Pre-Operations Report

Operation Name: Steeple Chase
County: Clatsop
Management Basin: Lousignot

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Partial Cut - Moderate	111	98
2	Partial Cut - Moderate	67	62
3	Partial Cut - Moderate	67	60
4	Modified Clearcut	65	56
Total	Partial Cut	259	220
Total	Modified Clearcut	65	56
Total		324	276

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are all located in the Lousignot Basin. This area is dominated by Douglas-fir, with some western hemlock and red alder. The soil types present are primarily (Tillamook) Ty, with some (Bradwood) Bq in all areas. Tillamook soils are deep, well drained, fine textured rock derived from siltstones. Bradwood soils are deep, well drained colluvial soils. Area 4 has a small component of (Keasey) Ky soils in the southern portion of the unit. Keasey soils are shallow to moderately deep, well drained colluvial soils. Site index averages from 137 to 140 for the Douglas-fir, and 110 for the western hemlock.

The landform of Area 1 is a gentle knob divide between Grub Creek and the Nehelam River. Areas 2 and 3 have gentle to moderate sideslopes above Fishhawk Creek. Area 4 has moderate slopes above a tributary to Lousignot Creek. The underlying rock units are sedimentary origin, Sager Creek infomal formation (mudstone with rhythmically interbedded sandstone) and in portions of Area 3 and 4, Pittsburg Bluff Formation (sandstone).

II. CURRENT STAND CONDITION:

Area 1: The current stands are generally 61 to 65 years old, and are composed of moderate sized Douglas-fir and hemlock. From initial field reconnaissance, some evidence of *Phellinus weirii* is present in pockets throughout this stand. The stands are categorized as 100% Closed Single Canopy (CSC), and the stand density is between 62 and 73.

Area 2: The current stands are composed of 68 year old moderate sized Douglas-fir. The stands are categorized as 100% CSC and the stand density is between 60 and 65.

Area 3: The current stands are generally 58 to 68 years old, and are composed of moderate sized Douglas-fir. The stands are categorized as 100% CSC, and the stand density is between 49 and 65.

Area 4: The current stands are generally 58 to 74 years old and are composed of moderate sized Douglas-fir. The stand is categorized as CSC and UDS, and the stand density is between 53 and 59.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Acres [2]
1	PC - M	1394	DF,WH	65	16	299	227	76	32
		1402	DF	63	26	300	79	62	5
		1405	DF	61	17	298	184	73	28
		1408	DF	63	19	285	152	68	14
		1422	DF	64	17	280	173	69	19
		Target [3]			19	110-130	55-75	25-35	98
2	PC - M	1261	DF	68	19	252	130	60	3
		1275	DF	68	19	276	140	65	37
		1285	DF	68	19	259	132	61	22
		Target [3]			20	110-130	55-75	25-35	62
3	PC - M	1243	DF	58	16	195	142	49	22
		1245	DF	68	19	276	140	65	26
		1261	DF	68	19	252	130	60	12
		Target [3]			19	110-130	55-75	25-35	60
4	MC	1200	DF	63	16	210	150	53	4
		1241	DF	63	19	236	122	56	13
		1246	DF	74	18	242	132	58	17
		1268	DF	58	17	244	147	59	22
		Target [3]					5		56

1 The source of stand inventory information is OSCUR from 2002.
2 The acres are based on GIS and excludes 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:

Sale Area 1 has been targeted for a desired future condition of Older Forest Structure (OFS), while Areas 2 and 3 have been targeted for a desired future condition of Layered (LYR). Area 4 is designated as general stewardship.

The specific stand targets for basal area and relative density in Areas 1, 2, and 3 will be determined during sale layout, but will range from 25% to 35% SDI.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Acres
1	1394	CSC	UDS	OFS	32
	1402	CSC	UDS	OFS	5
	1405	CSC	UDS	OFS	28
	1408	CSC	UDS	OFS	14
	1422	CSC	UDS	OFS	19
2	1261	CSC	UDS	LYR	3
	1275	CSC	UDS	LYR	37
	1285	CSC	UDS	LYR	22
3	1243	CSC	UDS	LYR	22
	1245	CSC	UDS	LYR	26
	1261	CSC	UDS	LYR	12
4	1200	UDS	REG	General	4
	1241	UDS	REG	General	13
	1246	CSC	REG	General	17
	1268	CSC	REG	General	22

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

IV. PROPOSED MANAGEMENT PRESCRIPTION:

Areas 1, 2, and 3 will be thinned and are targeted for complex desired future condition. The stands are currently designated as CSC. The proposed management is to thin the stands to a stand density index of 25-35 to create openings in the canopy and promote rapid growth of the understory, allowing the understory to become established. Vertical layers of tree crowns and shrubs will be essential in creating a layered stands. Minor species, such as western red cedar, will be reserved from cutting. Western hemlock may also be reserved in some areas. Alternative thinning prescriptions may be applied at a “patch” scale to create variability in the stand. Final prescriptions will take the desired Future Conditions in to account and the habitat roles that the targeted stands are providing.

Area 4 is a modified clearcut that will be replanted with a mixture of conifer species. Minor species, such as western red cedar, will be reserved from cutting. An average of 5 green trees per acre will be scattered and/or clumped throughout clearcut units, and not solely located in riparian areas. (FMP, page 4-53, Paragraph 2). In addition, individual and small clumps of non-merchantable alder may be left in operationally feasible areas to provide short term snag recruitment.

For all harvesting activities, all existing down woody debris will be retained. Down woody debris levels will be assessed and if deficiencies are found to exist on an individual unit, then additional conifer trees and/or conifer logs will be retained to meet the landscape targets for down woody debris as prescribed in

the FMP. (FMP, “Landscape Management Strategy 3d. Down Wood.”, pages 4-54 and 4-55.).”

Area 4 will be reforested with an initial stocking planted at approximately 300 TPA with a species mixture of Douglas-fir, western hemlock, and western red cedar. Site preparation prior to initial planting would include excavator slash piling on operable slopes in areas with concentrations of slash. Mountain beaver are a concern to stand establishment and trapping may take place. Spot application of ground applied herbicides may be required in Oregon grape, salal, salmonberry, & thimbleberry communities. Tree protection would be anticipated on Douglas-fir and western red cedars.

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)	5,096	1,380	6,476
Stumpage Value ($/MBF)	$325	$275	
Estimated Gross Value	$1,656,200	$379,500	$2,035,700
		Project Costs:	$206,000
		Estimated Net Value:	$1,829,700

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access is Highway 202 to Old Vesper Road.

For sale access, approximately 0.6 miles of new road construction, and 2.6 miles of road improvement along the haul route and within the basin will be completed to maintain the road to a standard that will allow year round hauling and provide for watershed health. Evaluation of a fill that crosses Grub Creek will be completed during the road maintenance inventory of the haul route. If the condition of the culvert in this fill is warrants replacement, then it will be completed prior to log hauling. New roads are minor ridge top spurs that do not cross perennial streams. Since this area has an established road network, utilizing the existing infrastructure and constructing a few minor spurs was determined the most sound access/harvest system.

Approximately 10,000 cubic yards of rock crushing will also occur with this sale.

A combination of cable yarding and ground yarding will be planned for harvesting. Cable systems will be used on steeper slopes. Ground yarding will generally be limited to slopes under 35%.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.5	0.1
Improve	0.0	2.6	0.0	0.0
Maintain	0.0	4.3	1.6	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.3

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Area 1- Grub Creek, a medium Type F stream goes through the eastern portion of Area 1 for approximately 1,350 feet to the northern boundary of the unit. From here, Grub Creek becomes an unknown sized Type F stream which parallels the northern boundary of the unit for approximately 3,000 feet. Area 2- Fishhawk Creek, a large Type F stream runs along the north boundary (and property line) of Area 2 for approximately 250 feet. Areas 3 and 4- No Type F streams are associated with the harvest activities.

Type N Streams: There are perennial Type N streams in all sale areas.

Aquatic Resource Protection: All of Area 2 and approximately 56 acres of Area 3 are within the Fishhawk Lake Creek Salmon Anchor Habitat Area. These areas shall receive aquatic resource protection in accordance with the standards contained in the Northwest State Forest Management Plan, Implementation Plan, and Salmon Anchor Habitat strategies.

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. No stream crossings are 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 hazard sites or debris-track Type N streams within the sale area.

All streams will be examined to determine stream type and classification during sale layout, and then the specific riparian management area strategies required in the FMP will be implemented. The FMP riparian management area strategies that will be implemented are found in the FMP, Appendix J, "Management Standards for Aquatic and Riparian Areas", pages J-1 through J-16.

Area 1 is in proximity to Grub Creek, a Type F stream that has historically contained listed fish in the lower reaches (Coho, Fall Chinook, and Winter Steelhead), is adjacent to the forest operation area. The haul route from Areas 2, 3, and 4 also crosses this creek. Therefore, per ODF's Salmon Protection Policy for State Forest Operations, contract provisions will be included to reduce the likelihood of adverse effects on listed fish. Specific standards will include: (1) hauling on roads which are in proximity to streams in which "listed" fish are present would only be allowed during weather conditions and use levels commensurate with the capabilities of road drainage systems; (2) implementation of riparian management area strategies in accordance with the FMP, Appendix J, "Management Standards for Aquatic and Riparian Areas", pages J-1 through J-16, for perennial Type N streams that are within 500 feet of streams in which listed fish are present.

There may be an opportunity to perform stream enhancement work in Grub Creek with this sale. Further assessment and collaboration will be done with ODFW biologists and the Jewell Unit Forester. If any in-stream work is done with this sale, then it will be conducted during in-stream periods established by ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The ODF Northwest Area Biologist determined on March 7, 2003 that none of the sale areas contained suitable habitat for Marbled Murrelets.

All sale areas were surveyed to protocol for northern spotted owl in 2003 and 2004 with no responses. Additional surveys will be conducted in 2005.

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

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The topographic map indicates that there are no high landslide hazard locations within Areas 2 and 3 and that there may be several isolated high landslide hazard locations along a band running midslope through Area 4 and one isolated high landslide hazard location at the southern edge of Area 1 on the west side of the ridge. The risk to the Nehalem River, Fishhawk Creek, Grub Creek, and

Lousignont Creek is low. The geotechnical specialist may be consulted if concerns arise during sale layout.

All of Area 2, most of Area 3, and one acre of Area 4 are within a Salmon Anchor Habitat Area. The topographic map indicates some steep slopes in the northern portion of Area 3. The one acre portion of Area 4 in the SAH is located in the northern most tip of the area, where the ground is gentle, posing no risk to resources. If High Landslide Hazard Locations are identified during the field work, or if the prescription of Areas 2 or 3 changes to clearcut, the geotechnical specialist will be consulted.

X. RECREATION RESOURCES:

This area receives dispersed recreation, which includes hunting, fishing, camping, target shooting, and driving forest roads. The Clatsop State Forest Recreation Plan does not list any specific activities for this portion of the basin.

XI. CULTURAL RESOURCES:

No known cultural resources are within or adjacent to the operation.

XII. SCENIC RESOURCES:

The sale areas are in a landscape of low visual sensitivity (Level 3)

XIII. OTHER RESOURCE CONSIDERATIONS:

The survey requirements are as follows: Area 1- The south and east boundaries will need to be traversed, blazed and posted, and the SE section corner to Section 24 will need to be rewitnessed. Area 2- no work needed. Area 3- The W 1/16 section to 12 and 13 needs to be rewitnessed. Area 4- The SE 1/16 corner needs to be rewitnessed (outside the unit boundary).

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic & Riparian	22	7
2	Aquatic & Riparian	17	1
3	Aquatic & Riparian	11	2
4	Aquatic & Riparian	15	2
4	Visual	18	0

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.