

Pre-Operations Report

Operation Name: Re-Hatch
County: Polk/Lincoln
Management Basin: Green Mountain

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
	Partial Cut	108	97

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This sale consists of one partial cut unit which is in the western hemlock vegetation zone. Average annual rainfall is 78" to 100". The soils are all Valino.

The operation area is located on mostly gentle to moderate slopes on the east flank of Rudder Creek, a tributary of Steere Creek. There is one steep slope area in the extreme northwest portion of the operation area. The area has a history of large-scale deep-seated slope movement and some geotechnical investigation. The underlying rock is sedimentary origin rocks of the Tye Formation with very thick sequence of rhythmically bedded, medium- to fine-grained marine sandstone and siltstone

The aspect for this sale is south and west.

II. CURRENT STAND CONDITION:

The overstory is predominately 68 year old Douglas-fir with a few western hemlock, Port Orford cedar, red alder, and big leaf maple present. The operation area was commercially thinned in 2000. Understory species include numerous hemlock and alder seedlings, vine maple, salal, hazel, and sword fern. Some snags and down wood exist in the stand.

The stand type is classified as Understory (UDS)

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	RD	Acres ²
	Partial Cut	18385	DF	67	21	190	79	41	4
		Target ³			24	100	32	20	
	Partial Cut	18386	DF	70	21	190	79	41	28
		Target ³			24	100	32	20	
	Partial Cut	18387	DF	67	22	182	69	39	62
		Target ³			24	100	32	20	
	Partial Cut	18394	DF	68	24	174	55	36	3
		Target ³			24	100	32	20	

1 The source of stand inventory information is district inventory information from 2000.

2 The acres are based on orthophotos and GIS and exclude roads, stream buffers, reserve areas, etc.

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

III. DESIRED STAND CONDITION:

According to the district's landscape design the operation area is designated as DFC Complex and is targeted to become Older Forest Structure (OFS). The anticipated pathway is to move from UDS to Layered (LYR) and finally to OFS through future thinnings.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
	18385	UDS	UDS	OFS	4
	18386	UDS	UDS	OFS	28
	18387	UDS	UDS	OFS	62
	18394	UDS	UDS	OFS	3

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:

The operation area will be partial cut to a RD of approximately 20 which will result in the retention of about 32 trees/acre that are about 24" DBH. Thinning to this level should provide enough sunlight in the understory to release the existing hemlock and alder seedlings. One or two patch cuts will be created. Brush concentrations in the patch cuts and the thinning area will be treated with herbicide. Some piling of slash and brush will likely be necessary. A 60/40 mix of western hemlock/western red cedar will be planted in the thinning area. In the patch cuts, seedling composition will consist of 25% Douglas-fir, 40% hemlock, and 35% western red cedar. Seedlings will be planted at approximately 300 per acre. Cedar in the patch cuts will be tubed to protect against deer and elk browse.

Hardwoods and conifer trees other than Douglas-fir will be retained.

Existing snags and down wood will be reserved. A survey for down wood and snags will be conducted during sale preparation. Additional down wood will be created so that total volume will average 300 to 600 cubic feet per acre. Snag creation will be implemented if one snag per acre is not present in the operation area.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
82%	18%		X
Planned Quarter: Alt.			

	Conifer	Hardwood	Total
Net Volume (MBF)	1,100	0	1,100
Stumpage Value (\$/MBF)	\$250	0	
Estimated Gross Value	\$275,000		\$275,000
		Project Costs:	\$83,000
		Estimated Net Value:	\$192,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access to the operation is from Steere Creek County road and Beaver Creek Road. The county road is county maintained. Beaver Creek road is rocked and in good condition but will need some spot rock and maintenance grading during hauling. The access spur off Beaver Creek road into the operation area will require a lift of rock to re-establish its original design standard.

Existing roads provide timber harvest access to 100% of the operation acreage. Because existing roads already access the sale area, no other harvest alternatives were considered.

About 1.8 miles of road improvement will be necessary.

All unsurfaced roads will be waterbarred, blocked to vehicular traffic, and grass seeded after harvesting operations are concluded and/or at the beginning of the wet season.

Harvesting timber in the operation areas would require a combination of 30% cable yarding and 70% ground skidding.

Contingent upon acquiring an access permit, the lower portion of Rudder Creek road will be evaluated for realignment or improvement.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0	0
Improve	0	0	0.8	1.0
Maintain	0	1.9	0	0
Close/Block	0	0	0	1.0
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:

Water flowing from the operation area is part of the Siletz River system. The operation area is in proximity to streams in which listed fish are present.

A type F stream exists to the west of the operation area. The timber sale boundary will be posted about 100' horizontal distance from this stream. The partial cut thinning prescription will retain sufficient trees in the outer Riparian Management Area (RMA) zone to comply with current standards. Approximately 12-15 logs will be placed in the type F stream adjacent to the south boundary of the unit to improve fish habitat.

Type N streams are present in the operation area. A 25' horizontal distance buffer will be established on either side of these streams. No harvesting will be allowed in the buffer except to facilitate cable yarding. The partial cut thinning prescription will retain sufficient trees in the RMA zone to comply with current standards.

Vegetation along type F and N streams consists of conifer and hardwood trees and brush species such as salmonberry, elderberry, vine maple, and sword fern.

There are registered domestic water intakes to the south of the operation area on private land. However, it is not anticipated that harvesting will impact water quality. Further investigation during sale preparation will be required to confirm this assumption.

Activities that will take place in proximity to the streams, listed above, include timber felling and yarding. The following measures will be employed to minimize impacts to the stream: 1) no timber will be felled within the buffer except to facilitate cable yarding, 2) timber above the buffer will be felled away from or parallel to the stream, 3) timber will be yarded away from the stream, where

possible, 4) if it is necessary to yard logs across the stream, logs will be fully suspended above the buffer vegetation, and 5) single end suspension of logs will be required elsewhere in the units.

Other requirements designed to minimize impacts to streams include seasonal restrictions for road construction and log hauling.

The Land Management Classification System for Aquatic and Riparian category determined 14 acres in Focused Stewardship. Focused Stewardship acres are distributed along type N stream RMA's and the outer zone of type F streams.

VIII. T&E SPECIES CONSIDERATIONS:

The operation area appears to contain suitable habitat for northern spotted owls and marbled murrelets. The area wildlife biologist will determine if suitable exists. Surveys will begin in 2005 if habitat is considered suitable.

T&E Fish: Tributaries of the Siletz river that are fed from streams in the operation areas support "threatened" Coho salmon. For a discussion of protection measures see Section VI. "Harvesting and Access Considerations", and Section VII. "Aquatic Resources and Water Quality".

The operation area was checked against district knowledge for any listed plant locations. The operation area was also checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations. No listed plant records were identified within the operation area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial assessment by the geotechnical specialist is low. There appears to be a mapping error showing very steep slopes within the operation area in the extreme northwest corner. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

X. RECREATION RESOURCES:

Recreation in the operation area consists mainly of hunting.

XI. CULTURAL RESOURCES:

There are no known cultural resources located in or adjacent to the operation area.

XII. SCENIC RESOURCES:

None of the operation area is visible from paved highways.

XIII. OTHER RESOURCE CONSIDERATIONS:

No other resource considerations have been identified.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
	Aquatic and Riparian Habitat	14	0

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, 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.