Pre-Operations Report

Operation Name: Doty's Derby (Alternate)
County: Tillamook County
Management Basin: Wheeler

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
I	Modified Clearcut	84	77
Total	**Regeneration Harvest**	**84**	**77**

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a south aspect and range from 10% to 60%. Elevations range from 2000 to 2600 feet. Jewell is the major soil type. The sale is on a slope above Doty Creek between Doty and Derby Creeks. A mile below the sale area Derby Creek flows into the Nehalem River. The underlying rock is igneous origin basalts from the Tillamook Volcanic Formation. The northeast portion of the sale area is underlain by sedimentary rock of the basaltic sandstone at Roy Creek Informal Formation.

II. CURRENT STAND CONDITION:

The entire sale area has been inventoried using the Stand Level Inventory (SLI) procedure, and the stand has been classified as UDS.

The Douglas-fir stand is well stocked. No significant insect or disease problems have been discovered at this time. There is more than average defect in the stand, possibly a result of the 1962 Columbus Day storm.

The understory is comprised primarily of vine maple, sword fern, and salal.

There are few snags in the stand. Those that exist are mostly of decay classes 3 and 4. There is little down woody debris.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age[2]	DBH	BA	TPA	SDI	Net Acres [3]
1	MC[4]	8316	DF, WH	34-35 48-64	18	231	128	56	77

[1] The source of stand inventory information is from SLI in 2005.

[2] Actual measured breast height ages are shown unless labeled "est."
[3] The acres are based on GIS and exclude existing and planned roads, stream buffers, and green tree retention areas.
[4] MC is Modified Clearcut.

III. DESIRED FUTURE CONDITION/VISION:

According to the Forest Grove District's landscape design for the Wheeler basin, the desired future condition (DFC) for Area 1 is 100% General.

After harvest the area will be planted and managed to develop into a vigorously growing stand that will move quickly through the early seral stages. In the future, we intend for this stand to be managed along with the adjacent REG stands to the west and north as a high value conifer stand.

When the next modified clearcut harvest occurs in this area, the stand will be 60-70 years old and will be in the UDS condition. The area will consist of Douglas-fir with lesser amounts of noble fir, western red cedar and Grand fir. A few alder will also be present. Where there are gaps in the overstory, there will be an understory of hemlock, cedar, alder and brush (vinemaple, huckleberry, sword fern, Oregon grape, others). Legacy trees left from the first regeneration harvest will be located along the streams and all noble fir will be retained in the area above the Derby Ridge Road. Snags will be interspersed with the remnant green trees.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Net Acres
1	8316	UDS	UDS	GEN	77

[1] The stand is expected to develop into this condition in the five to ten years after this operation is completed, except in REG stands which occur after harvest.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:

This harvest will be a modified clearcut. Post harvest, the area will be managed to reach first commercial thinning at the same time as the adjacent Upper Doty sale area so the two areas can be managed simultaneously.

A variety of methods will be used to achieve green tree retention requirements, which include green tree retention areas and stream buffers. These methods will be used in combination to meet the green tree requirement in the Forest Management Plan (FMP).

It is anticipated that green tree retention and snag creation will be at the bottom of the sale between the small perennial N stream and Doty Creek and west of the

small N stream at the west side of the unit. Remaining green tree retention will be all noble fir located above the Derby Ridge Road.

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 during harvest activities and will develop over time through natural processes.

After harvest, the landing debris not utilized will be burned. At this time it is anticipated that a site prep herbicide treatment will be applied and, prior to planting, mountain beaver will be trapped from this unit.

Following completion of site prep activities, the areas will be replanted with approximately 85% Douglas-fir and 15% other species including noble fir and western red cedar at a density between 430 and 550 trees per acre. All cedar will be tubed to deter elk and deer browse. Once planting is complete, the operation area will fit the REG classification.

It is likely that at least one herbicide application will be needed within the first 3 years after planting in order to release planted conifer from competing brush. It is also likely that mountain beaver will be trapped again the first year after planting. Alder is expected to seed-in naturally into the stand and may need to be treated, either manually or with herbicides if it is threatening the desired conifer seedlings. By age 12, the stand will have moved from REG to CSC.

If the goals for the stand remain unchanged, it is anticipated that when the stand reaches age 12-15, it is likely that PCT will be used to reduce total trees to between 200 and 250 trees per acre. This will create an even-aged and sized stand that maximizes timber growth for an early commercial thinning. We would expect to leave the biggest and best trees, while also trying to maintain the existing species diversity.

At approximately age 35 the area will be capable of supporting a commercial thin. Contingent on goals in the year 2040, this area could be thinned to an RD of 35, capturing volume that would be lost due to competition mortality. This thinning would also move the stands on the pathway from CSC to UDS by opening the stands enough to allow vegetation to grow in the understory. Approximately 5-10 years following this thinning, the UDS condition will be achieved.

Beyond this, the stand could be again thinned to further encourage development of the understory or would be a candidate for another modified clearcut.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	X	
Planned Quarter:			

	Conifer	Hardwood	Total
Net Volume (MBF)	2,800		
Stumpage Value ($/MBF)	450		
Estimated Gross Value	1,300,000		$1,300,000
		Project Costs:	$15,000
		Estimated Net Value:	$1,285,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Enter ODF Salmonberry Road between Hwy 26, MP 28 and MP 29. From the Salmonberry Road take Section 10 Road to Wheeler Road to Fire Road #2. Right off Fire Road #2 on spur road to timber sale area. Access is entirely through ODF owned land and on ODF roads. Miles of road from Highway 26 to timber sale area is approximately 7-8 miles.

Approximately 0.3 mile of road will be constructed to provide access to cable yarding or landing locations. New construction is limited to ridgetops and gentle to moderate sideslopes. Proposed roads will not cross any streams.

Additional purchaser select landings will be constructed in the ground operable portion of the unit. The dirt spur running through the northeast corner of the unit will be removed at the completion of harvesting activities.

Also at the completion of harvesting activities a helicopter landing will be constructed at top of the unit.

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.

Following harvest, roads and skid trails within the sale areas will be evaluated for closure.

Sale related project work - estimated costs $11,000 for road construction.
Other project work – estimated costs $4,000 for heliport construction.

Costs for landing construction and spur road closure are included in harvesting costs.

The operation will be 70% cable yarding and 30% ground yarding.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	0.3	0
Improvement	0	0	0	0
Maintenance	0	7.0	0.3	0
Vacation	0	0	0	0

VII. AQUATIC RESOURCES AND WATER QUALITY:

A small type N perennial tributary of Doty Creek flows through the bottom of the sale area and two small Type N streams originate in the sale area and flow into the perennial N stream at the bottom of the unit. Riparian area stand types along these streams are a Douglas-fir and red alder mix.

The cable operation will tailhold across these streams. This is expected to result in minimal impacts to the RMA.

Snags will be created from green trees in and adjacent to the RMAs of each of these streams. Creating these snags will allow other co-dominate trees to increase in size and vigor, will allow more light to reach the understory, and will add snags to this stand type, each of which contribute to developing mature forest conditions in the RMA.

The entire sale area is within the Lousignont/Upper Nehalem basin. This basin has been designated as a Salmon Anchor Habitat (SAH) Basin. Stream buffers within harvest unit boundaries will be managed according to Salmon Anchor Habitat guidelines. This will include the green tree retention along seasonal small type N streams.

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. No culvert installments or replacements are necessary for this sale area.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist (Area Biologist).

Surveys for northern spotted owls were conducted in 2005 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Doty's Derby was surveyed for spotted owls three times in 2005 with no responses, and the second year of survey will be completed in 2006. 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.

This operation does not involve an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. Neither the sale area nor the haul route is in close proximity to a stream with listed fish.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records in the Land Management Classification System (LMCS). No listed plant records were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There are no steep slopes within the sale area. The initial hazard and risk assessment from the geotechnical specialist is low. The geotechnical specialist will be consulted if high landslide hazard locations are observed during field work to determine if a field visit is needed.

X. RECREATION RESOURCES:

The sale is in the area of the forest designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). There are no recreation facilities in or adjacent to the sale area.

Some dispersed camping and hunting does occur in this area, however this sale is not expected to greatly impact these activities.

XI. CULTURAL RESOURCES:

The surveyed route of the Salem to Astoria Military Road transects the sale area. The route is documented on the ground by use of trees with metal tags and yellow paint dots. Protection measures will be established to retain as many of the marked trees as possible during sale operations.

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format).

No other cultural resource records were identified within or adjacent***** to the operation areas. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

*******Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

XII. SCENIC RESOURCES:

The sale has a visual classification of Level 3, low sensitivity. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

No property survey is needed.
No other resources of significance are involved.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Area 1 contains Focused Stewardship, Aquatic and Riparian Habitat Subclass, due to the presence of perennial streams within the sale areas. The sale area also contains Focused Stewardship, Wildlife Subclass, because the sale area is within the Lousignont Creek/Upper Nehalem River Salmon Anchor Habitat (SAH). See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.