

# Pre-Operations Report

**Operation Name: Sagermeister**  
**County: Clatsop**  
**Management Basin: Sager**

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

Area	Type of Operation	Gross Acres	Net Acres
1	Partial Cut-Moderate	143	129
2	Partial Cut-Moderate	25	22
3	Partial Cut-Moderate	27	24
4	Partial Cut-Moderate	36	30
5	Partial Cut-Moderate	38	35
6	Topping	28	26
7	Partial Cut-Moderate	27	24
Total		324	290

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

These sale areas are all located in the Sager Basin. The operation area is located in the hemlock vegetation zone. 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. There are areas of steep slopes, 40% to 65%, in Areas 2, 4, 5 and 7.

The Sale consists of seven Areas all within rolling terrain above the Nehalem River along Sager Creek Road near the town of Vesper. All seven Areas are underlain by rock of sedimentary origin, the informal Hamlet formation, primarily mudstone with some sandstone.

## **II. CURRENT STAND CONDITION:**

**Area 1:** The current average age of this stand is approximately 92 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock with some patches of red alder in riparian areas and in old skid trails. The average DBH for this stand is 22 inches. The stand is currently categorized as Layered (LYR) with an average stand density SDI of 55. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages 2.5 snags per acre greater than 12 inches DBH and less than one snag per acre on average greater than 24

inches. Down wood amounts in all decay classes averages 700 cubic feet per acre and 250 cubic feet in decay classes 1 and 2.

**Area 2:** The current average age of this stand is approximately 82 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock with some patches of red alder in riparian areas. The average DBH for this stand is 20 inches. The stand is currently categorized as Layered (LYR) with an average stand density SDI of 65. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages eight snags per acre greater than 24 inches DBH. Down wood amounts in all decay classes averages 500 cubic feet per acre and 300 cubic feet in decay classes 1 and 2.

**Areas 3 and 4:** The current average age of these stands is approximately 81 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock with some patches of red alder. The average DBH for this stand is 20 inches. The stand is currently categorized as Layered (LYR) with an average stand density SDI of 51. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages 5.5 snags per acre greater than 12 inches DBH and one snag per acre on average greater than 24 inches. Down wood amounts in all decay classes averages 975 cubic feet per acre and 300 cubic feet in decay classes 1 and 2.

**Area 5:** The current average age of this stand is approximately 99 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock, western red-cedar, and red alder. The average DBH for this stand is 20 inches. The stand is currently categorized as Layered (LYR) with an average stand density SDI of 59. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages eight snags per acre greater than 24 inches DBH. Down wood amounts in all decay classes averages 1,710 cubic feet per acre and 540 cubic feet in decay classes 1 and 2.

**Area 6:** The current average age of this stand is approximately 110 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock, western red-cedar, and red alder. The average DBH for this stand is 24 inches. The stand is currently categorized as Layered (LYR) with an average stand density SDI of 51%. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages 1.5 snags per acre greater than 24 inches DBH. Down wood amounts in all decay classes averages 2,270 cubic feet per acre and 675 cubic feet in decay classes 1 and 2.

**Area 7:** The current average age of this stand is approximately 83 years old and is composed of large, well stocked Douglas-fir and small components of western hemlock and red alder in the riparian areas. The average DBH for this stand is

23 inches. The stand is currently categorized as Understory (UDS) with an average stand density SDI of 47. Understory development consists of sword fern, vine-maple, huckleberry, salmonberry, and red alder in old skid trails. The stand averages one snag per acre greater than 12 inches DBH and less than one snag per acre on average greater than 24 inches. Down wood amounts in all decay classes averages 1,725 cubic feet per acre and 535 cubic feet in decay classes 1 and 2.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	PC-L	23869	DF	92	22	249	94	55.4	129
		Target <sup>3</sup>	DF		25	170-190	51	35-45	129
2	PC-M	24466	DF	82	20	280	128	64.8	22
		Target <sup>3</sup>			23	140-160	50	25-35	22
3	PC-M	23890	DF	81	20.1	222	100	51.3	24
		Target <sup>3</sup>	DF		23	140-160	52	25-35	24
4	PC-M	23890	DF	81	20.1	222	100	51.3	30
		Target <sup>3</sup>	DF		23	130-150	45	25-35	30
5	PC-M	23873	DFCX	99	20.2	256	115	59	35
		Target <sup>3</sup>	DFCX		23	150-170	54	25-35	35
6	Topping <sup>4</sup>	23865	DF	110	23.9	237	76	51.1	26
		Target <sup>3</sup>	DF		24	237	71	50	26
7	PC-L	23875	DF	83	22.8	216	76	47.4	24
		Target <sup>3</sup>	DF		26	170-180	48	35-45	24

1 The source of stand inventory information is SLI 2004.

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.

4 Tree topping for snag and down wood creation is the only prescription slated for this sale area.

### III. DESIRED STAND CONDITION:

The desired future stand condition for the sale areas is shown in the table below. By partial cutting these stands, individual tree growth will be maintained. More understory can develop as a result of increased light to the forest floor, allowing for development of a more complex stand structure. Snag creation and felling for down wood will take place in areas that show substantial deficiencies. In areas where down wood and snags are close to stand targets inputs from harvest activities with some minor additional input is anticipated to accomplish stand structure goals which will promote stand conditions towards OFS and LYR.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	23869	LYR	LYR	OFS	111
1	23869	LYR	LYR	LYR	18
2	24466	LYR	LYR	LYR	22
3	23890	LYR	LYR	LYR	24
4	23890	LYR	OFS	OFS	30
5	23873	LYR	OFS	OFS	35
6	23865	UDS	OFS	OFS	26
7	23875	UDS	LYR	GEN	5
7	23875	UDS	LYR	OFS	19

<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 has a current stand condition of LYR desired future condition of Older Forest Structure (OFS) and Layered (LYR). To reach the OFS condition and maintain the current LYR condition in the portion of the stand with that target, it will be an automark thinning with a target Stand Density Index (SDI) of 35-45. Minor species will be reserved and efforts will be made to reserve the understory. There will also be a lower end diameter limit set to insure that the younger layer of timber in this area is reserved. To reach OFS this stand needs 400 cubic feet per acre of downed woody debris and four snags per acre created. Downed woody debris will be increased during harvest. At the completion of yarding activities snags and downed woody debris will be created by topping four trees per acre that are larger than 24 inches.

Areas 2 and 3 have a current stand condition of LYR and a desired future condition of LYR. This unit will be automark thinned with a target SDI of 25-35 that will maintain current growth rates and allow more understory development. All minor species and trees under eight inches DBH will be reserved where operationally feasible.

Area 4 has a current stand condition of LYR and a desired future condition of OFS. This unit will be an automark thinning with a target SDI of 25-35. To reach OFS this stand needs approximately 300 cubic feet per acre of downed woody debris and one snag per acre >24 inches DBH created. The downed woody debris component will also be increased during harvest. In addition to requiring topping and/or girdling of tailhold and intermediate support trees, it is anticipated that an average of one snag per acre will need to be created in order to meet stand structure goals which will promote the stand condition to OFS.

Area 5 has a current stand condition of LYR and a desired future condition of OFS. This unit will be an automark thinning with a target SDI of 25-35. To reach OFS this stand needs approximately 100 cubic feet per acre of downed woody debris in decay classes 1 and 2. It is anticipated that this amount will be

recruited during harvesting activities. Although snag levels already exceed the stand structure targets topping and/or girdling of tailhold and intermediate support trees will still be required for snag recruitment.

Area 6 has a current stand condition of LYR and a desired future condition of OFS. There will be no commercial harvesting in Area 6. Activities in Area 6 will involve topping and/or girdling of trees for snag and down wood creation. Two trees per acre larger than 24 inches and three trees per acre greater than 12 inches will be topped and/or girdled to meet the OFS stand structure targets.

Area 7 has a current stand condition of UDS and a desired future condition of OFS. This unit will be an automark thinning with a target SDI of 35-45. To reach OFS this stand needs two snags per acre created. At the completion of yarding activities snags will be created by topping two trees per acre that are larger than 24 inches on the 21 acres of the area that are on a pathway toward OFS.

During all harvesting activities, all existing snags will be retained unless deemed to be safety hazards. It is anticipated that additional snags will develop during yarding activities by leaving, topping or girdling damaged rub trees, tail lift trees, and/or intermediate support trees. (FMP, "Landscape Management Strategy 3c. Snags", pages 4-53 and 4-54).

For all harvesting activities, all existing down woody debris will be retained. To increase down woody debris, operations will be required only to yard merchantable logs. (FMP, "Landscape Management Strategy 3d. Down Wood", pages 4-54 and 4-55).

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
86.7 %	13.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		1st	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,280	0	5,280
Stumpage Value (\$/MBF)	\$450	0	
Estimated Gross Value	\$2,376,000	0	\$2,376,000
		Project Costs:	\$180,000
		Estimated Net Value:	\$2,196,000

## **VI. HARVESTING AND ACCESS CONSIDERATIONS:**

Access is via Highway 202 to Sager Creek Road.

For sale access, approximately 0.6 miles of new rock road construction, 0.6 miles of dirt road construction, and 6.1 miles of road improvement will be needed along the haul route. This will improve the road to a standard that will allow year round hauling while providing for watershed health. New roads are minor ridge top spurs that do not cross perennial streams. New roads will be evaluated to determine if year round use is necessary. If not they will be left as dirt. 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. The spurs which connect to the planned haul route (Sager Creek, Jones Road, Nehalem Crossover), are planned for road improvement. The majority of the road construction involves accessing Area 1 and will be used for future harvesting. The dirt roads in Areas 1 will be blocked and water-barred upon completion of operations. Old roads in the vicinity will be evaluated for vacating during actual sale layout.

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	0.6	0.6
Improve	0.0	6.1	0.0	0.0
Maintain	0.0	11.0	2.0	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.6

- 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:**

*Type F Streams:* Sager Creek, a medium Type F stream, runs parallel to the southern boundary of Area 7 for a distance of 1,400 feet, the same stream which changes classification to a small Type F, runs between the southern and southeastern boundary of Area 4 and northern and northwestern boundary of Area 2 for a distance of 1,430 feet. An unnamed tributary of Sager Creek, a small Type F, parallels the southwest boundary of Area 1 for a distance of 620 feet. The rest of the streams within the sale boundaries have not yet been surveyed.

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

All streams will be examined to determine stream type and classification during sale layout. 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.

*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.

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

The ODF Northwest Area Biologist determined on April 19, 2004 that Areas 1 and 2 contained suitable habitat for Marbled Murrelets. The suitable habitat in these areas was surveyed in 2004 with no detections, and will be surveyed again in 2005.

All sale areas were surveyed to protocol for northern spotted owls in 2004 with no responses. All sale areas are scheduled for surveys again in 2005.

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 only a few isolated high landslide hazard locations. This thinning has a low risk associated with it. The geotechnical specialist may be consulted if concerns arise during sale layout

#### **IX. 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.

#### **X. CULTURAL RESOURCES:**

A homestead near the road intersection between Area 1 and Area 7 may exist. Early reconnaissance of these sale areas has not turned up any remnants. It is suspected that the area in question is no longer discernible due to road construction and vegetation growth. Additional field reconnaissance will be conducted during sale layout.

**XI. SCENIC RESOURCES:**

Area 5 is in a landscape class of moderate visual sensitivity and is visible from Highway 202. All other sale areas are in a landscape level of low visual sensitivity (level 3)

**XII. OTHER RESOURCE CONSIDERATIONS:**

The Area 1 property line is shown as having been blazed in 1964 on Survey D-21. The adjacent land owner has harvested their timber. During sale layout the following corner monuments and bearing trees on the units exteriors will need to be located and protected: The N1/16 to Sections 35 and 36 (Rewitnessed in 1988), the ¼ to Sections 35 and 36 (Rewitnessed in 2002), the CW1/16 to Section 36 and the C¼ to Section 36. Bearing and witness trees will be reserved from cutting. The following corners will need to be found and rewitnessed: C¼ and CW1/16 corners.

The CW1/16 to Section 35 in Area 3 is near the unit boundary and will need to be located and protected as will the bearing trees. This corner was rewitnessed in 2002

The west and north unit boundaries of Area 5 were TB&P in 1964 on Survey D-21. The adjacent land owners have harvested their timber.

The ¼ corner of Sections 26 and 35 is within the interior of Area 7. This monument for this ¼ corner will need to be found and along with the bearing trees. Bearing trees will be reserved from cutting. This corner was rewitnessed in 2002.

**XIII. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

Approximately 32 in Areas 5 is classified as focused-visual stewardship. This will be managed with the priority of keeping these acres visually pleasing to the public.

**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic & Riparian	30	2
2	Aquatic & Riparian	6	0
3	Aquatic & Riparian	4	0
4	Aquatic & Riparian	11	5
5	Focused Visual	32	0
5	Aquatic & Riparian	1	0
6	Aquatic & Riparian	6	1
7	Aquatic & Riparian	5	3

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,  
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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.