

Pre-Operations Report

Operation Name: Hoskins Bridge
County: Tillamook
Management Basin: Wilson

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified clearcut	50	50
2	Modified clearcut	48	48
3	Retention cut	71	71
4	Modified clearcut	42	37
5	Modified clearcut	105	97
6	Retention cut	75	75
Total		391	378

1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), other stream buffers, and reserve areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have varied aspects and range from 10% to over 90%. Elevations range from 400 to 2,300 feet. The major soil types are Rye and Killam.

The landform is gentle spur ridges with moderate to very steep draws and side-slopes above the Wilson River between Jordan Creek to the west and Luebke Creek to the east. The underlying rocks are mostly igneous intrusive origin rocks, diabase commonly tabular sills with columnar joints cut by dike swarms fed by Tillamook Volcanics. Area 1 is underlain by rocks of sedimentary origin rocks of the Yamhill formation massive to thin-bedded dark gray siltstone commonly associated with tuff beds and thin sandstones.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	210	DF	53	18	165	112	48	50
2	MC	211	DF/RA	53	14	120/60	100	30	48
3	RC	212	DF/RA	42	13	115	125	32	71
		Target ³	DF		15	40	25	8	71
4	MC	213	DF	53	14	150	140	40	37
5	MC	214	DF/RA	42	14	140	130	37	97
6	RC	215	DF/RA	432	14	140	130	37	75
		Target ³	DF		16	40	29	10	75

1. The source of stand inventory information is from field reconnaissance plots taken in 2004 and SLI in 2002.

2. The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), other stream buffers, and reserve areas. Modified clear cut acres are not contiguous and do not exceed 120 acres.

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 burned in the 1933 (Tillamook), the 1939 (Saddle Mountain), and the 1945 (Wilson River) fires. Areas 1 and 4 were aerially seeded in 1951, Area 2 was planted in 1951, Area 3 in 1958 with the eastern portion replanted in 1970, and Areas 5 and 6 were planted in 1959 with the majority replanted in 1971. Portions of Area 1 and 4 were aerially fertilized in 1997. Portions of Area 4 were commercially thinned in 1994.

Approximately 189 net acres have been inventoried using the Stand Level Inventory (SLI) and the stands have been identified as UDS. The remaining 50% of the sale acres were identified as CSC according to the district stand summary information (1999). These stands are primarily single story two species stands with an understory of brush species.

See Table 2 for specific stand data.

The Douglas-fir has Swiss needle cast (SNC) symptoms resulting in slowed diameter and/or height growth. The stands have been mapped by aerial surveys in two of the last three years.

There are scattered hemlock, spruce and cedar throughout the sale areas.

Small portions of the alder components of these stands were aerially sprayed to release planted conifer in the 1970's resulting in alder trees with short boles and many limbs.

No other significant insect or disease problems have been discovered at this time.

The brush component in all the sale areas is comprised primarily of salmonberry, sword fern, vine maple, and Oregon grape. The salmonberry is primarily found in the draws and in pockets. Vine maple is in patches while sword fern is found as a fairly continuous layer.

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. SLI measurements on the sale areas show that down wood in decay classes 1 and 2 ranges from 35 to 234 cubic feet per acre. Total down wood is approximately 4,365 cubic feet per acres. No down wood greater than 24" on the large end in decay class 1 and 2 was recorded. Landscape targets set in the FMP were not met for hard conifer logs. Older Forest Structure targets for total down wood were met.

There are some large snags in various states of decay and some hard snags created from natural conditions. SLI measurements in Areas 1 and 3, showed 0.5 to 1.1 snags, at least 15" in diameter, in class 1 and 2. FMP landscape targets of two hard snags per acre have not been met. Older Forest Structure targets pertaining to number and size of snags were met in these areas.

III. DESIRED STAND CONDITION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	210	CSC/UDS	REG	GEN/LYR	50
2	211	CSC/UDS	REG	GEN/OFS	48
3	212	CSC/UDS	REG	GEN/LYR	71
4	213	CSC/UDS	REG	LYR/OFS	37
5	214	CSC/UDS	REG	GEN/LYR/OFS	97
6	215	CSC/UDS	REG	GEN/LYR/OFS	75

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.

The operation will remove Douglas-fir susceptible to Swiss needle cast while retaining other conifer species and a component of Douglas-fir. Harvesting of the merchantable alder will create patchy openings in Areas 5 and 6 and remove the simple alder stand in Area 2. The areas will be planted with a mix of conifer species. Unmanaged hardwood and conifer mixes will be left in headwalls and riparian areas.

Some of the adjacent stands to the south and east of the sale areas have been commercially thinned. Overall, there has been limited management in this area and the operations will create some openings in the landscape. The prescriptions will combine with the adjacent stands to create a mosaic of openings, gaps, variable density and mixed species. As the future stand is established the residual trees from this entry will add to the 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.

Stand Level Inventory (SLI) will be scheduled for the harvest units five to seven years after stand establishment. SLI will measure the snags/acre and cubic feet of down wood by decay class. If the stands are deficient in either of these characteristics, the need for creating additional amounts will be evaluated.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

See table 2 for prescription targets

Modified Clearcut:

In Areas 1, 2, 4, and 5, merchantable Douglas-fir and alder will be removed. A diameter limit will be used to select trees to be left. These residual trees will provide future down wood and/or snags. All other species will be reserved.

Retention Cut:

In Areas 3 and 6, average residual basal area will be at least 33 square feet, primarily in Douglas-fir. Douglas-fir in excess of 33 square feet basal area and merchantable alder will be removed. All other species will be retained.

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

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. These leave trees function as future source of snags and down wood recruitment across the landscape. Green trees will be left on precipitous slopes and headwalls and those areas not reached by

conventional logging methods. Stream buffers adjacent to small perennials and the outer Riparian Management Area (RMA) of both Hoskins and Luebke Creek will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

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. Tops resulting from ground yarding will be left in the unit.

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.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	2402	787	3189
Stumpage Value (\$/MBF)*	236	236	
Estimated Gross Value	\$566,872	\$185,732	\$752,604
		Project Costs:	\$164,500
		Estimated Net Value:	\$588,104

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Jordan Creek Road and Archers Road. These are currently all-weather, crushed rock roads. See maps for specific road locations and conditions.

Approximately 1.3 miles of existing surfaced spur road and 0.7 miles of existing, unsurfaced spur road will be improved. This 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 1.5 miles of road will be constructed in order to realign an existing abandoned road in Area 5 and provide access to Areas 2 and 3. An alternative access route from the west, up Axe Ridge, was evaluated but was not feasible.

Following harvest, roads within the sale areas will be reviewed for closure. Ground yarding roads will be closed and water-barred following harvest. See summary document for more information on this topic.

No other project work is currently planned for the sale.

The operation will be 15% ground yarding and 85% cable yarding.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct			1.5	
Improve			1.3	0.7
Maintain ²		6.6	0.8	
Close/Block ³				
Vacate ³				

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.*

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are no known Type F streams within the sale areas. Luebke Creek (medium Type F) and Hoskins Creek (small Type F) are adjacent to Areas 5 and 6. Bridge Creek (small Type F) is adjacent to Area 2. There are several 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.

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 identify possible stream enhancement project areas.

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.

Surveys for marbled murrelets and northern spotted owls are not required due to the absence of potentially suitable habitat.

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 hazard risk assesment from the geotechnical specialists is low for Area 1, moderate for Areas 2 and 3, and high for Areas 4, 5 and 6.

X. RECREATION RESOURCES:

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). The District Recreation Coordinator has reviewed the sale.

Three designated trails, Buckup, Archers Fire Break, and Chainbreaker are located within and adjacent to Area 1. Short term closure of these trails may occur to facilitate logging and public safety. Slash will be removed from the OHV trails upon completion of the operation. A plan will be developed to advise the public when trails are closed due to harvest activity. Closure of Hoskins Road following initial reforestation activities will be evaluated due to its proximity to

Highway 6. The District Recreation Coordinator will be consulted during sale layout.

Recreational use common to this area includes hunting and OHV use.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary. The district will consult the Public Use Coordinator for appropriate protection measures when necessary.

XII. SCENIC RESOURCES:

Highway 6 is a Designated Scenic State Highway. Operations will not occur in the 150 foot visually sensitive corridor designated adjacent to the highway. Areas 2, 3, 4, 5 and 6 do have a visual classification in the Land Management Classification System (LMCS). These areas are categorized as Level 1 / high sensitivity due to their visibility from Highway 6. Area 1 has a Level 2, moderate sensitivity. The Public Use Coordinator reviewed the sale.

Visual impact will be minimized by the trees in and adjacent to the visually sensitive corridor, stream buffers, the amount of residual trees being left in the sale areas, and a mix of retention and modified clearcut prescriptions. The prescription in Area 3 and location of Area 6 were selected to minimize the impact since these areas are visible from a straight stretch on the highway.

XIII. OTHER RESOURCE CONSIDERATIONS:

Permanent inventory plots are within or adjacent to Area 1. Permanent plot markings will be protected according to guidelines.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian habitat	19	
	Recreation	16	
2	Aquatic and Riparian habitat	18	
3	Aquatic and Riparian habitat	26	
	Visual	31	
4	Aquatic and Riparian habitat	17	
5	Aquatic and Riparian habitat	37	4
	Visual	55	
6	Aquatic and Riparian habitat	26	<1
	Visual	66	

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.