

Pre-Operations Report

Operation Name: Thin Fawcett
County: Tillamook
Management Basin: Tillamook

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	PC	114	82
2	PC	93	71
Total		207	153

¹ The net acres are based on orthophotos and GPS and exclude roads, stream buffers, reserve areas and non-required thinning areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have N and S aspects and range from 5% to 75%. Elevations range from 600 to 1500 feet. The major soil types are Killam (95%) and Rye (5%).

The landforms are moderate slopes with bands of steeper slopes scattered though the two areas north and south of Fawcett Creek below Skookum Lake. The underlying rocks are mostly igneous origin rocks of the Tillamook Volcanics Formation. The underlying rocks of the western portion of the sale area are sedimentary origin rocks mapped as Sandstones of the Trask River.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	PC	312	WH/SS	59	17/19	215	63/45	46	82
		Target ³			19/22	125	27/20	25	
2	PC	313	WH/SS	59	19/20	303	109/29	65	71
		Target ³			22/20	160	39/20	33	

¹ The source of stand inventory information is from field reconnaissance cruise plots taken in 2005 and SLI in 2002.

² The net acres are based on orthophotos and GPS and exclude roads, stream buffers, reserve area and non-required thinning areas.

³ The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

⁴ These numbers are based on plot data taken to this point and final numbers may differ significantly from the actual conditions. The directive for minor and major modifications will be followed for further review.

The sale areas were harvested in the 1950's and 60's and has naturally regenerated. These areas have had no prior stand management.

Area 1 has been inventoried using the Stand Level Inventory (SLI) procedure and the stand has been identified as UDS. The remaining area of the sale was identified as CSC according to the district stand summary information (1999). Field measurements indicate Area 2 is UDS. Not all species identified in the sale areas were significant enough to be captured during the recon cruise.

The stands are a mix of native conifer trees with patches of alder. These stands have different sizes of most species along with some brush to begin layering. These stands also contain trees with defect and natural damage. Area 1 has some open areas that are continuous brush cover with no tree overstory.

See Table 2 for specific stand data.

The hemlock in Area 2 is overstocked and has poor height to diameter ratios resulting in poor live crown ratios and slowed diameter growth. There is scattered Douglas-fir, noble fir, cedar, and alder throughout the sale areas. No other significant insect or disease problems have been observed at this time.

The brush component in all the sale areas is comprised primarily of vine maple, sword fern, salmonberry and huckleberry. There are patches of salmonberry that occlude other species growth and swordfern over most of other open ground. Most brush is less than 15 feet high, with some vine maple exceptions.

There are some large snags in various states of decay and/or some hard snags created from snow and/or animal damage. SLI estimates more than 12 snags per acre greater than 12" dbh and 3 of those over 24" dbh. SLI also reports that some larger snags are in decay classes 0-2. Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow in decay classes 1 and 2 and trees felled as part of harvests in surrounding areas. SLI indicates more than 4500 cubic feet of wood over all. All values for snags and downed wood are greater than targeted in the FMP.

III. DESIRED STAND CONDITION and VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	312	UDS	LYR	GEN/OFS	16/66
2	313	UDS	LYR	LYR/OFS	67/4

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

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition goals.

The prescriptions described below are based on the current stand condition such as overall tree and stand growth, species mix, stand density, and stand health.

Partial Cut:

In the short term Areas 1 and 2 will be partial cut to reduce stand density. This is a first entry operation to begin to move the stand along the pathway to more complex structure. This prescription will allow for openings in the stand to allow the residual trees to grow larger in diameter and crown depth. The openings and gaps will also allow for increased understory initiation of shrubs and shade tolerant tree species creating horizontal and vertical diversity. The expectation is by thinning from below the LYR structure will develop sooner and require less management in the long term. The Area Biologist will review these stands to incorporate strategies for improving murrelet habitat by creating openings around trees with large limbs. The Tillamook River Basin has been targeted for creating complex stands in the future.

These prescriptions will combine with the adjacent stands to create a mosaic of openings along Fawcett Creek through gaps, variable density and mixed species. Unmanaged hardwood and conifer mixes will be left in headwalls, and/or in riparian buffers as well as between the units. Residual trees in the units will continue to add to snags and down wood over time and through the life of the stand.

A snag assessment will be done during sale layout. If the average diameter of residual trees is over 18 inches and snag levels do not meet the FMP guidelines, snag creation at harvest will be considered.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND ANTICIPATED PATHWAY:

See table 2 for prescription targets

Partial Cut:

In Area 1, merchantable hemlock and spruce will be thinned to a basal area range of 110 to 130 square feet. Merchantable Douglas-fir less than 24 inches DBH will be harvested. Incidental alder may be harvested if in yarding roads or near landings. Noble fir and cedar will be reserved.

In Area 2 merchantable hemlock, spruce and Douglas-fir will be thinned to a basal area range of 150 to 170 square feet. A diameter limit may be set to create variable density. Incidental alder may be harvested if in yarding roads or near landings. Noble fir and cedar will be reserved.

Understory vegetation will be enhanced by the additional growing space available.

Green Tree, Down Wood and Snag Strategies

See also Section III: Desired Future Condition for long term strategies

Existing down wood will be left in the sale areas. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and tops left during harvest. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags and down wood.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities (rub trees, lift trees, or tail trees) and over time by natural processes. Live trees with natural defect will be retained as part of the residual basal area with the expectation they will contribute to the stand similar to snags.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter:		3	

	Conifer	Hardwood**	Total
Net Volume (MBF)	1885		1885
Stumpage Value (\$/MBF)*	\$83.94		
Estimated Gross Value	\$158,225		\$158,225
		Project Costs:	\$27,010
		Estimated Net Value:	\$131,215

**Combined spruce and hemlock stumpage values based on harvest type.*

*** Alder will be removed according to prescriptions. Current estimates are negligible.*

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Munson Creek, Simmons Ridge, 3000 Mainline and 4000 Mainline Roads. These are currently all weather crushed rock roads. See maps for specific road locations and conditions.

Approximately 0.75 miles of existing surfaced, and 0.25 miles of existing unsurfaced road will be improved which includes grading, rocking, widening, culvert replacement, spot rocking, sidecast pullback, and adding new culverts.

This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 0.25 miles of road will be constructed to provide access to cable yarding areas. Following harvest, roads within the sale areas will be reviewed for closure. See summary document for more information on this topic.

Other project work that will be included with this sale is closing access and modifying drainage structures on the road into Area 1.

The operation will be 100% cable yarding in Area 1, 95% cable yarding and 5% ground yarding in Area 2. Seasonal restrictions will be place for Thin Fawcett, see section VIII; T&E Species Considerations for more information.

Table 5. Transportation Planning Summary (Miles)³

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0.25	0
Improve	0	0	0.75	0.25
Maintain ²	2.7	7	1	0
Close/Block ³	0	0	1	0
Vacate ³	0	0	0	0

¹ Additional roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest

² All roads accessing the sale area will be maintained during the life of the timber sale contract. Maintenance miles in the table are those roads not being constructed or improved.

³ The numbers in this table reflect planned Project Work associated with the sale.

VII. AQUATIC RESOURCES AND WATER QUALITY:

Fawcett Creek is a large Type F stream that is between the sale areas. Simmons Creek and Munson Creek are large Type F streams that are adjacent to the haul route. There are additional unnamed small perennial and seasonal Type N streams within the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain.

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.

Fawcett Creek delivers water to a known water right downstream from sale areas.

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

ODFW fish biologist will work with ODF to evaluate the potential to replace or improve culverts on Munson Creek Road with harvest activities.

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 monitoring logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and September 15. 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 Clint Smith.

It was determined that there is potential marbled murrelet habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2005 and 2006 survey seasons for marbled murrelets. All surveys for marbled murrelets were/will be conducted in accordance with Pacific Seabird Group (PSG) protocol. 2005 Surveys detected and occupied site adjacent to the timber sale and a MMMA has been designated. Protection measures will follow ODF policy for protection of occupied murrelet sites, including seasonal restrictions and buffers.

It was determined that in the sale areas there is potential northern spotted owl habitat, and other species habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2005 and 2006 survey season for northern spotted owls. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol.

There will be seasonal hauling restrictions based on existing occupied MMMA site along the haul route. During sale layout, harvesting restrictions will be added or modified as determined by Area Biologist.

T & E Fish species: See Sections VII, and IX for listed fish protection measures.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial assessment from the geotechnical specialists is moderate; the area where high landslide hazard locations might be of concern is in the center of the portion south of Fawcett Creek. There are other smaller HLHL sites near the top of both portions of the sale. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

X. RECREATION RESOURCES:

The sale areas are designated as Non-Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. There are no plans for developing this area for recreation use. Recreational use common to this area includes walk-in hunting.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected. Private Industrial tree farms are adjacent to Area 2.

XIII. OTHER RESOURCE CONSIDERATIONS:

A permanent inventory plot is within the sale area. Permanent plot markings will be addressed according to current guidelines.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Areas 1 and 2 contain Focused and Special Stewardship, Aquatic and Riparian Habitat, Wildlife Habitat and Domestic Water Use. See Section VII, Aquatic Resources and Water Quality for the management guidelines to be used during sale layout and harvest.

Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.