

Pre-Operations Report

Operation Name: Camp 26 Thin
County: Linn
Management Basin: Rock Creek

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
	PC-M	212	198
Total		212	198

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The operation is located within a temperate climate area. Typically the fall and winter seasons are wet. This area receives approximately 70 to 90 inches of rainfall per year. The operation is located within the *Tsuga heterophylla* Zone (Natural Vegetation of Oregon and Washington, Franklin & Dyrness, 1973).

The landform is gentle to moderate slopes above tributaries to Rock Creek and Snake Creek. The majority of the operation is mapped a Quaternary landslide deposits.

The slopes within the operation range from 15% to over 60%. The soils in the operation are 80% Pechuck and 20% Akerson soils. The elevation ranges from 1,820 to 2,440 feet.

II. CURRENT STAND CONDITION:

The operation is located in a dense 63 year old stand. This stand is currently classified as Understory. The overstory consists of western hemlock, Douglas-fir, big leaf maple, red alder and some western red cedar. The understory contains Oregon grape, vine maple and sword fern as well as approximately 500 trees per acre of sapling sized western hemlock and Douglas-fir. The area was commercially thinned in 1981.

There are 4 snags per acre; 989 cubic feet per acre of sound down wood; and a total of 4,900 cubic feet per acre of down wood within all decay classes. (SLI 2002)

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
	PC-M	12716	DFWH	63	20	240	111	54	212
		Target ³			23	147	53	35	

1 The source of stand inventory information is SLI from 2002 for trees greater than 8 inches in diameter.

2 The acres are based on GIS and include 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:

This operation is located in the Rock Creek Basin. Approximately 55 percent of this basin is planned for Complex Structure stands. (*Cascade District Implementation Plan, 2003*) Approximately 3% of this basin is currently considered Complex Structure. This basin is dominated by mature, densely stocked stands of Douglas-fir mixed with varying amounts of western hemlock, western red cedar, noble fir, and hardwoods. The diversity of tree species in these stands present good opportunities for structure based management, except for stands with very high overstory densities. The stands generally have high timber values and retain important structural components (snags, large old growth trees, large down logs, etc.) from legacy stands. This basin is an important part of the City of Salem’s municipal watershed and makes up approximately 2.5 percent of the watershed.

The DFC for the stand (SLI type 12716) is Layered.

The anticipated pathway for the stand begins with moderately thinning the overstory. The partial cut will remove enough of the overstory trees to allow light to reach the understory to encourage more growth of herbs, shrubs and residual overstory trees.

This will be the second commercial thinning of the stand:

- Perform a moderate thin on the current stand while minimizing damage to the understory.
- Evaluate the entire stand in 15-20 years for another possible entry to encourage the growth of the understory trees.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
	12716	UDS	UDS	LYR	212

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:

The proposed management prescription for the stand is:

- All trees greater than 8 inches DBH thin to: BA of 147, TPA of 53, average DBH of 23 inches, and an SDI of 35%.
- Bigleaf maples 12 inches in diameter or larger will be reserved from harvest and will count towards the target residual SDI for trees larger than 8 inches DBH.
- Maintain the existing snags which do not pose a safety hazard and downwood. At the completion of the operation there will be at least 2 snags per acre.
- The **total residual stand (overstory and understory) in the stand will be:** BA of 155, TPA of 691, average DBH of 3 inches and an SDI of 40%.

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:			

	Conifer	Hardwood	Total
Net Volume (MBF)	2,574	0	2574
Stumpage Value (\$/MBF)	\$350	0	
Estimated Gross Value	\$900,900	0	\$900,900
		Project Costs:	\$23,000
		Estimated Net Value:	\$877,900

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access from the pavement to the sale area consists of going 4.4 miles on the South Rock Creek (SRC) mainline road, a crushed rock surfaced road. The SRC mainline is in good condition and is scheduled to have a 4 inch lift of crushed rock added with another timber sale prior to this one. Two short spur roads will be constructed with this sale to facilitate cable and ground yarding systems. These two spurs will be surfaced with pit-run rock to allow winter use. No high risk sites or significant streams are involved with new road construction.

The harvesting will be done with a combination of cable and ground logging, roughly a 50/50 split between the two. Existing roads and the two new spur roads will provide access to the slope breaks where ground yarding will stop and cable ground begins. All the cable logging will be with relatively short span logging, less than 1000 feet in length.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0.52	0
Improve	0	0	0	0
Maintain	4.4	0	0.75	0
Close/Block	0	0	0	0
Vacate	0	0	0	0

*For determination of road class either use results of the Harvest and Habitat roads classifications, or if this information is not available then low use roads are spurs, medium use roads are collectors and high use roads are mainlines. Use these same criteria when comparing the total for all AOP sales to the IP plans.

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are no streams with listed fish located within the operation. There are seven small perennial non-fish bearing streams and two small fish bearing streams within the operation. These streams flow into the West Fork of Rock Creek. The riparian vegetation for these streams include Douglas-fir, western hemlock, big leaf maple and red alder in the overstory. Devils club, salmon berry, Oregon grape, vine maple and sword fern can be found in the understory.

Management activities within riparian areas of streams will focus on achieving properly functioning aquatic and riparian habitat conditions over time. Riparian Management Areas (RMAs) will be established immediately adjacent to streams for the purpose of protecting aquatic and riparian resources and maintaining the functions and ecological processes of the streams. The Management Standards

for Aquatic and Riparian Areas found in the *NWO State Forests Management Plan* (pg. J-1 – J-16) will be followed within these RMAs.

The following measures will be used to minimize impacts to streams: 1. No ground based equipment will be allowed within 25 feet of the non fish bearing streams or within 50 feet of the fish bearing streams, 2. There will be seasonal restrictions on when ground yarding and road construction will be allowed (i.e. during dry seasons), 3. Erosion control measures will be used on areas of soils exposed during road construction or improvement, 4. In the cable portions of the operation, one end suspension of logs during yarding will be required, 5. Road ditches will be disconnected from streams, 6. Road maintenance will be required during log hauling.

VIII. T&E SPECIES CONSIDERATIONS:

This operation was surveyed for Northern Spotted owls during the 2002, 2003, 2004 and 2005 survey seasons with one response during 2005. The operation will be surveyed again during the 2006 survey season.

The operation area was checked against District knowledge for any listed plant location. The operation area was also checked against the Oregon Natural Heritage Program's database of known listed plant locations. No listed plant records were identified within the operation area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial hazard and risk assessment by the geotechnical specialists is low. There are no steep slopes indicated on the topographic maps. If however during field work high landslide hazard locations are identified, the geotechnical specialist will be consulted.

X. RECREATION RESOURCES:

There are no developed recreational resources within or in close proximity to this operation. Hunting, sight seeing and horseback riding do occur in the area. There may be some delays on the TR 500, Translator Hill and South Rock Creek roads due to road work or logging, but through traffic and public access should not be impeded by the operation.

XI. CULTURAL RESOURCES:

Pre-operation reconnaissance revealed no visible cultural resource features or artifacts. If discovery is made, the cultural resource will be protected and field staff will consult with the Cultural Resource Specialist in Salem.

XII. SCENIC RESOURCES:

There are no scenic considerations within the operation.

XIII. OTHER RESOURCE CONSIDERATIONS:

There are no other resource considerations.

XIV. LMCS:

Area 1 contains Special Stewardship, Aquatic and Riparian Habitat for two small Type F stream. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.

Area 1 contains Focused Stewardship, Aquatic and Riparian Habitat for seven perennial Type N stream. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.