

# Pre-Operations Report

**Operation Name:** Upper Elliot (alternate)  
**County:** Tillamook  
**Management Basin:** Rogers  
**Legal Description:** Secs. 12,13, T1N, R6W, W.M.

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

Area	Type of Operation	Gross Acres	Net Acres
1	Moderate Partial Cut	52	47
2	Moderate Partial Cut	55	53
3	Moderate Partial Cut	42	37
<b>Total</b>	<b>Partial Cut Harvest</b>	<b>149</b>	<b>137</b>
4	Modified Clearcut	74	68
<b>Total</b>	<b>Regeneration Harvest</b>	<b>74</b>	<b>68</b>

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

Slopes have a varied aspect and range from 10% to 65%. Elevations range from 1900 to 2500 feet. The sale areas occupy ridgetops and slopes above upper Elliot Creek.

The landform is a gentle divide between South Fork of the Wilson River and Elliot Creek including one steep area in the headwaters of Elliott Creek. The underlying rocks of the eastern portions of the sale areas are igneous origin intrusive diabase sills while the western portions of the sale areas is underlain by sedimentary origin rock, siltstone of the Yamhill Formation.

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

The sale areas burned in the 1933, 1939 and 1945 Tillamook Burns.

All sale areas have been inventoried using the Stand Level Inventory (SLI) procedure. Those stands have been classified as UDS.

The stand is composed of moderately stocked to over-stocked Douglas-fir. There is *Phellinus* and a survey has been ordered to determine the extent of infection which will determine whether to treat it. No other significant insect or disease problems have been discovered at this time.

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

SLI data for Areas 1,2, and 3 show 12 snags/acre within all decay classes. This includes 5 hard snags per acre. The data also show 4,600 cu. ft./acre total down woody debris, including 120 cu.ft./acre of classes 1 & 2.

SLI data for Area 4 show a range of 6 - 17 snags/acre within all decay classes. This includes up to 5 hard snags per acre. The data also show a range of 4,600 – 15,900 cu. ft. per acre total down woody debris, including up to 120 cu.ft. per acre of classes 1 & 2.

**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>	7936	DF	31-47	18	217	121	52	47
		<i>Target<sup>5</sup></i>	<i>DF</i>		18	140	79	33	47
2	PC-M <sup>3</sup>	7936	DF	31-47	18	217	121	52	53
		<i>Target<sup>5</sup></i>	<i>DF</i>		18	140	79	33	53
3	PC-M <sup>3</sup>	7936	DF	31-47	18	217	121	52	29
		7952	DF,WH	40-44	15	203	161	52	8
		<i>Target<sup>5</sup></i>	<i>DF,WH</i>		18	140	79	33	37
4	MC <sup>3</sup>	7936	DF	31-47	18	217	121	52	10
		7952	DF,WH	40-44	15	203	161	52	30
		7953	DF,WH	52-55	16	213	153	54	28

<sup>1</sup>The source of stand inventory information is from SLI grown to 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, MC is modified clearcut.

<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:**

**Areas 1,2,3:** According to the Forest Grove District’s landscape design for the Rogers Basin, the desired future condition (DFC) for these Areas are 90% General and 10% OFS. The harvest operation will develop these stands into UDS structure in the short term. The stands would then make a good candidate for DFC complex. The proposed management for these areas is to conduct a first entry partial cut. Reducing the stand density will enhance vigorous growth of the overstory and provide light for the understory to develop.

As the understory develops, future partial cut operations will remove more of the overstory. Phellinus root rot will contribute to the complexity of the stand whether

it is treated or not. 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. Snags will be created from natural processes.

**Area 4:** According to the Forest Grove District’s landscape design for the Rogers Basin, the desired future condition (DFC) for this Area is 100% General. The sale will be planted with a mix of conifer species, predominately Douglas-fir, and managed for timber production. Retaining some green trees, creating snags, adding down woody debris, and planting a variety of tree species will provide habitat for early seral wildlife species between harvest intervals. It is anticipated that the newly established plantation will be scheduled for precommercial thinning at approximately age 15 and commercial thinning at approximately age 40 before the next modified clearcut harvest at age 60. The stand will move through the REG, CSC and UDS conditions between harvest intervals.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	7936	UDS	UDS	GEN	33
				OFS	14
2	7936	UDS	UDS	GEN	53
3	7936	UDS	UDS	GEN	29
	7952	UDS	UDS	GEN	8
4	7936	UDS	REG	GEN	10
	7952	UDS	REG	GEN	30
	7953	UDS	REG	GEN	28

<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:**

**Areas 1,2,3, Partial Cut Moderate:**

The target SDI is approximately 33. Douglas-fir will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 130 to 150 square feet. The average DBH of the residual stand will be approximately 18 inches. Residual trees will be the trees that have the largest DBH and height, and are of the best form and vigor. Trees less than 8 inches shall be reserved and shall not count toward the target basal area. These will be mostly hemlocks and cedars or small clumps of Douglas-fir which will not significantly contribute to the relative density of the stand.

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.

In the part of Area 1 with a DFC of OFS, another partial cut will be done to keep the crown canopy open enough to support an understory of shrubs and trees. An underplanting with shade tolerant tree species may be done after the second partial cut to enhance the understory and achieve the desired complex structure. In the remainder of Area 1 and Areas 2 & 3, future managers will decide whether to clearcut these stands and start over at the REG structure or partial cut them again to continue developing more complex structures.

**Area 4, Modified Clearcut:**

This is a clearcut leaving at least 9 green trees per acre. They will mostly be left along stream buffers in the middle of the unit and along the southwest edge of sale, a small seasonal pond in the east side of the unit, single trees along the Cedar Tree trail and in a 300' wide area between the East Rogers timber sale and this unit. Two trees per acre will be left scattered throughout the unit. Of these residual trees, one half of them will be topped for snag creation and the other half will be dropped for DWD creation. The remaining, required one snag per acre can be found in the GTR areas outside the cutting boundary, as specified in the SLI data for this stand. All existing DWD will be reserved in the sale areas. Additional DWD recruitment is expected through mortality & windthrow of residual green trees, felled snags, and logging slash. The sale will be planted with a mix of conifer species, predominately Douglas-fir, and managed for timber production. It is anticipated that the newly established plantation will be scheduled for precommercial thinning at approximately age 15 and commercial thinning at approximately age 40 before the next modified clearcut harvest at age 60. The stand will move through the REG, CSC and UDS conditions between harvest intervals.

**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)	4,200		
Stumpage Value (\$/MBF)	\$400		
Estimated Gross Value			\$1,680,000
		Project Costs:	\$140,000
		Estimated Net Value:	\$1,540,000

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale area is accessed via Beaver Dam Road and Jack Rabbit spur. These are currently rocked roads. The old road going into the sale areas is being improved with the East Rogers sale. It will be completed by Nov. 1<sup>st</sup>, 2006.

Approximately 2.3 miles of road will be constructed to provide access to the remainder of the sale area. New construction is limited to ridgetops and gentle to moderate sideslopes. 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, all skid trails within the sale areas will be blocked. The access road will need to remain open into the clearcut area for reforestation management activities, the spur into the partial cut will be evaluated for closure after firewood is removed.

Estimated cost of project work is \$140,000.

The operation will be 40% cable yarding and 60% ground yarding.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	2.3	0
Improvement	0	0	0	0
Maintenance	0	6.0	2.3	0
Vacation	0	0	0	0

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

128 acres (91%) of Areas 1,2,3 and 22 acres (31%) of Area 4 are within the Devils Lake Fork of the Wilson River Basin. This basin has been designated as a Salmon Anchor Habitat (SAH) Basin. Stream buffers within harvest unit boundaries will be managed according to FMP Riparian Strategies and according to the Salmon Anchor Habitats Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing these strategies.

Elliot Creek, a tributary of Devils Lake Fork, flows along the north edge of the Area 1. The lower part of Elliot Creek in this area is Type F, as determined by a fish presence survey.

The parts of the sale area that are not in a SAH are in the South Fork Wilson River watershed. These areas are drained by small perennial and seasonal type N streams. Stream buffers in these areas will be managed according to FMP Riparian 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 September 15. 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 2005 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Upper Elliot 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.

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.

This operation does not involve an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. Neither the sale area nor the haul route is in close proximity to a stream with listed fish.

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 is one steep slope area mapped in the headwaters of Elliot Creek within Areas 1,2,3. The initial hazard and risk assessment from the geotechnical specialist is low. If during field work the steep slope is identified as a high landslide hazard location the geotechnical specialist will be consulted.

**X. RECREATION RESOURCES:**

The sale is in an area designated as Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

A new 4 Wheel Drive trail, the Cedar Tree Trail, runs through both sale areas. Trail and road layout coordination was accomplished between the sale planner and recreation trail staff 2 years ago. Area 3, partial cut, will have seasonal operating restrictions: no logging activity will be allowed between May 1<sup>st</sup> and November 1<sup>st</sup>. In Area 4 - clearcut, single trees will be reserved, with wildlife tree posters instead of paint, along the trail to mitigate the impacts to the trail. In addition, standard trail protection and user management measures will be employed.

Other recreational use common to this area includes hunting and camping.

**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:**

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:**

All Areas contain Focused Stewardship, Aquatic and Riparian Habitat Subclass, due to the presence of perennial streams within the sale areas. The sale area also contains Focused Stewardship, Wildlife Subclass, because parts of the sale area are within the Devil's Lake Fork Wilson River Salmon Anchor Habitat (SAH). See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized. Both sale areas are Focused Stewardship, Recreation Subclass. See Section X, Recreation Resources, for the strategies that will be implemented to minimize impacts to trail resource.