

Pre-Operations Report

Operation Name: Summit Combo
County: Clatsop
Management Basin: Hamilton

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Modified Clearcut	79	71
2	Partial Cut - Moderate	62	61
3	Modified Clearcut	22	22
Total	Modified Clearcut	101	93
Total	Partial Cut	62	61
Total		172	154

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are all located in the Hamilton Basin. Douglas-fir, western hemlock and red alder dominate the areas. The predominant soil type is Rinearson. These soils are deep, well-drained soils in mountainous terrain. Site index averages 165 feet for Douglas-fir.

The sale is located on gentle ridgetop and moderate sideslopes above Fishhawk Creek and several of its tributaries. The sale is underlain by sedimentary rocks of the Pittsburg Bluff Formation and the informal Northrup Creek formation, sandstone and mudstone.

II. CURRENT STAND CONDITION:

Area 1: The current stand is generally 54 to 59 years old, and is composed of heavily stocked western hemlock, Douglas-fir, and red alder from 14 to 16 inches DBH. The stand is currently categorized as closed single canopy (CSC) with a stand density between 60 to 74. There is little understory development in most of the stand due to the dense stocking.

Area 2: The current stand is generally 54 to 59 years old, and is composed of well stocked western hemlock and Douglas-fir with some inclusions of red alder in riparian areas, with average stand diameter ranging from 14 to 16 inches. The stand is categorized as CSC with a stand density between 60 to 74. There is little understory development due to the dense overstory.

Area 3: The current average age of this stand is approximately 51 years old and is composed of medium stocked Douglas-fir and western hemlock averaging 16 inches DBH. The stand is currently categorized as understory development

(UDS) with an average stand density SDI of 49. The understory that does exist consists of primarily sword fern, huckleberry, salmonberry, and some suppressed western hemlock and red cedar.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID	Species	Age	DBH	BA	TPA	SDI	Acres ³
1	MC	1453 ¹	WH,RA	53	14	260	258	70	44
		1489 ¹	WH,DF	58	16	236	177	60	23
		1506 ¹	WH,DF,RA	55	14	280	257	74	4
		Target ⁴	RA,DF,WH				5		71
2	PC-M	1453 ¹	WH,RA	53	14	260	258	70	6
		1473 ¹	WH	58	16	267	204	68	17
		1489 ¹	WH,DF	58	16	236	177	60	26
		1506 ¹	WH,DF,RA	55	14	280	257	74	12
		Target ⁴	WH,DF		16	140-160	135	30-40	61
3	MC	23829 ²	WH,DF	57	16	192	145	49	22
		Target ⁴	WH,DF				5		22

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

2 The source of stand inventory information is 2003 SLI. Age shown is as of 2005.

3 The acres are based on GIS and exclude roads, streams buffers, reserve areas, etc.

4 The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED STAND CONDITION/VISION:

Areas 1 and 3 do not have a designated complex desired future condition. The desired condition of these stands are healthy vigorous stands of mixed conifer and hardwoods. These areas will be regeneration harvested. Five to seven of the largest conifer trees per acre will be left to provide a source for natural regeneration and future downed wood and snags. The stands will be planted with a mixture of conifer species. It is anticipated that some natural regeneration of western hemlock and red alder will also occur. 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.

Area 2 has a desired future condition of OFS. At the next entry, in 10-15 years, the stand will be a predominately Douglas-fir overstory with some western red cedar, hemlock, and red alder in the understory. There is also some ground vegetation developing in the more open areas. When the stand reaches OFS, 30-50 years or when the larger trees reach 32 inches DBH, Douglas -fir will still be the dominate species in the overstory. The understory layers will be composed of western hemlock and western red cedar. Red alder and vine maple will be present in scattered openings. Snags and downwood will be adequate to meet OFS requirements.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	1453	CSC	REG	General	44
	1489	CSC	REG	General	23
	1506	CSC	REG	General	4
2	1453	CSC	UDS	OFS	6
	1473	CSC	UDS	OFS	17
	1489	CSC	UDS	OFS	26
	1506	CSC	UDS	OFS	12
3	23829	UDS	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 and 3 are both modified clearcuts that will be replanted with a mixture of conifer species, including Douglas-fir, western hemlock, and western red cedar. It is anticipated that red alder will naturally seed in portions of exposed to mineral soil.

Area 2 is a partial cut. Because the topography of this stand increases the chances of blowdown and the current stand condition of CSC, it was decided to take a multiple entry approach towards achieving the desired future condition of OFS. It is anticipated that this entry will increase individual tree growth and allow further development of tree crowns while also creating understory initiation. This stand will be thinned to a basal area range of 140 –160 with an SDI range of 30 to 40%. The thinning is intended to open up the canopy to allow one or more canopy layers to develop in order to move from CSC to an OFS stand. Minor species and red alder will be reserved. Alternative thinning prescriptions may be applied at a “patch” scale to create variability in the stand. It is anticipated that another thinning entry will be needed in order for this stand to reach the target DFC of OFS.

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.

Green Trees: In MC Areas 1 and 3, an average of five to seven green 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 at least 25% in the uplands and placing some within stream buffers and outer RMA areas. In addition, individual and small

clumps of non-merchantable alder may be left in operationally feasible areas to provide short term snag recruitment for cavity nesting birds. In all sale areas minor species such as red cedar may 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. In the partial cut area, to increase down wood levels, operations will be required to top trees prior to yarding and to yard only merchantable log segments to roadsides.

Site preparation will be provided by the cable and ground based harvesting activities. Mechanical site preparation is anticipated on portions of the areas. Areas will be planted at 200–250 trees per acre with the following species: 35 % Douglas-fir, 55 % western hemlock, 10 % western red cedar. Animal damage through big game browse is anticipated to be high. Tree protection will be prescribed to the newly planted conifer species; Douglas-fir will receive paper bud caps, western red cedar will receive tubes at initial planting. Natural regeneration is anticipated with the western hemlock leave trees and from adjacent stands. Ground applied herbicides will be prescribed in those situation where competing vegetation will hinder stand establishment.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	0	4
Planned Quarter:		Alternate	

	Conifer	Hardwood	Total
Net Volume (MBF)	2,526	545	3,071
Stumpage Value (\$/MBF)	\$250	\$300	
Estimated Gross Value	\$631,500	\$163,500	\$795,000
		Project Costs:	\$52,000
		Estimated Net Value:	\$743,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

All three sale areas are accessed via Highway 202 to Cedar Flats Road.

Approximately 0.7 miles of new, rock surfaced, logging spur roads will be constructed to fully access the sale areas. Improvement of approximately 1.8 miles of Cedar Flats and adjoining spurs is anticipated. This improvement would

consist of adding crushed rock, opening ditches, roadside brushing, and replacing culverts where needed.

A combination of cable yarding systems and ground yarding will be planned for harvesting. Cable systems will be used on the 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	0.7	0.0
Improve	0.0	1.8	0.0	0.0
Maintain	0.0	3.0	1.1	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 and Domestic Use Streams: Area 1 borders Fishhawk Creek, a large Type F stream, for approximately 2,200 feet.

Type N Streams: There are perennial Type N streams 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 required with this sale, it will all be conducted during in-stream work periods established by ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

Spotted owl surveys were conducted in 2004 and 2005 with no detections. Potential marbled murrelet habitat was discovered within the sale areas and surveys were done in 2004 and 2005, with no detections.

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 topographic map indicates that there are no high landslide hazard locations within Areas 1 and 3 and that there may be several isolated high landslide hazard locations within Area 2 midslope on the south side of the ridge. The risk to Fishhawk Creek and its tributaries is low. The geotechnical specialist may be consulted if concerns arise during sale layout.

X. RECREATION RESOURCES:

This area receives little use. 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 within or adjacent to the operation.

XII. SCENIC RESOURCES:

Area 3 has ten acres that are visible from Highway 202. These acres are in focused stewardship for Level 2 visual management. Steps will be taken to insure the visual areas are managed consistent with FMP visual management objectives. (FMP, "Scenic Resources", pages 4-105 to 4-107).

XIII. OTHER RESOURCE CONSIDERATIONS:

The west unit boundary in Area 1 is the property line and was TB&P in 1978 (Survey G-89). This boundary will need to be located and posted accordingly. There are no corners to protect in this unit.

The west unit boundary in Area 2 is the property line and was TB&P in 1978(Survey G-89). The south unit boundary is also along the property line and was TB&P in 1980 (Survey G-38 This boundary will need to be located and posted accordingly. There are bearing trees located at the ¼ corner to Sections 25 and 36, T6N, R8W. This corner was rewitnessed in 1990. The bearing trees will not be cut.

Area 3 is entirely within interior ODF ownership. State will protect the ¼ corner to Sections 30 and 31, T6N, R7W, which were established in 1990. The bearing trees will be high stumped in this unit.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale area is in a landscape of low visual sensitivity (Level 3) with the exception of ten acres in Area 3. See Section XII, Scenic Resources, for the management guidelines to be utilized. All other acres in Areas 1-5 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.