

Pre-Operations Report

Operation Name: Gregorian Cant
County: Clatsop
Management Basin: McGregor
Legal Description: Sec. 28, T04N, R06W, W.M.

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
I	Heavy Partial Cut	131	118
Total	Partial Cut Harvest	131	118

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a varied aspect and range from 0% to 65%. Elevations range from 1800 to 2100 feet. The major soil types are Grindstone and Humbug. The sale area occupies mainly ridges above a small tributary of South Fork Rock Creek and is in the Upper Rock Creek SAH.

The landform is a gentle to moderate ridge-top and headwaters of tributary streams to South Fork of Rock Creek above Sunset Springs. The underlying rocks are mostly igneous origin intrusive basalts of the Cole Formation. The southwestern portions of the sale area are rock of sedimentary origin, mudstones of the Hamlet Formation.

II. CURRENT STAND CONDITION:

The sale area burned in the 1933 Wolf Creek Fire and naturally regenerated. This area has had no prior stand management.

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

The stand is composed of mostly Douglas-fir and hemlock with scattered noble fir, cedar, red alder and cherry throughout the sale area.

The stand contains minor amounts of *Phellinus weirii*, *Armillaria*, and bear damage. The root disease will not be treated at the time of harvest.

The understory in the sale area is comprised primarily of vine maple, cherry, sword fern, salal, western hemlock, western red cedar, dwarf Oregon grape, huckleberry, bracken fern, and oxalis. Average ground cover from SLI data is 77%.

SLI data show that there are approximately 10 snags per acre, within all decay classes including 2 hard snags per acre. The data shows that there is 8100 ft³/acre of DWD, including 318 ft³/acre of classes 1 & 2.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age ⁵	DBH	BA	TPA	SDI	Net Acres ²
1	PC-H ⁴	7200	DF,WH,RC,RA	45-59	16	259	178	65	118
		<i>Target</i> ³	<i>DF,WH,RC,RA</i>		21	110	46	24	118

¹ The source of stand inventory information is from SLI inventory grown to 2005.

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-H is Heavy Partial Cut.

⁵ Actual measured breast height ages are shown unless labeled "est."

III. DESIRED FUTURE CONDITION/VISION:

The harvest operation will maintain the UDS structure of this stand and develop it into the LYR structure in the longer term (15-25 years). The prescription is designed for only one entry to be made to move the stand along its desired pathway. All cedar, noble fir, red alder, and cherry will be reserved from cutting during partial cutting. This, along with the hemlock in the overstory will help to maintain the species diversity and allow additional natural seeding to enhance the developing understory of shade tolerant conifers.

All existing snags and down woody debris of all decay classes shall be retained as safety allows.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	7200	UDS	UDS	GEN	118

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 AND PATHWAY:

Partial Cut - Heavy:

The target SDI is approximately 24. Douglas-fir and hemlock will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 100 to 120 square feet. The average DBH of the residual stand will be approximately 21 inches. 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, cedar, noble fir and hardwoods shall be reserved and shall not count toward the target basal area.

This stand has been designated for a single entry prescription which will result in a LYR stand condition 15-25 years after harvest. It is expected to remain in a LYR condition for an additional 20-30 years. At that time future managers will have the option of moving the stand into an OFS stand condition or applying another harvest prescription.

One tree per acre shall be topped to create hard snags. Snags shall be evenly distributed throughout the sale area and have a DBH of at least 15 inches, and be at least 80 feet in height.

No underplanting is planned because it is anticipated that natural regeneration from shade tolerant species will enhance the understory vegetation.

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.

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:			

	Conifer	Hardwood	Total
Net Volume (MBF)	2,500		2,500
Stumpage Value (\$/MBF)*	\$280		
Estimated Gross Value	\$700,000		\$700,000
		Project Costs:	\$50,000
		Estimated Net Value:	\$650,000

*Combined Douglas-fir and hemlock stumpage values

VI. TRANSPORTATION PLANNING AND HARVESTING:

The sale area is accessed via the McGregor Road. This is an all-weather, crushed rock road.

Approximately 0.9 miles 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.

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.

In addition, an old stream crossing and puncheon from an old skid road will be removed, and approximately four miles of existing spur roads will be closed or vacated.

Sale related project work - estimated costs \$41,000 for road construction.
Other project work – estimated costs \$9,000

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

Table 5. Transportation Planning Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	0.9	0
Improvement	0	0	0	0
Maintenance	0	2.5	0.9	0
Closure/Vacation	0	0	4.0	0

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are no Type F streams within or adjacent to the sale area.

There are 2 unnamed, small, perennial Type N streams within the sale area, which are tributary to South Fork Rock Creek. Riparian area stand types along these streams are generally a hardwood/conifer mix.

The entire sale area is within the Upper Rock Creek basin. This basin has been designated as a Salmon Anchor Habitat (SAH) Basin. SAH Basin Strategies will be applied during timber sale layout and contract development. Buffers along the two streams will be 50' on each side of the stream.

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 Aug. 31. Operations outside of this period will be reviewed with ODFW.

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 2004 and 2005 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Gregorian Cant was surveyed for spotted owls three times in 2004 and three times in 2005 with no responses. A third 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:

The initial hazard and risk assessment from the geotechnical specialist is low. The geotechnical specialist may be consulted if concerns arise during sale layout.

The sale area is within the Upper Rock Creek SAH Basin. The most current SAH Strategies will be used at the time of timber sale preparation and contract development. See the Summary Document for more information.

X. RECREATION RESOURCES:

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

Recreational use common to this area includes hunting and mushroom picking. The spur roads will be blocked after sale activities are completed.

XI. CULTURAL RESOURCES:

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format). No 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 area has a visual classification of Level 3, low sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

No property survey is needed. No other resources of significance are involved. All known survey corners and witness trees shall be protected from damage during any operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

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