

Pre-Operations Report

Operation Name: Fosters 40
County: Clatsop
Management Basin: Northrup

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	55	48
2	PC-M	253	217
3	MC	71	64
Total	Modified Clearcut	126	112
Total	Partial Cut	253	217

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are located in the Northrup Basin. They are characterized by Douglas-fir stands, with some western hemlock, western redcedar, and red alder. The soil series are Tillamook and Bradwood on most slopes. Average site Indices are 140 feet (I-) for Douglas-fir on the Tillamook Soil Series and 130 feet (II+) for Douglas-fir on the Bradwood Soil Series. Areas 1-3 drain into Northrup Creek. Timber is generally wind-firm on all acres. Slopes in the operation area range from moderate mountain slopes (20-40%) to steep mountain slopes (40-65%), with primarily eastern and southern aspects. Elevations range from 1,200 to 1,600 feet.

II. CURRENT STAND CONDITION:

Areas 1 and 3 - The current stands are approximately 60 years old, and are composed primarily of moderate sized Douglas-fir (approximately 18 inches in DBH) with hardwoods mixed throughout the stand. The stands are categorized as an Understory structure (UDS) with a stand density index of 60.

Area 2 - The current stands are primarily composed of 60 year old, moderate sized, Douglas-fir. The stand is categorized as UDS with a stand density index of 60.

Understory development for all sale areas consists primarily of sword fern, vine maple, huckleberry, and salmonberry.

Areas 1 and 2 have approximately 7 snags per acre over 12 inches in DBH, and 1 snag per acre over 24 inches in DBH, and Area 3 has approximately 5 snags per acre over 12 inches in DBH, and 3 snags per acre over 24 inches in DBH.

Areas 1, 2, and 3 have approximately 5,000 cubic feet per acre of down wood in all decay classes, and approximately 162 cubic feet per acre of down wood in decay classes 1 and 2. Area 3 has approximately 405 cubic feet per acre of down wood in decay classes 1 and 2.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	MC	23842	WH, DF	64	16	282	206	72	3
	MC	23492	DF	60	17	231	140	56	45
		Target ³	DF, WH						48
2	PC-M	23492	DF	60	17	231	140	56	146
	PC-M	23555	DF	62	16	242	155	60	25
	PC-M	23531	DF	60	17	231	140	56	46
		Target ³	DF, WH		18	120-140	70-90	25-30	217
3	MC	23555	DF	62	16	242	155	60	16
	MC	23557	DF, RA	57	18	165	89	39	5
	MC	23531	DF	60	17	231	140	56	23
		Target ³	DF, WH						64

¹ The source of stand inventory information is SLI and imputed SLI date. Age shown is as of 2007.

² The acres are based on GIS 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 FUTURE CONDITION/VISION:

Areas 1 and 3 are not planned to have a complex desired future condition on the landscape. Five to seven conifer trees per acre will be left to provide a source for natural regeneration and future downed wood and snags. A precommercial thinning is anticipated at 12-17 years when crowns close followed by a commercial thinning at 30-40 years of age to ensure continued growth. At age 50-60 the stand will be evaluated for either additional thinning or regeneration harvest.

Area 2 has a desired future condition of Older Forest Structure (OFS). This area will be thinned to a level that will develop the existing UDS condition into a Layered (LYR) condition throughout these stands. It is anticipated that this entry will increase individual tree growth and allow further development of tree crowns and understory development. Vertical layers of tree crowns and shrubs will be essential in creating a Layered stand. It is also anticipated that a heavier thin will delay future harvest intervals. The stand is located on a less dominant finger ridge off of Nicolai Mountain is expected to be less susceptible to windthrow.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	23492	UDS	REGEN	GEN	45
	23842	CSC	REGEN	GEN	3
2	23492	UDS	LYR	OFS	146
	23531	UDS	LYR	OFS	46
	23555	UDS	LYR	OFS	25
3	23555	UDS	REGEN	GEN	16
	23531	UDS	REGEN	GEN	23
	23557	UDS	REGEN	GEN	5

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 and 3 - These areas are planned for a modified clearcut that will be replanted with a mixture of conifer species. A combination of methods will be implemented to achieve the green tree retention requirements such as green tree retention areas, stream buffers, and trees scattered across the sale areas (FMP, page 4-53, Paragraph 2). Minor species found will be reserved from cutting.

Area 2 - The sale is designed to commercially thin from below to a stand density index (SDI) of 25 to 30. An effort will be made to retain minor tree species. Trees less than 8 inches in DBH will be reserved. Merchantable hardwoods will be thinned through, leaving the biggest and best trees regardless of species.

Snags: In all areas, all existing snags will be retained unless deemed to be safety hazards. In MC areas, if pre-sale activities determine that fewer than two hard snags per acre exist, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels as defined by the Forest Management Plan. In PC Area 2, 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. Pre-sale activities will also be used to determine if snag creation after harvesting will be needed to supplement the anticipated number of snags in Area 2 after harvest.

Green Trees: In MC Areas 1 and 3, an average of five to seven trees per acre will be scattered and/or clumped throughout the areas. A combination of methods will be implemented to achieve the green tree retention requirements such as clumping and scattering them in the uplands and placing some within stream buffers and outer RMA areas. In addition, individual and small clumps of non-merchantable trees will be left in operationally feasible areas. In all sale areas minor species such as red cedar will be reserved from cutting, and any existing larger remnant trees will be reserved from cutting.

Downed Wood: For all harvesting activities, all existing downed woody debris will be retained. In MC Areas 1 and 3, additional conifer trees and/or conifer logs will be retained to meet the 600 cubic foot/acre landscape target for down wood as prescribed in the FMP and Implementation Plan. Obvious defect in conifer logs will be bucked out in the unit to enhance downed wood levels. To increase down wood levels In the partial cut area, operations will be required to top trees prior to yarding and to yard only merchantable log segments to roadsides. 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. Efforts will be made to leave as much downed wood that is created from the harvest activities within the unit. This will be accomplished through topping trees and bucking out cull sections within the unit. It is also anticipated that natural snag and down wood recruitment will occur post harvest over time due to natural occurrences. (FMP, "Landscape Management Strategy 3d. Down Wood." pages 4-54 and 4-55.)"

In Areas 1 and 3 some slash manipulation is anticipated for site prep, but will be evaluated at the time the sale is prepared. The planned planting prescription is 300 trees per acre at the following mixtures: 75% Douglas-fir, 20% western hemlock, 5% western red cedar. Tree protection will be provided to all species except Western Hemlock. Prescription of herbicide will be determined at the time the sale is prepared.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	7,500	900	8,400
Stumpage Value (\$/MBF)	\$275	\$400	
Estimated Gross Value	\$2,062,500	\$360,000	\$2,422,500
		Project Costs	\$259,100
		Estimated Net Total	\$2,163,400

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to the harvest site will be Highway 202 to Northrup Creek Road to Foster Mainline Road.

Road improvements will be done on Foster Mainline Road from the Shingle Mill Road junction to the Nicolai Mainline junction (1.5 miles). It is expected that a lift of surfacing rock will be needed on this section of road. Additional improvement lifts will also be needed on the existing rocked spur off Foster Mainline to Area 1 (0.5 mile). New road construction in Areas 1 and 2 will be rocked roads. New road construction in Area 3 will be unsurfaced dirt spur roads which will be closed and/or vacated at the completion of the sale.

Rock crushing at Knob Point Quarry and stockpiling approximately 15,000 cubic yards of 4"-0" rock will be done as a project within this sale.

The majority of Areas 1 and 2 will be cable yarded while Area 3 will be mostly harvested with ground based equipment. Methodology of logging these areas is determined from analysis of the terrain and landing locations. Existing roads will be utilized as much as possible for logging the sale areas.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0.0	0.0	1.0	0.7
Improvement	1.5	0.0	0.5	0.0
Maintenance	8.0	0.0	1.5	0.0
Close/Block	0.0	0.0	0.0	0.3
Vacating	0.0	0.0	0.0	0.4

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Northrup Creek, a Type F stream, is located adjacent to the eastern boundary of Area 2. A Type F tributary of Northrup Creek runs through Area 2.

There are no known domestic water systems associated with this sale. This sale does not contain any streams with federally listed fish species.

Aquatic Resource Protection: Northrup Creek and tributaries shall receive aquatic resource protection in accordance with the standards contained in the Northwest State Forest Management Plan.

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

In addition, 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. Stream type and classification will be done using the most recently completed stream survey

information and newly adopted FPA rules where appropriate. 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.

There may be an opportunity to perform stream enhancement work in Northrup Creek. 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. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

All sale areas were surveyed to protocol for northern spotted owls in 2007 with no responses and will be surveyed again in 2008.

The ODF Northwest Area Biologist determined that none of the sale areas contained suitable habitat for Marbled Murrelets.

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 (OHNP) database of known listed plant locations. No listed plant records were identified within the sale area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based off of USGS 1:24,000 topographic maps and available geologic maps. There are a few isolated high landslide hazard locations in Areas 1 and 2 and there are high landslide hazard locations scattered throughout Area 3. The entire sale area drains to Northrup Creek. The risk of landslides delivering directly to Northrup Creek from Areas 1 and 2 is low to moderate and from Area 3 is low. Area 3 appears to be located on a large, deep-seated landslide landform. The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

X. RECREATION RESOURCES:

This area receives dispersed recreation, which includes hunting, camping, target shooting, and driving forest roads. This sale is located in the motorized recreation portion of the Clatsop State Forest. Inventories of existing motorized trails found desirable trails in the sale. At this time it is not known if the trails will become part of a developed motorized trail network on the Clatsop State Forest.

XI. CULTURAL RESOURCES:

There are no known cultural resources within or adjacent to the operation.

XII. SCENIC RESOURCES:

The sale area is in a landscape of low visual sensitivity (Level 3).

XIII. OTHER RESOURCE CONSIDERATIONS:

No survey work is required. There is a section corner located in Area 1 that will need protection.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

All acres in Areas 1-3 are classified as “general management.”





