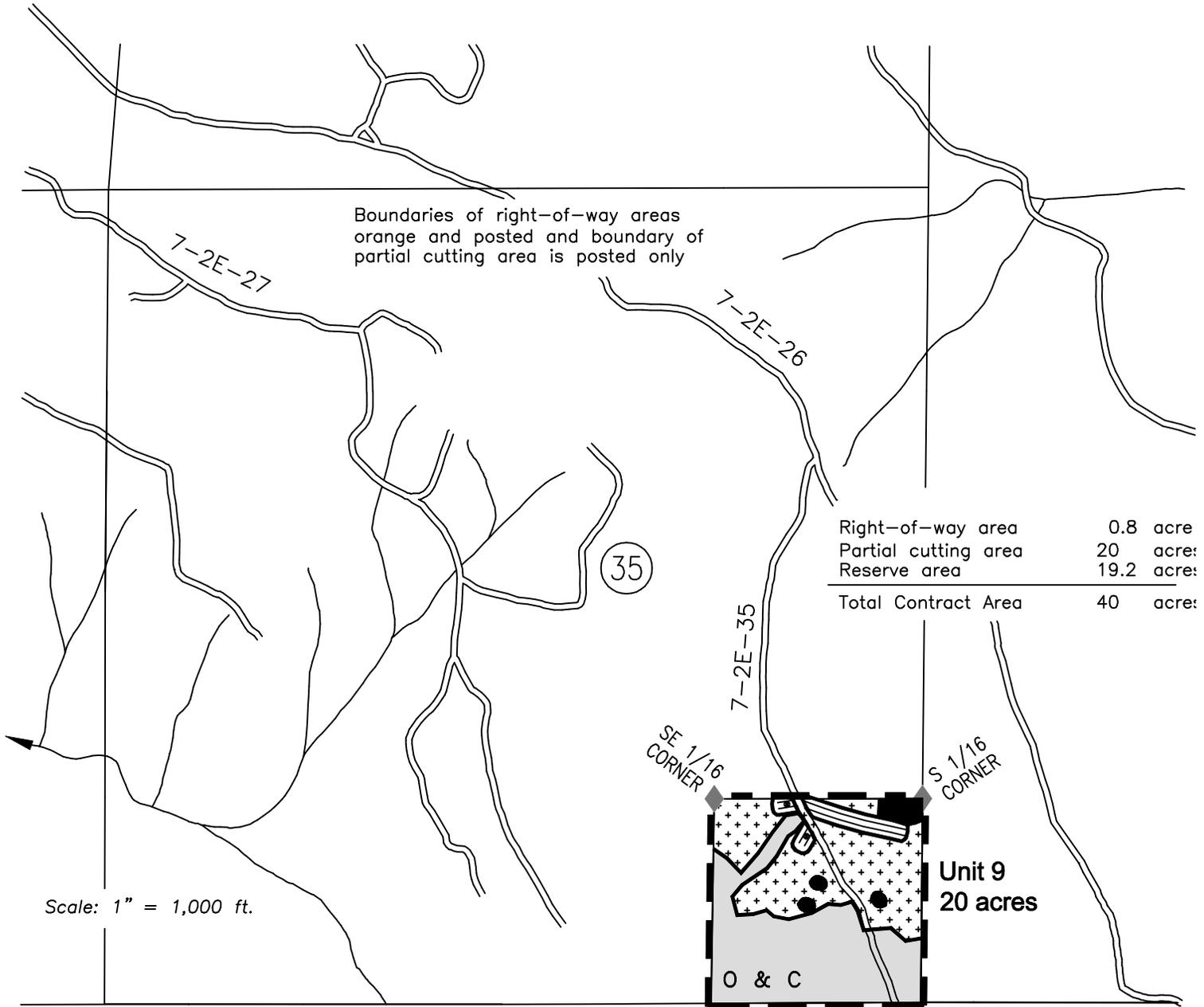


Right-of-way area	1 acre
Regeneration harvest area	6 acres
Partial cutting area	89 acres
Reserve area	184 acres
<b>Total Contract Area</b>	<b>280 acres</b>

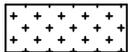
Boundaries of right-of-way areas and regeneration harvest areas are painted orange and posted and boundary of partial cutting area is posted only

LEGEND

- Right-of-way area
- Partial cutting area
- Green tree retention area - reserved
- Regeneration harvest area
- Cable yarding area
- Reserve area
- Area previously marked, deleted from sale - reserved
- Existing road
- Road to be constructed
- Quarry
- Corner found
- Gate
- Stream
- Boundary - Contract area
- Boundary - Cutting area



Right-of-way area



Partial cutting area



Green tree retention area - reserved



Reserve area



Stream

**LEGEND**



Existing road



Road to be constructed



Corner found



Boundary - Contract area



Boundary - Cutting area

## APPENDIX B: “Survey and Manage” Species Survey Summaries

### I. FUNGI

The units of this timber sale are located along the west slopes of the Cascade range, between 2 and 22 air miles SE of the town of Scotts Mills in Section 25, T.6S., R.1E. and Sections 7, 17, 27 & 35, T.7S., R.2E., WM., Marion County Oregon, within the Abiqua Creek and Butte Creek Watersheds. Approximately 270 acres were surveyed for “Survey and Manage” (S&M) or Protection Buffer (PB) fungi species.

#### 1. Survey Results

Fall fungi surveys for *Aleuria rhenana*, *Bondarzewia mesenterica*, *Otidea leporina*, *Otidea onitica* and *Otidea smithii*, were initiated on October 26th and completed on December 20<sup>th</sup> 1999. Spring fungi surveys for *Sarcosoma mexicanum* were initiated on March 9th and completed on April 11<sup>th</sup> 2000. The units of the Split Finger Timber Sale were surveyed in accordance with the newly established protocol described in *BLM Instruction Memorandum No. OR 2000-018*. **Table 5** shows the survey results.

Location			Species	Category	Found in Fall Surveys	Found in Spring Surveys
EA Unit	Survey Unit	Current Unit				
17A	3	3	<i>Sarcosoma mexicanum</i>	S&M 1, 3, PB		X
			<i>Otidea onitica</i>	S&M 1, 3	X	
25A	4	DROPPED	<i>Cortinarius olmpianus</i>	S&M 1,3	X	
27B	5	5	<i>Sarcosoma mexicanum</i>	S&M 1, 3, PB		X
			<i>Phaeocollybia fallax</i>	S&M 3	X	
27A	6	6	<i>Sarcosoma mexicanum</i>	S&M 1, 3, PB		X
27D	7	7	<i>Sarcosoma mexicanum</i>	S&M 1, 3, PB		X
35B	8	DROPPED	<i>Phaeocollybia attenuata</i>	S&M 3	X	
35D	9	9	<i>Sarcosoma mexicanum</i>	S&M 1, 3, PB		X
			<i>Gymnopillus punctifolius</i>	S&M 1,3		X

Table 5: Survey and Manage Fungi Species found during Surveys						
Location			Species	Category	Found in Fall Surveys	Found in Spring Surveys
EA Unit	Survey Unit	Current Unit				
			<i>Phaeocollybia kauffmanii</i>	S&M 1,3	X	
27B	10	8	<i>Sarcosoma mexicanum</i>	S&M 3, PB		X
27B	11	4	<i>Sarcosoma mexicanum</i>	S&M 3, PB		X
			<i>Phaeocollybia olivaceae</i>	S&M 3	X	
			<i>Phaeocollybia pseudofestiva</i>	S&M 3	X	
			<i>Phaeocollybia kauffmanii</i>	S&M 1,3	X	
			<i>Phaeocollybia fallax</i>	S&M 3	X	
27B	12	6	<i>Sarcosoma mexicanum</i>	S&M 3, PB		X

## 2. Effects to Current Units:

Table 6: Effects to Current Units		
Survey Unit	Current Unit	Effect
1	1	No effect. No Survey and Manage species identified at this site.
2	2	No effect. No Survey and Manage species identified at this site.
3	3	No effect in regards to the survival of <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) or <i>Gymnopilus punctifolius</i> ( S&M 1,3 ) identified at this site is expected to occur due to the protection allotted these species and to their abundance in the area of the units of this proposed Split Finger Timber sale.
4	Dropped	No effect. Unit dropped from proposed timber sale.
5	5	No effect to the <i>Otidea onotica</i> ( S&M 1,3 ) and <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) identified at this site is expected to occur due to the protection allotted to these species.
6	Dropped	No effect. Unit dropped from proposed timber sale.
7	7	No effect to the continued existence of <i>Phaeocollybia kauffmanii</i> ( S&M 1,3 ) is expected to occur with the loss of the two sites on this unit due to its abundance and protection allotted it on other units of this proposed sale and in other locations throughout the Cascades.
8	Dropped	No effect. Unit dropped from proposed timber sale.

Table 6: Effects to Current Units		
Survey Unit	Current Unit	Effect
9	9	No effect to the continued existence of <i>Phaeocollybia kauffmanii</i> ( S&M 1,3 ) or <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) is expected to occur with the loss of two sites each on this unit due to their abundance and protection allotted to them on other units of this proposed sale and in other locations throughout the Cascades. All of the <i>Gymnopilus punctifolius</i> ( S&M 1,3 ) located at this site has been adequately protected.
10	8	No effect in regards to the survival of <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) or <i>Gymnopilus punctifolius</i> ( S&M 1,3 ) identified at this site is expected to occur due to the protection allotted these species and to their abundance in the area of the units of this proposed Split Finger Timber sale.
11	4	No effect to the continued existence of <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) is expected to occur with the loss of some of the sites on this unit due to the abundance of <i>Sarcosoma mexicanum</i> in this area , protection allotted it on this and other units of the proposed sale and in other locations throughout the Cascades. All of the <i>Otidea onotica</i> ( S&M 1,3 ) at this site has been adequately protected.
12	6	No effect to the continued existence of <i>Sarcosoma mexicanum</i> ( S&M 3, PB ) or <i>Otidea onotica</i> ( S&M 1,3 ) is expected to occur due to the loss of one site each on this unit due to their abundance and protection allotted to them on other units of this proposed sale and in other locations throughout the Cascades.

### 3. Findings

No effect to the continued existence of any of the Survey and Manage fungi species identified during the fall 1998 & 1999 and spring 2000 fungi surveys is expected to occur due to their abundance and the protection allotted them in the area of the proposed Split Finger Timber Sale and throughout the Cascades.

## II. SURVEY AND MANAGE WILDLIFE

### 1. Red Tree Vole

Red tree voles (*Arborimus longicaudus*) surveys were conducted on October 4 and 5 of 1999 with ten trees with potential nest structures being identified. All ten trees were climbed by BLM climbers and none of the structures were identified as red tree voles nests - either active or inactive.

## 2. Mollusks

### a. *Analysis of Habitat:*

The Split Finger proposed project is located in seven sections spanning five 6<sup>th</sup> field watersheds. A total of 365 acres were surveyed to protocol standards.

Of the eight survey and manage species identified in the Northwest Forest Plan as being known or potential inhabitants of the Cascade Resource Area four were detected within the project area.

Each species detected was analyzed based on distribution (both within individual proposed unit areas and across the project area including reserves) and abundance.

### b. *Survey Results:*

<b>Table 7: Survey and Manage Mollusks</b>					
<b>Species</b>	<b>S&amp;M Survey Strategy</b>	<b>Species Found? Y/n</b>	<b>Total # Found</b>	<b>Total # Sites</b>	<b>Locally Abundant ?</b>
SNAILS					
<i>Megomphix hemphilli</i>	1, 2	Y	2	2	No
<i>Pristiloma arcticum crateris</i>	1, 2	N	0 <sup>9</sup>	0	N/A
<i>Cryptomastix devia</i>	1, 2	N	0	0	N/A
SLUGS					
<i>Deroceras hesperium</i>	1, 2	N	0	0	N/A
<i>Hemphillia glandulosa</i>	1, 2	Y	0	0	N/A
<i>Hemphillia malonei</i>	1, 2	Y	60	40	Yes
<i>Prophysaon coeruleum</i>	1, 2	Y	117	66	Yes
<i>Prophysaon dubium</i>	1, 2	Y	5	3	No

<sup>9</sup> A *Pristiloma* species found was determined not to be the target species.

c. *Management Recommendations*

Management Recommendations Version 2.0 dated October 15, 1999 and November 23, 1999 provides guidance in determining site specific management. Management for each species or group of species is dependent on frequency of detection, distribution, and presence in adjacent or nearby habitat. Detections within the project area were mapped and analyzed and the management recommendations applied to all sites.

For those species determined to be locally common the management recommendations provide some flexibility in management providing that persistence of a population is maintained and that a relatively high level of suitable habitat conditions and features are conserved.

- 1) *Prophysaon coeruleum* is considered to be locally common (see table above). This species was detected in five adjacent 6<sup>th</sup> field watersheds in addition to adjacent or nearby forest stands.

Hot Spots were identified based on distribution of the species and habitat features. All sites for this species are protected within hot spots, riparian reserves, adjacent reserved forest stands or as individual sites except for one site located below a proposed landing. Within that site yarding roads will be allowed as defined within the Management Recommendations but felling will not. Micro-site climatic conditions will be maintained while canopy closure outside of Hot Spots would be maintained above 50 percent. Canopy closure would be maintained at current levels within Hot Spots.

- 2) *Prophysaon dubium* is not locally common with five detections within the project area. Each site is protected within a combination of riparian reserves and mollusk reserves. Canopy closure and micro-site climatic conditions will be maintained at pre harvest conditions.
- 2) *Megomphis hemphilli* was found at only two sites. Both sites are within identified Hot Spots for PRCO. Those portions of the project were dropped. Habitat and micro-site conditions will be maintained at current levels.
- 3) *Hemphillia malonei* was found at forty (sixty individuals) sites within the project area. Current management direction is to protect all known occupied sites from activities that would alter micro-site conditions and to moderate fluctuations in micro-site conditions. Within the proposed project area all sites are protected within riparian reserves, Hot Spots, and within entire areas (project proposal dropped).

Some of the hot spots and mollusk reserves include multiple survey and manage species.

