

# Pre-Operations Report

**Operation Name:** Wildcat  
**County:** Washington  
**Management Basin:** Gales Creek

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

Area	Type of Operation	Gross Acres	Net Acres
1	Moderate Partial Cut	412	362
2	Moderate Partial Cut	32	29
<b>Total</b>	<b>Partial Cut Harvest</b>	<b>444</b>	<b>391</b>

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

Slopes have a varied aspect and range from 10% to 50%. Elevations range from 600 to 1000 feet. The major soil type is Tillamook. The sale areas occupy ridges to lower slopes.

The landforms are gentle and moderate slopes of the headwaters of Beaver Creek and a small ridge that divides the tributaries. The underlying rocks are sedimentary rock mostly sandstone of the Keasy and Cowlitz Formations. There is a large scale landslide deposit mapped in the northeast portion of sale Area 2.

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

The sale areas were not part of a fire. Some of Area 1 was commercially thinned in the early 1980's.

Approximately 378 acres (97%) of the sale has been inventoried using the Stand Level Inventory (SLI) procedure. Those stands are classified as UDS. One stand has not been surveyed and is classified as CSC according to the Current Condition map that appears in the Forest Grove District Implementation Plan (March 2003).

The stand is composed of well stocked Douglas-fir and other species scattered through the sale. *Phellinus weirii* is present but will not be treated. No other significant insect or disease problems have been discovered at this time.

The understory in all the sale areas is comprised primarily of vine maple, and dwarf Oregon grape.

SLI data shows a range of 4 to 7 snags per acre in decay class 2 and 1 snag per acre in decay classes 3 to 4. There is approximately 3300 to 5400 cubic feet of down woody debris (DWD) per acre in decay classes 3 to 5.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age <sup>4</sup>	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	PC-M <sup>3</sup>	7594	DF	54-59	16	251	174	63	87
		7595	DF	46-52, 58-64	16	261	187	66	6
		7603	DF,WH	57-64	17	271	180	50	231
		7607*	DF,WH	43 est.	16	217	154	54	13
		7635	DF,WH	41-52	17	255	156	61	25
		<i>Target</i> <sup>5</sup>			18	150	85	35	362
2	PC-M	7603	DF,WH	57-64	17	271	180	50	29
		<i>Target</i> <sup>5</sup>			19	150	76	34	29

<sup>1</sup> The source of stand inventory information is from SLI grown to 2005. Stand ID shown with (\*) is from SLI expanded data 11/2/2005.

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

<sup>3</sup> PC-M is moderate partial cut.

<sup>4</sup> Actual measured breast height ages are shown unless labeled "est."

<sup>5</sup> The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

### **III. DESIRED FUTURE CONDITION/VISION:**

According to the Forest Grove District's landscape design for the Gales Creek basin, the desired future condition (DFC) for Area 1 is 23% LYR and 77% OFS. The DFC for Area 2 is 69% GEN and 31% OFS. The harvest operation will continue the development of UDS structure in the short term. As the understory develops, second and third entry partial cut operations at approximately 20 year intervals will remove more of the overstory. This will provide more light and nutrients to the understory. In time, a second and third layer of trees and other vegetation will develop the complex structure of these stands.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	7594	UDS	UDS	LYR	83
				OFS	4
	7595	UDS	UDS	OFS	6
	7603	UDS	UDS	OFS	231
	7607	CSC	UDS	OFS	13
	7635	UDS	UDS	OFS	25
2	7603	UDS	UDS	GEN	20
				OFS	9

<sup>1</sup> 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.

**IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:**

**Partial Cut- Moderate:**

The sale is PC- M. The target SDI is approximately 35 for Area 1 and 34 for Area 2. Douglas-fir and hemlock will be selected for harvest. All other species will be reserved. The stands will be thinned to a target basal area of 140 to 160 square feet. The average DBH of the residual stand will be approximately 18 to 19 inches. Residual trees will have the largest DBH, height, and the best form and vigor. All trees less than 8 inches shall be reserved and shall not count toward the target basal area.

Understory vegetation will be enhanced from the additional growing spaces made available. Through subsequent partial cut entries, understory development can be maintained promoting multiple stand layers and increasing biological diversity with overstory density control through active management we should be able to move this stand to the OFS condition within 30 to 50 years from the initial harvest.

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. One tree per acre shall be topped to create hard snags. Snags shall be evenly distributed throughout sale, and have a DBH of at least 18 inches, and be at least 40 feet in height. All of these components combined will maintain and promote biodiversity within the future stand.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter: 1			

	Conifer	Hardwood	Total
Net Volume (MBF)	7600		
Stumpage Value (\$/MBF)*	350		
Estimated Gross Value			\$2,660,000
		Project Costs:	\$260,000
		Estimated Net Value:	\$2,400,000

\*Combined Douglas-fir and hemlock stumpage values

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via the Timber Road, a paved County Road and the Wildcat Road, a crushed rock road.

An access easement will not be needed.

Approximately 1.6 miles of existing pitrun 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. See maps for specific road locations and conditions.

Approximately 4.5 miles of the Wildcat Mountain Road will be improved. This work will include culvert replacement, if needed, and surface replacement.

Approximately 2.2 miles of road will be constructed to provide access to landing locations. New construction is predominantly on ridgetops. Some construction on gentle to moderate sideslopes will be required. Proposed new roads will not cross 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, roads and skid trails within the sale areas will be evaluated for closure.

Estimated cost of project work is \$260,000.

Area 1 will be 100% ground based yarding. Area 2 will be approximately 80% cable and 20% ground based yarding.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	2.2	0
Improvement	0	4.5	1.6	0
Maintenance	0	4.5	3.8	0
Vacation	0	0	0	0

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

An unnamed type F stream flows adjacent to and through the sale. The size of this stream varies from small to large. There are several unnamed small perennial and seasonal Type N streams within both sale areas. All streams flow into Beaver Creek.

During sale layout, all streams will be field verified as to size, type, locations, and/or source.

Riparian area stand types along these streams are a mix of conifer and hardwood.

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.

Seasonal hauling restrictions will be applied in order to protect the water quality on all streams along the haul route. Restrictions may include limiting the number of loads hauled per day, not hauling during periods of heavy moisture, or having an alternate haul route.

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 September 30. Operations outside of this period will be reviewed with ODFW.

**VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:**

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

Surveys for northern spotted owls were conducted in 2004 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Wildcat was surveyed for spotted owls three times in 2005 with no responses, and the second year of survey will be completed in 2006. All surveys were/will be conducted in accordance with USFWS protocol.

Wildcat was surveyed for marbled murrelets in 2005 due to the presence of potentially suitable murrelet habitat adjacent to the sale area. The presence of murrelets was not detected during the 2005 surveys. The second year of survey will be completed in 2006. All surveys were/will be completed in accordance with PSG protocol.

This operation involves an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. The sale area is in close proximity to a stream with listed fish. In addition, the haul route crosses or is in close proximity to a stream with listed fish. See Section VII and IX of this report for a discussion of protective measures.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records in the Land Management Classification System (LMCS). No listed plant records were identified within or adjacent to the sale areas.

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

There are only a few scattered steep slopes in sale Area 1 and none in sale Area 2. Large scale landslide deposits mapped off of shapes identified on the USGS topographic map are usually very deep seated very large ancient landslide features that are not typically affected by forest management activities. The initial hazard and risk assessment from the geotechnical specialist is low. If during field, work high landslide hazard locations are identified or signs of slope movement are observed in the area of the large landslide deposit the geotechnical specialist will be consulted to determine if a field visit is needed.

#### **X. RECREATION RESOURCES:**

The sale is designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). The District Recreation Coordinator has reviewed this sale, and had no suggestions.

Restricted access prevents recreational use in this area.

#### **XI. CULTURAL RESOURCES:**

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format). No cultural resource records were identified within or adjacent\* to the operation

areas. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

*\*Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

**XII. SCENIC RESOURCES:**

The sale has a visual classification of Level 3, low sensitivity. No scenic impact is expected.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

Section 10 needs to be surveyed. The rest of the property lines have been true blazed and posted.

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

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

Areas 1 and 2 contain Focused Stewardship and Special Stewardship, Aquatic and Riparian Habitat Subclass, due to the presence of perennial streams within the sale areas. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.