

# Pre-Operations Report

**Operation Name: Filosi Moss**  
**County: Tillamook**  
**Management Basin: Miami**

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

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	PC	108	76
2	RC	27	25
3	PC	62	40
Total		197	141

*1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), and non-required thinning areas.*

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

Slopes have a north to northwest aspect and range from 10% to 80%. Elevations range from 80 to 960 feet. The major soil types are Rye and Killam.

The landform is steep to very steep slopes just below the ridgeline that divides Moss Creek and Illingsworth Creek both tributaries to the Miami River. The underlying rocks are igneous origin rocks of the Tillamook Volcanics formation, mostly the lower subaerial basalt flow sequence with some submarine basalt, pillow basalt and pillow breccias.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	PC	102	WH,DF,RA	35	15.4	332	257	85	76
		Target <sup>3</sup>		35	20	139	64	32	76
2	RC	103	RA,WH,DF	60	14	235	220	63	25
		Target <sup>3</sup>		60	20.7	70	30	16	25
3	PC	104	WH, DF, RA	35	13.2	204	216	56	40
		Target <sup>3</sup>		35	14.9	120	99	31	40

*1. The source of stand inventory information is from field reconnaissance cruise plots taken in 2004.*

*2. The net acres are based on orthophotos and GIS and exclude roads, and stream buffers (special stewardship), 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 significantly. The directive for minor and major modifications will be followed for further review.*

A large portion of Area 1 and a small portion of Area 3 were planted in 1969. A portion of Area 1 and 3 and all of Area 2 were naturally regenerated. These areas have had no prior stand management. The stands in the sale areas are classified as CSC according to the district stand summary information (1999).

Areas 1 and 3 are single story dense hemlock stands with some small pockets of alder, scattered other conifer and very little understory brush species. The hemlock is overstocked resulting in poor live crown ratios and slowed diameter growth. Area 2 is a single story alder stand with scattered conifer throughout the area. In this area there is a continuous understory of salmonberry. The alder was not aerially sprayed but the height and diameter growth has slowed due to stand age.

See Table 2 for specific stand data.

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. There are some large snags in various states of decay and some hard snags created from wind. These sale areas have not been Stand Level Inventoried at this time so down wood and snag information is unavailable. During sale preparation, different options such as down wood and snag creation, additional green tree retention, and future stand management and monitoring will be considered in order to achieve FMP targets.

## II. DESIRED STAND CONDITION:

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	102	CSC	UDS	GEN	30
1	102	CSC	UDS	LYR	35
1	102	CSC	UDS	OFS	11
2	103	CSC	UDS	GEN	23
2	103	CSC	UDS	LYR	1
2	103	CSC	UDS	OFS	1
3	104	CSC	UDS	LYR	40

*1. The stand is expected to develop into this condition in the five to ten years after this operation is completed except in REG stands which occur after harvest.*

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.

In the short term Areas 1 and 3 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.

In the long term, this operation will move the stand toward more complex structure. This prescription will allow for openings and gaps in the stand to allow the residual trees to grow larger in diameter and crown depth. The openings and gaps will also allow for understory reinitiation of shrubs and tree species creating horizontal and vertical diversity. The expectation is future density management to continue the growth of overstory trees as well as understory trees and shrubs species.

The prescription for Area 2 will remove alder and small Douglas-fir and hemlock and retain other species resulting in a varied stand that has open areas and pockets of conifer. There will also be areas of unmanaged timber in headwalls, stream buffers, and on high landslide hazard locations. This area will be planted with a mix of conifer species. As the future stand is established the residual trees from previous stands will add to complexity of sizes, species and densities.

The timber sale areas will combine with adjacent recently managed thinnings, planned future sales and unmanaged stands to create a mosaic of openings, gaps, variable densities and mixed species stands. As the future stand is established the residual trees from previous stands will add to complexity of sizes, species and densities. These trees will also add to snags and down wood over time and through the life of the stand.

A snag and down wood assessment will be done approximately five years following sale completion. Partial cut units with a resulting average diameter over 15 inches will be reviewed for snag and down wood creation at time of harvest.

Stand Level Inventory (SLI) will be scheduled for clearcut and regeneration harvest units five to seven years after stand establishment. This inventory will provide more data on down wood and snags in the harvest units. Snag and down wood creation opportunities will be evaluated at this time.

### **III. PROPOSED MANAGEMENT PRESCRIPTION:**

**See Table 2 for prescription targets**

#### **Partial Cut:**

In Areas 1 and 3, hemlock and Douglas-fir will be thinned to a basal area range of 120 to 140 square feet. All other species will be reserved.

**Retention Cut:**

In Area 2, alder will be harvested. Hemlock and Douglas-fir less than 14 inches will be harvested to remove the smaller trees that would be vulnerable to windthrow and the remaining hemlock and Douglas-fir will be thinned to 120 to 140 square feet of basal area. All other species will be reserved.

**Green Tree, Down Wood and Snag Strategies**

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

A variety of methods will be used to achieve green tree retention requirements. These residual green trees will supplement the future stand by promoting growth of dominant/co-dominant leave trees. Small non-merchantable hardwood and conifer will also be retained where possible. Unmanaged hardwood will also be left in headwalls, on high landslide hazard locations that are identified during fieldwork, and throughout Areas 1 and 3. Conifer not targeted for harvest will be left on all of the sale areas. There also are areas adjacent to the sale areas and outside of the timber sale boundary that will be left unmanaged due to Salmon Anchor Habitat strategies. These leave trees function as future source of snags and down wood recruitment across the landscape. Tops from harvest operation will be left on approved ground yarding locations.

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.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	X
Planned Quarter:		4th	

	Conifer	Hardwood	Total
Net Volume (MBF)	1735	185	1920
Stumpage Value (\$/MBF)*	\$89	\$200	
Estimated Gross Value	\$154,415	\$37,000	\$191,415
		Project Costs:	\$38,750
		Estimated Net Value:	\$152,665

**\*Combined Douglas-fir and hemlock stumpage values**

**V. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Illingsworth Road, Filosi Road, and Lower Moss Creek Road. These are currently all weather, crushed rock roads and dirt roads. Approximately 1.0 mile of existing surfaced roads and .25 miles of existing unsurfaced roads that will be improved. This work will bring all roads up to standards described in *the Forest Roads Manual*. See maps for specific road locations and conditions. Following harvest, roads within the sale areas will be reviewed for closure. See summary document for more information on this topic. The operation will be 100% cable yarding and use of existing roads is planned for access.

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

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct				
Improve		1		.25
Maintain <sup>2</sup>	.4			
Close/Block <sup>3</sup>				
Vacate <sup>3</sup>				

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. Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.
4. The numbers in this table reflect planned Project Work associated with the sale.

## **VI. AQUATIC RESOURCES AND WATER QUALITY:**

Moss Creek and Illingsworth Creek are Type F streams adjacent to the sale areas. There is also an assumed Type F stream within the sale boundary. Riparian vegetation along these streams include hardwood and conifer mix. Additional streams may be identified during fieldwork and will be managed according to FMP riparian strategies.

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

Illingsworth Creek and Moss Creek deliver water to known water rights downstream from sale areas.

Stream buffers within and adjacent to the 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.

All of the sale areas are within the Miami sub-basin. This sub-basin has been identified as a Salmon Anchor Habitat (SAH) Basin and the most current SAH Basin Strategies will be used at the time of contract development.

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.

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

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

It was determined that in the sale areas there is potential marbled murrelet habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2004 and 2005 survey season for marbled murrelets. All surveys for marbled murrelet have been and will be conducted in accordance with Pacific Seabird Group (PSG) protocol. There have been no marbled murrelet detections during the 2004 survey season.

It was determined that there is potential northern spotted owl habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2004 and 2005 survey season for northern spotted owl. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. There have been no northern spotted owl detections during the 2004 survey season.

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.

#### **VIII. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

The initial assessment from the geotechnical specialist is moderate with some high landslide hazard locations scattered through the sale area mostly in draws. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

The sale areas have been identified as SAH Basin and the most current SAH Strategies will be used at the time of contract development. See the Summary Document for more information.

#### **IX. RECREATION RESOURCES:**

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). No OHV trails were identified within or adjacent to the sale areas. Recreational use common to this area includes hunting, hiking, target shooting, and OHV use. The District Recreation Coordinator will be consulted during sale layout and sale contract preparation.

#### **X. CULTURAL RESOURCES:**

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

#### **XI. SCENIC RESOURCES:**

Area 1 has a visual classification of Level 1, high sensitivity. Areas 2 and 3 have a visual classification of Level 2, moderate sensitivity. The sale will be reviewed by the Public Use Coordinator to determine methods to minimize visual impact.

Visual impact will be minimal due to small size of sale areas and the amount of residual trees being left in the sale areas.

**XII. OTHER RESOURCE CONSIDERATIONS:**

None known.

**XIII. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian Habitat	33	>1
1	Transmission		>1
1	Visual	108	
1	Wildlife Habitat	108	
2	Aquatic and Riparian Habitat	9	
2	Wildlife Habitat	28	
3	Aquatic and Riparian Habitat	24	8
3	Wildlife Habitat	62	

This table summarizes the acres of Focused and Special Stewardship within the operations. The acres in each operational area in this table do not necessarily add up to its gross or net acres, because of overlapping classifications under the Land Management Classification System (Feb. 2003). For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.