Pre-Operations Report

Operation Name: Wookee Thinning
County: Clatsop
Management Basin: Fishhawk

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	PC-M	211	200
Total		211	200

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This sale area is located within the Fishhawk Basin. All the sale areas are located near the Clatsop and Columbia County line, approximately 7 miles south of the Columbia River and Hwy 30. The sale areas are composed of dense, mixed conifer stands with small inclusions of hardwoods. The understory vegetation consists of huckleberry and ferns, with some salmonberry in the hardwood pockets. Well maintained mainline roads and secondary rocked roads on ODF property provide primary access to all of the sale areas.
Soil types in these sale areas are mostly Bradwood and Tillamook, and are deep, well-drained, moderately fine textured, with site index ranging from 110 to 130 feet for Douglas-fir, and averaging 100 feet for hemlock. Elevations range from 900 to 1,300 feet.

The landforms are gentle to moderate spur-ridges and side-slopes with a few scattered steep slopes dividing tributaries of Fishhawk Creek. The underlying rock is sedimentary origin rock of the Northrup Creek (informal) member Astoria Formation, well bedded dark gray mudstones and subordinate thin fine grained yellowish-gray sandstone and the Pittsburg Bluff Formation, ridgeforming thick tuffaceous sandstone.

II. CURRENT STAND CONDITION:

The current stands are approximately 61 years old, and are moderate sized mixed conifer stands, composed mostly of Douglas-fir and hemlock, with some true firs and western red cedar in scattered locations, and stringers of alder along many of the draws. There are larger residual Douglas-fir and cedar leftover from the original railroad logging in the 1940's, and are grouped in clumps across the

southwest portion of the sale area. Understory vegetation is moderate, with a 94 percent coverage of shrubs, herbs, and grasses.

There are approximately 8.7 snags per acre across the majority of the sale area, with 4 snags per acre greater than 24 inches in diameter. There is approximately 268 cubic feet of down wood in decay classes 1 and 2. The accumulated volume of all decay classes exceeds 4,900 cubic feet.

In general, there are many existing stand structure components contributing towards a pathway of a complex stand structure. However, the existing high stand density levels are curtailing further development of additional understory initiation and growth.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Acres [2]
1	PC-M	23435	DF, WH	60	14	256	406	76	150
		23494	DF, WH	59	15	227	233	62	4
		23517	DF, WH	61	17	274	178	68	42
		23536	DF	56	15	227	187	59	4
		Target [3]			19	130	64	30	200

1 The source of stand inventory information is (SLI and Oscur) from 2002.
2 The acres are based on (orthophotos, traverse, GIS, GPS, etc) and exclude roads, streams buffers, reserve areas, etc.
3 The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED STAND CONDITION:

The desired future stand condition for Area 1 is Layered (LYR). By partial cutting these stands, individual tree growth will be maintained, and more understory can develop as a result of increased light to the forest floor, allowing for development of a more complex stand structure.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [2]	Desired Future	Acres
1	23435	UDS	LYR	LYR	150
1	23494	UDS	LYR	LYR	4
1	23517	UDS	LYR	LYR	42
1	23536	UDS	LYR	LYR	4

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

IV. PROPOSED MANAGEMENT PRESCRIPTION:

This area will be thinned to a moderate level, approximately SDI 30 to 35, with the goal of moving the stand from an “understory” condition to “layered”.

The existing stocking levels vary significantly across the sale area. The application of a general basal area thinning prescription should maintain or enhance this variability of stand densities. There are stringers of hardwoods scattered through portions of these area. In order to preserve some of the existing species diversity, the "biggest and best" trees will be retained regardless of species, including alder.

Snags: All existing snags will be retained unless deemed to be safety hazards. It is anticipated that additional snags will develop during yarding activities by leaving, topping, or girdling damaged rub trees, tail trees, lift trees, and/or intermediate support trees.

Downed Wood: For all harvesting activities, all existing downed woody debris will be retained. To increase down wood levels, operations will be required to top trees and buck out significant defect prior to yarding.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	☐	✓
Planned Quarter:		3rd	

	Conifer	Hardwood	Total
Net Volume (MBF)	3,000		3,000
Stumpage Value ($/MBF)	$350		
Estimated Gross Value	$1,050,000		$1,050,000
		Project Costs:	$55,000
		Estimated Net Value:	$995,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

The sale can be accessed from State Highway 30 to the West Creek Ridge Road at Westport, to the Kerry Road. Existing routes across State Forest will be used, and an estimated 1.0 miles of new spur roads will be needed to fully access the sale areas for logging. The proposed new roads are ridgetop spurs accessed from existing rocked roads. These new rocked roads will be needed for future harvesting entries, and will remain open upon completion of harvesting activities. The construction of these roads will complete the three phase transportation plan of the road system between Horseshoe Camp Road and Kerry Road.

Other alternative access routes would require obtaining a permanent easement from an adjacent landowner in Columbia County, creating a significant backhaul distance for log trucks and double the length of forest road to maintain during

hauling operations. This alternative has no environmental benefit or disadvantage, but is economically and operationally inefficient. Multi-span cable yarding (long line) systems from the existing roads and helicopter yarding were also analyzed. These alternative harvesting strategies were determined to be economically unfeasible and provided minimal additional resource protection.

Repair to the Kerry Road bridge decking is necessary prior to log hauling activities on that road.

Total project work for this sale is estimated to cost approximately $55,000.

Approximately 2/3 of the sale area will be cable logged, as the slopes are moderate to steep. Ground based harvesting systems will be utilized on the more gentle slopes. Cable yarding can be done with medium size yarders. Tractor logging can be done with shovel loggers, track or wheel skidders.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	1.0	0.0
Improve	0.0	0.0	0.0	0.0
Maintain	6.5	8.0	2.5	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.0

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F Streams:
A large Type F stream (Fishhawk Creek) is located along the southern boundary of the sale area for approximately 4,300 feet. A medium Type F stream (unnamed tributary of Fishhawk Creek) flows along the western boundary of the sale area for approximately 2,100 feet.

Type N Streams: There are small perennial Type N streams in the sale area. NW Oregon Forest Plan and Salmon Anchor Habitat (SAH) stream riparian strategies will be employed along these streams, as appropriate.
The current riparian vegetation is composed of a patchwork of conifer and hardwood overstories. The understory in the conifer dominated reaches is similar to the headlands, with mostly ferns, vinemaple, and some devils club. The understory within the alder reaches is mostly salmonberry.

All streams will be buffered as prescribed in the NW Oregon Forest Plan and Salmon Anchor Habitat (SAH) riparian strategies. All streams will be examined during sale layout to determine stream type and classification, and then the

specific RMA strategies required in the FMP will be implemented. The FMP riparian strategies are found in Appendix J, pages J-1 through J-16.

The actual sale area is within proximity of Fishhawk Creek, in which listed fish are present. In addition, if the Greasy Spoon Mainline or Bovine Mainline are used as haul routes from the sale area, the operational area will be within proximity of streams in which listed fish are present.

Stream Enhancement Opportunities: There are minimal opportunities for stream enhancement within the sale area due to poor access, and the current high level of existing downed wood within the Type F stream channels. Further assessment and collaboration will be done with ODFW biologists and the Sunset Unit Forester.

Aquatic Resource Protection: For all areas, full log suspension is required when cable yarding over streams. No ground-based logging equipment operation is allowed within the stream bank zone. Adequate RMA buffers will be left where required on all streams per the FMP and SAH standards. There are no stream crossings anticipated during road construction. To protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods range from use of hay bales in road ditches, to "ditch-outs" away from streams, to complete shutdown of logging and hauling operations during times of heavy rainfall. There are no known high risk sites within the sale area. Any high-risk sites found will require at least one-end log suspension and cable logging.

VIII. T&E SPECIES CONSIDERATIONS:

The sale area has been surveyed for Northern Spotted Owls in 2004, with no responses, and is scheduled to be resurveyed in 2005.

The sale area has also been surveyed for Marbled Murrelets in 2004, with no responses, and is scheduled to be resurveyed in 2005.

The sale area was checked against district knowledge for any listed plant location. The sale area was also checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations. No listed plant records were identified within the sale area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial assessment from the geotechnical specialist is low. The geotechnical specialist may be consulted if concerns arise during sale layout.

X. RECREATION RESOURCES:

This area receives dispersed recreation, which includes hunting, fishing, camping, target shooting, and driving forest roads. There are no established recreation sites within the operation areas. The planned operations will only temporarily impact recreational road use.

XI. CULTURAL RESOURCES:

There are no identified cultural resources within the operation areas.

XII. SCENIC RESOURCES:

The sale area is not visible from any county road or state highway. All forest roads accessing the sale areas are Level 3 visual classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

None.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The lands in this timber sale are all classified "general" management, except for those within stream buffers, which receive "aquatic and riparian" classifications.

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian Habitat	51	9

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. For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.