

# Pre-Operations Report

**Operation Name: Sweeping Corners**

**County: Clatsop**

**Management Basin: Buster**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres
1	Modified Clearcut	78	58
2	Modified Clearcut	28	24
Total		106	82

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

This sale is located in the Buster Basin. All sale areas are within the hemlock vegetation zone. Aspects for both the units are a mixture of north, south, northwest and southwest. The soils of Area 1 are predominately Killam (Km) and Rye (Rj) with a slight occurrence of Lousignont (Lo). Killam is a deep, well-drained, medium textured soil which arises on mountainous terrain with a rock content of 10-40 percent depending on soil depth. Rye is a common counterpart to Killam and is also a deep, well-drained soil. The rock content of Rye is higher than Killam at 40-80 percent. Lousignont is a moderately grained, fine textured soil with lacking drainage capability. This soil is found in stream basins. Area 2 has mostly the Neddon soil type which is a shallow, well-drained, medium textured soil. Site indices range from 100 (III-) to 130 (II-) for Dougals-fir and from 100 (III-) to 110 (III+) for western hemlock. Slopes of this area range from moderate (20%-40%) to steep with some slopes over 65%.

The sale is located in the divide at the upper end of Cow Creek and the headwaters of Quartz Creek between the South Fork of Quartz Creek and the main branch of Quartz Creek. Area 1 is mostly on gentle to moderate slopes that divide the South Fork of Quartz Creek from Quartz Creek. Area 2 is in the steep side slopes and gentle upper slopes of the divide in the headwaters of Cow Creek. The sale area is underlain by a mix of igneous and sedimentary origin rocks. The igneous rocks are of the Tillamook Volcanics formation, thin basaltic andesite flows with vesicular top and bottom flow breccias, and the Cole Mountain Basalt formation, intrusive basalt sills and dikes. The sedimentary rocks are of the informal Hamlet formation and the Sunset Highway informal member of the informal Hamlet formation, both primarily mudstone with a few interbeds of indurated debris flows and sandstones.

## II. CURRENT STAND CONDITION:

**Area 1:** This area consists of 49-63 year old Douglas-fir and approximately 50 year old red alder. Approximately 32% of the stand is classified as Understory (UDS), and 68% Closed Single Canopy (CSC). The understory consists primarily of dense sword fern with occasional vine maple, huckleberry, and salmonberry.

**Area 2:** 43 year old Douglas-fir dominates this small stand. The stand is classified as CSC. The understory consists of sword fern, vine maple and huckleberry.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	CC	2462	DF, RA	49	19	261	134	62	19
		2495	RA, DF	54	16	192	144	65	12
		2509	DF, RA	62	18	151	87	36	19
		2549	DF, RA	61	18	295	174	72	4
		2575	DF, RA	63	16	218	153	55	4
		Target <sup>3</sup>				5		58	
2	CC	2385	DF	43	11	177	269	52	24
		Target <sup>3</sup>					5		24

1 The source of stand inventory information is OSCUR from 2002. Age shown is as of 2005.

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 STAND CONDITION/VISION:

Neither sale area has been placed into a specific desired future condition such as OFS or LYR. The desired condition of these stands are healthy vigorous stands of mixed conifer.

These areas will be regeneration harvested and planted with a mixture of conifer species. 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 45-50 the stand will be evaluated for either additional thinning or regeneration harvest.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	2462	CSC	REGEN	GENERAL	19
	2495	CSC	REGEN	GENERAL	12
	2509	UDS	REGEN	GENERAL	19
	2549	CSC	REGEN	GENERAL	4
	2575	UDS	REGEN	GENERAL	4
2	2385	CSC	REGEN	GENERAL	24

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

**IV. PROPOSED MANAGEMENT PRESCRIPTION:**

**Area 1 and 2:** These areas are both modified clearcuts 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 may be reserved from cutting; further consideration of those species will be taken during sale layout. In addition, individual and small clumps of non-merchantable alder may be left in operationally feasible areas to provide short term snag recruitment.

Due to the location of the sale to Highway 26 as well as the power lines, ODOT and the power company will be consulted to discuss any harvest concerns they may have. Sale boundaries may be adjusted based on their concerns.

During all harvesting activities, all existing snags will be retained unless deemed to be safety hazards. Where fewer than two hard snags per acre are found to exist during sale layout, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels (FMP, "Landscape Management Strategy 3c. Snags", pages 4-53 and 4-54). Green trees and snags will not be left in any location which may create interference with the powerlines through Area 1. It is proposed that a green tree retention area be left as labeled on the map in Area 1.

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.)"

Site preparation on gentle slope will be done by mechanical slash manipulation. On steeper slopes the site preparation will be accomplished through cable harvesting activities. Planting will be at 300-350 trees per acre with the following species: 75% Douglas-fir, 15% western hemlock, 20% true firs. Mountain beaver trapping will focus on the sword fern/alder type areas. Animal damage through

big game browse to conifer seedlings is anticipated to be high in both sale areas. Tree protection will be prescribed to the newly planted conifer species; Douglas-fir will receive paper bud caps at initial planting.

**V. ESTIMATED TIMBER AND REVENUE INFORMATION:**

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	<input type="checkbox"/>	4
Planned Quarter:		1 <sup>st</sup>	

	Conifer	Hardwood	Total
Net Volume (MBF)	2,624	246	2,870
Stumpage Value (\$/MBF)	\$350	\$300	
Estimated Gross Value	\$918,400	\$73,800	\$992,200
		Project Costs:	\$36,500
		Estimated Net Value:	\$955,700

**VI. TRANSPORTATION PLANNING AND HARVESTING:**

Access to the harvest site will be from privately owned land to the east of the sale. An easement for use of the Military Creek road will be negotiated with the landowner (Stimson) prior to selling the sale. The haul route will be from the sale areas on Military Creek spurs to Military Creek Road and out to Highway 26. Approximately 0.7 miles of new road will be constructed for harvest purposes and 5.8 miles of road improvement on the haul route is planned. The tentative plan for the new roads is that they will be dirt and will be closed upon completion of the sale.

The sale will predominately have cable yarding from ridge top spur roads with several ground yarding options. The location of Highway 26 and the powerlines may create challenging harvest to parts of Area 1. It will be determined during sale layout if cable yarding beyond the powerline is possible.

**Table 5. Transportation Planning Summary (Miles).**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.0	0.7
Improve	0.0	4.8	1.0	0.0
Maintain	0.0	9.1	0.5	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.7

## **VII. AQUATIC RESOURCES AND WATER QUALITY:**

*Type F and Domestic Use Streams:* No Type F streams or domestic use streams are associated with the harvest activities.

*Type N Streams:* There are perennial Type N streams located within the sale areas.

The operation is not in proximity to streams in which listed fish are present.

*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. 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.

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.

If any in-stream work is done with this sale, it will all be conducted during in-stream work periods established by ODFW.

## **VIII. T&E SPECIES CONSIDERATIONS:**

Area 2 of this sale was surveyed to protocol for spotted owls in 2002 with no responses. This sale was originally planned as Area 4 of Osweg Combination, and thus was surveyed under maps labeled Osweg Combination. Though the name of the harvest area has changed, it was verified that this location was suitably surveyed. Both sale areas were surveyed to protocol in 2003, 2004, and 2005 with no responses.

The ODF Northwest Area Biologist determined on November 13, 2002 none of the sale areas contained suitable habitat for Marbled Murrelets.

Stream surveys were conducted in both areas in 2002. All streams located within the harvest boundary are classified as non-fish bearing streams.

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:**

The initial hazard and risk assessment from the geotechnical specialists for Area 1 is low with only one small steep slope area in the south portion of the sale area. Due to this steep slope area, the sale boundary was moved up the hill to the break in topography where the steep slope starts. The topographic map indicates only one small area in the southern most part of Area 1 that has high landslide hazard locations. For Area 1, the geotechnical specialist will be consulted during sale layout and the need for field review will be assessed. There are some steeper and more extensive high landslide hazard locations in the northern part of Area 2. For Area 2, the geotechnical specialist will review the sale in the field. If the sale boundaries are changed prior to field review, the geotechnical specialist may be consulted and the need for field review may be reassessed.

## **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:**

The *Recreation and Cultural Resource Inventory and Assessment Report* lists a mining location/mining shaft at the legal area, NE ¼ ,T4N, R7W Sec. 11. Part of this sale is in the above legal section, however the exact location of the mine is not known. The mine is categorized as a recollection of a local person(s) and has not been confirmed in the field. It is also unconfirmed that a military road from Astoria to Salem runs through this general area. Additional field reconnaissance will be conducted to locate any additional features or artifacts. If any are found, they will be protected appropriately.

## **XII. SCENIC RESOURCES:**

In Area 1, 36 acres are labeled as level 1 visual classification. This classification is due to the proximity of Area 1 to Highway 26, which is a designated scenic highway. All of Area 1 is located outside the Oregon Forest Practices required 150-foot corridor. Steps will be taken to insure the Level 1 visual areas are managed consistent with FMP visual management objectives. (FMP, "Scenic Resources", pages 4-105 to 4-107).

The 22 remaining acres in Area 1 and all of Area 2 are of low visual sensitivity (level 3).

**XIII. OTHER RESOURCE CONSIDERATIONS:**

A survey of the property lines was conducted in 1995. The property line running north along Section 11 and 12, T4N, R7W has been blazed and posted while the east/west property line has not. The other north running property line, which hits Quartz Creek, has also not been blazed or posted.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

Approximately 3,200 feet of powerline runs through the unit, this is classified as special stewardship; and will be managed for utility purposes. In Area 1, 36 acres is adjacent to Highway 26 and is classified as focused-visual stewardship. This will be managed to meet ODF's visual management requirements. See Section XII, Scenic Resources, for the management guidelines to be utilized. All other acres in Areas 1 and 2 are classified as "general management."

Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.