

Pre-Operations Report

Operation Name: Howdy Doty

County: Tillamook

Management Basin: Upper Salmonberry

Legal Description: Sec. 21, 22, 27, and 28, T03N, R06W, W.M.

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
I	Moderate Partial Cut	216	203
II	Heavy Partial Cut	60	58
Total	Partial Cut Harvest	276	261

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Area I has slopes that are generally a southwest aspect, and Area II has a northerly aspect. Slopes range from 25-65%. Elevation ranges from 1800-2400 feet. The major soil type is Jewell. The sale areas occupy the ridge tops to midslopes.

The landforms are gentle to moderate slopes above the confluence of Penoyer Creek Salmonberry River. The underlying rock is igneous origin rock or the Tillamook Volcanics, basalt flows form the base of the shield building sequence.

II. CURRENT STAND CONDITION:

Area I has been inventoried using the Stand Level Inventory (SLI) procedure and the stands have been classified as UDS. Area II is classified as 28% CSC and 72% UDS according to the Current Condition map that appears in the Forest Grove District Implementation Plan (*March 2003*).

The sale area is largely composed of unmanaged stands of heavily stocked Douglas-fir. Approximately 30 acres of Area II was thinned in 1995. Many trees in the sale area have poor live crown ratios and poor height to diameter ratios. Average SDI based from SLI data is 70. There is small quantity of hemlock, noble fir and pockets of alder scattered throughout the sale area.

The stands contain minor amounts of *Phellinus weirii* and will not be treated at time of harvest. No other significant insect or disease problems have been discovered at this time.

The understory in all the sale areas is comprised primarily of vine maple, sword fern, salal, dwarf Oregon grape, huckleberry, and bracken fern. Estimated average ground cover, based on SLI information, is 65%.

SLI data indicates an approximate average of 8 snags per acre (12" + DBH) and 2600 ft³ per acre of DWD, in all decay classes.

Overall, there is a lack of hard snags and hard DWD, according to target amounts provided in the Implementation Plan (IP).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
I	PC-M ⁴	7385	DF	63	21	295	126	64	81
		7410	DF	58	19	245	129	56	29
		7415	DF	71	22	312	118	67	93
		<i>Target</i> ³			26	160	43	33	203
II	PC-H ⁴	7440*	DF	57	17	213	132	52	58
		<i>Target</i> ³			26	120	32	24	58

¹ The source of stand inventory information is from SLI in 2004. Stand ID shown with (*) is from SLI expanded data 10/6/2004.

² The acres are based on GIS and exclude existing and planned roads, stream buffers, and non-thinnable areas.

³ The Target row for partial cut areas identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

⁴ PC-M is Moderate Partial Cut, PC-H is Heavy Partial Cut.

III. DESIRED STAND CONDITION:

The harvest operation will maintain the stands in the sale as UDS structure in the short term. According to the Forest Grove District's landscape design for the Upper Salmonberry basin, the desired future condition (DFC) for Area I is 100% GEN and Area II is 100% OFS.

The anticipated management pathway for Area I is a 1st entry operation for density management. Reducing the SDI, in the short term, will primarily benefit the continued vigor of the overstory and maintain multiple options for future management decisions. A second entry modified clearcut, 15-20 years after the first entry, will convert the stands to REG.

In Area II the anticipated management pathway is a 1st entry and 2nd entry in some portions. This entry will be for density management of the overstory so that an understory layer of more shade tolerant species may develop. The residual stand should also retain the largest trees, at least 32-40 trees per acre with an average DBH of approximately 26 inches. These conditions will allow the stand to develop into a complex stand structure more rapidly than through natural processes. The stand will be evaluated after harvest, to determine what species should be planted in the understory.

All existing snags and down woody debris of all decay classes shall be retained. All trees less than 8 inches shall be retained. All conifer species other than Douglas-fir and hardwoods shall be retained. All of these components combined will maintain and promote biodiversity within the future stand.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
I	7385	UDS	UDS	GEN	81
	7410	UDS	UDS	GEN	29
	7415	UDS	UDS	GEN	93
II	7440	CSC	UDS	OFS	16
		UDS	UDS	OFS	42

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:

Partial Cut – Moderate: Area I residual stand target SDI is 33.

Partial Cut – Heavy: Area II residual stand target SDI is 24.

Douglas-fir will be selected for harvest. All other species will be reserved. Area I will be partial cut to a target basal area of 160 square feet and Area II will be cut to a target basal area of 120 square feet. The average DBH of the residual stand will be approximately 26 inches in each area. Residual trees will be the trees that have the largest DBH and height, and are of the best form and vigor. All trees less than 8 inches shall be reserved and shall not count toward the target basal area.

2 trees per acre shall be topped to create hard snags. Snags shall be a DBH of at least 18 inches, and be at least 60 feet in height.

Understory vegetation will be enhanced from the additional growing spaces made available.

All existing DWD will be reserved in the sale areas. DWD recruitment is expected through mortality, windthrow of residual trees, felled snags, and logging slash.

Existing snags determined not to be a safety hazard will be retained and any felled snags will be left for down wood. Additional snags will be created over time through natural processes.

Following harvest, the sale areas will be reviewed to determine if site preparation for planting in Area II is needed. Planting of shade tolerant conifer species will give the stand greater species diversity and more complex structure.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,200		5,200
Stumpage Value (\$/MBF)	\$400		
Estimated Gross Value	\$2,080,000		\$2,080,000
		Project Costs:	\$138,000
		Estimated Net Value:	\$1,942,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

The sale areas are accessed via Cochran Road and Giveout Mountain Road. These are currently all-weather, crushed rock roads. Most of the Cochran Road is owned and maintained by the county and an easement is not necessary. There is a small portion of the haul route through Stimson ownership located in Sec. 34, T03N R06W, WM. ODF currently has a permanent easement on all roads through these said portions of road. Road use fees will not apply.

Approximately 1.1 miles of road will be constructed in order to provide access to critical landing locations. New construction is limited to ridgetops and gentle to moderate sideslopes. Proposed roads will cross one small, Type N, Perennial stream.

Approximately 5.2 miles of collector road will be improved by adding crushed rock.

All haul roads will have high quality crushed rock or pit run surfacing. Roads will provide access to all timber within the sale area and allow for logging methods and hauling which will minimize impacts to soils, residual timber, streams, and riparian areas.

The proposed road locations do not pass through any of the steep slopes in the sale area.

Rock for proposed road construction and improvement will likely come from the State pit located on Sec. 35, T03N R06W, WM. (Dunbar Pit). The pit is located approximately 3 miles from the sale area. An estimated 2500 cubic yards of rock will be necessary.

Following harvest on each setting during the operation, skid trails within the sale areas will be evaluated for closure.

Sale related project work - estimated costs \$138,000.

The operation will be 85% cable yarding, 15% ground based yarding.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	1.1	0
Improve	0	5.2	0	0
Maintain	0	11.5	1.5	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 3 small, Type F streams and several seasonal streams which are within or directly adjacent to the sale area. During sale layout, all streams will be field verified as to size, type, locations, and/or source.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

Stream buffers within harvest unit boundaries will be managed according to FMP Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and seasonal restrictions on logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and August 31. Operations outside of this period will be reviewed with ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale area has been reviewed with the ODF Northwest Oregon Area Biologist (Area Biologist).

Surveys for northern spotted owls were conducted in 2003 and 2004 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Howdy Doty was surveyed for spotted owls three times in 2003 and three times 2004 with no responses. A third year of survey will be completed in 2005. All surveys were/will be conducted in accordance with USFWS protocol.

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale area. The ODF wildlife biologist for the NW Oregon Area made the determination that the sale area is non-suitable habitat for marbled murrelets.

The sale area was 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 assessment from the geotechnical specialist is moderate. There are bands of steep slopes in the northwest portion of area 2 and in both areas along the small tributary to Penoyer Creek on the boundary of sale area 1 & 2. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

X. RECREATION RESOURCES:

The sale area is designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

No authorized trails are within or adjacent to the sale area. Recreational use common to this area includes hunting.

XI. CULTURAL RESOURCES:

The sale area was checked against the Tillamook State Forest Cultural Resource Inventory database. No cultural resource records were identified within the sale area. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 3, low sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

All known survey corners and witness trees shall be protected from damage during any operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary. This table summarizes the acres of Focused and Special Stewardship within the operations. Due to overlapping classifications under the Land Management Classification System, the acres summarized for each operational area in this table may exceed the net or gross acreage of the area. For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian Habitat, Recreation, and Scenic resources.

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
I	Aquatic and Riparian Habitat	42	17