

# Pre-Operations Report

**Operation Name:** Mystree Thin  
**County:** Tillamook  
**Management Basin:** Upper Salmonberry  
**Legal:** Sec.20, 28 and 29, T03N, R06W, W.M.

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres
I	Moderate Partial Cut	92	88
II	Moderate Partial Cut	19	17
III	Moderate Partial Cut	81	76
<b>Total</b>	<b>Partial Cut</b>	<b>192</b>	<b>181</b>

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

Slopes have a NW-SW aspect and range from 15% to 65%. Elevations range from 1300 to 2100 feet. The major soil types are Killam and Rye. The sale areas occupy the ridge tops to the lower slopes of the Salmonberry River.

The landforms are gentle to moderate slopes above the Salmonberry River. There are bands of steep slopes at the bottom of the sale areas. The underlying rock is igneous origin rock or the Tillamook Volcanics, basalt flows form the base of the shield building sequence and two large scale landslide landforms mapped in Area I.

## **II. CURRENT STAND CONDITION:**

Portions of the sale area burned in the 1945 Tillamook Burn and the area naturally regenerated. The stands in the sale area have had no prior management.

All the stands in the sale area have been inventoried using the Stand Level Inventory (SLI) procedure and have been classified as 97% UDS and 3% CSC.

The stand is composed almost entirely of heavily stocked Douglas-fir. There is scattered hemlock, noble fir, and alder throughout the sale area.

The stands contain minor amounts of *Phellinus weirii* and will not be treated at time of harvest. No other significant insect or disease problems have been discovered at this time.

The understory vegetation in all the sale areas is comprised primarily of vine maple, sword fern, salal, dwarf Oregon grape, huckleberry, and oxalis. Average ground cover throughout all areas is estimated to be 85% based on SLI data.

There is a moderate amount of snags in various states of decay throughout the sale area. SLI data shows that there are approximately 6-8 hard snags per acre. Area lacks adequate amounts of hard DWD. SLI data indicates approximately 200 ft<sup>3</sup> per acre.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
I	PC-M	7409	DF	63	18	238	129	56	88
II	PC-M	7409	DF	63	18	238	129	56	17
III	PC-M	7417	DF	49	16	225	167	56	5
		7433	DF	56	20	179	78	40	71
		<i>Target</i> <sup>3</sup>			23	140	50	30	181

<sup>1</sup> The source of stand inventory information is from SLI in 2004.

<sup>2</sup> The acres are based on GIS and exclude existing and planned roads, stream buffers, and non-thinnable areas.

<sup>3</sup> The Target row for partial cut areas identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

<sup>4</sup> PC-M is Moderate Partial Cut

### **III. DESIRED STAND CONDITION:**

The harvest operation will leave these stands as UDS structure in the short term. According to the Forest Grove District's landscape design for the Upper Salmonberry basin, the desired future condition (DFC) for these stands are approximately 33% GEN, 43% LYR, and 24% OFS.

The anticipated management pathway for the sale area is a 1<sup>st</sup> entry operation for density management. Reducing the SDI from harvesting will maintain vigorous growth of the overstory. The residual stand will maintain the pathway of these stands toward complex forest structure. There will be ample opportunity to harvest more of the overstory in a 2<sup>nd</sup> entry within 15-20 years. Portions of the sale area that are not within DFC – complex will be good candidates for modified clearcut within 15-20 years.

All existing snags and down woody debris of all decay classes shall be retained. All trees less than 8 inches shall be retained. Hardwoods and all conifer species other than douglas-fir shall be retained. All of these components combined will maintain and promote biodiversity within the future stands.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
I	7409	UDS	UDS	LYR	78
				OFS	10
II	7409	UDS	UDS	OFS	17
III	7417	CSC	UDS	GEN	5
	7433	UDS	UDS	GEN	53
				OFS	18

<sup>1</sup> The stand is expected to develop into this condition in the five to ten years after this operation is completed.

**IV. PROPOSED MANAGEMENT PRESCRIPTION:**

**Partial Cut - Moderate:**

Area I, II, and III are PC-M. The target SDI is approximately 30.

Douglas-fir will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 140 square feet. The average DBH of the residual stand will be approximately 23 inches. Residual trees will be the trees that have the largest DBH and height, and are of the best form and vigor. All trees less than 8 inches shall be reserved and shall not count toward the target basal area.

1 tree per acre shall be topped to create hard snags. Trees selected for snag creation shall have a DBH of at least 18 inches, and be at least 60 feet in height.

Understory vegetation will be enhanced from the additional growing space made available.

All existing DWD will be reserved in the sale areas. DWD recruitment is expected through mortality, windthrow of residual trees, felled snags, and logging slash.

Existing snags determined not to be a safety hazard will be retained and any felled snags will be left for down wood. Additional snags will be created over time through natural processes.

**V. ESTIMATED TIMBER AND REVENUE INFORMATION:**

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	3,300		3,300
Stumpage Value (\$/MBF)	\$400		
Estimated Gross Value	\$1,320,000		\$1,320,000
		Project Costs:	\$102,000
		Estimated Net Value:	\$1,218,000

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Salmonberry Road. This is currently an all-weather, crushed rock road, and entirely on ODF ownership.

Approximately 0.6 miles of existing, unsurfaced, road will be improved at an estimated cost of \$22,000. This includes grading, rocking, widening, culvert replacement, spot rocking, sidcast pullback, and adding new culverts.

Approximately 1.2 miles of road will be constructed in order to provide access to cable yarding landing locations, at an estimated cost of \$75,000. All new construction is limited to ridgetops and gentle to moderate sideslopes. Proposed roads will not cross any streams.

All haul roads will have high quality crushed rock or pit run surfacing. Roads will provide access to all timber within the sale area and allow for logging methods and hauling which will minimize impacts to soils, residual timber, streams, and riparian areas. Following harvest on each setting during logging operations, roads and skid trails within the sale areas will be evaluated for closure.

Approximately 10 miles of existing spur roads will be assessed for potential closure or vacating. Estimated cost is \$5,000

Sale related project work - estimated costs \$97,000.

Other project work – estimated costs \$5,000.

Rock for the project work will most likely come from a local source, less than a mile from the sale area. There is an estimated 6,000 cubic yards of pit run necessary for all project work.

The operation will be approximately 65% cable yarding, 35% ground based yarding.

**Table 5. Transportation Planning Summary (Miles).**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	1.2	0
Improve	0	0	0.6	0
Maintain	0	8	1	0
Close/Block <sup>1</sup>	0	0	10	0
Vacate <sup>1</sup>	0	0	0	0

For determination of road class either use results of the Harvest and Habitat roads classifications, or if this information is not available then low use roads are spurs, medium use roads are collectors and high use roads are mainlines. Use these same criteria when comparing the total for all AOP sales to the IP plans.

<sup>1</sup> These mileages reflect roads that will be assessed for closure. They do not necessarily represent the actual roads that may be closed or vacated.

**VII. AQUATIC RESOURCES AND WATER QUALITY:**

The Salmonberry River is a large, Type F, stream that is directly adjacent along some portions of the sale area. Two unnamed medium Type F streams are also within close proximity. Two small, Type N, perennial streams are within the sale areas, and also several Type N, seasonal streams. All streams are tributaries of the Salmonberry River.

During sale layout, all streams will be field verified as to size, type, locations, and/or source. If the streams in question are determined to be Type F, any road crossings will be assessed for fish passage issues and possible mitigation.

Riparian area stand types along these streams are conifer / hardwood mixed.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

The harvest operation is directly adjacent to a stream (Salmonberry River) in which listed fish are known to be present (Coho). Appropriate measures will be taken to protect the said resources.

Stream buffers within harvest unit boundaries will be managed according to FMP Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and seasonal restrictions on logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and August 31. Operations outside of this period will be reviewed with ODFW.

#### **VIII. T&E SPECIES CONSIDERATIONS:**

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist (Area Biologist).

Mystree Thin is being surveyed for spotted owls due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Suitable habitat within 1.5 miles of Mystree Thin had previously been surveyed in 2002 and 2003, in association with another timber sale in the vicinity. A female NSO was heard in this area during the 2003 survey season. She was not found during the daytime follow-up visit, and there were no further responses detected during the three additional surveys conducted in 2003. Therefore, the status of the observation was classified as "non-territorial single" in 2003.

In 2004, the area was surveyed in association with Mystree Thin and two other sales in the vicinity. During the 2004 survey season, a spotted owl was heard during two separate nighttime surveys in close proximity to the 2003 location. The first 2004 observation was confirmed as a female, and the second response was a vocalization that is characteristic of both sexes; therefore it is unknown whether the second observation was a male or a female. The owl was not located during the daytime follow-up visits, and there were no further responses during the three additional surveys conducted in 2004. Three spotted owl observations in that area within two years of survey resulted in the establishment of an activity center and "resident single" site status.

Approximately 61 acres of Area III are within the 1.5-mile radius circle around the activity center. A Biological Assessment (BA) is being prepared by the Area Biologist and will be reviewed U.S. Fish and Wildlife Service (USFWS) in accordance with the Agreement for the Conservation of Northern Spotted Owls (2001).

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale area. The ODF wildlife biologist for the NW Oregon Area made the determination that the sale area is non-suitable habitat for marbled murrelets.

The sale area was checked against the Oregon Natural Heritage Program (OHNP) database of known listed plant locations. No listed plant records were identified within the sale area.

**IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

The initial assessment from the geotechnical specialist is moderate in one specific location within Area II. There is topographic evidence for very large scale slope movement in the landform. Due to this topographic evidence of very large scale slope movement, in Area II, the geotechnical specialist will review the sale in the field. If it is determined that the planned partial cut harvest would be detrimental to slope stability, this portion of Area II can easily be posted out of the sale.

**X. RECREATION RESOURCES:**

The sale area is designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). The District Recreation Coordinator has no comments for this sale.

No trails were identified within or adjacent to the sale areas. Recreational uses common to this area includes hunting.

**XI. CULTURAL RESOURCES:**

The sale area was checked against the Tillamook State Forest Cultural Resource Inventory database. No cultural resource records were identified within the sale area. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

**XII. SCENIC RESOURCES:**

The sale area has a visual classification of Level 3, low sensitivity.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

All known survey corners and witness trees shall be protected from damage during any operations.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Management Classification Summary.** This table summarizes the acres of Focused and Special Stewardship within the operations. Due to overlapping classifications under the Land Management Classification System, the acres summarized for each operational area in this table may exceed the net or gross acreage of the area. For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian Habitat, Recreation, and Scenic resources.

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
I	Aquatic and Riparian Habitat	27	2
	Operationally Limited	0	19
II	Aquatic and Riparian Habitat	6	6
	Operationally Limited	0	17
III	Aquatic and Riparian Habitat	17	3
	Operationally Limited	0	15