Pre-Operations Report

Operation Name: Jackstraw
County: Klamath

Table 1. Operation Areas, Types and Acres

Stand	Type of Operation	Gross Acres	Net Acres
203	Partial Cut	90	90
207	Partial Cut	124	124
Total		**214**	**214**

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Soil Types: The sale area consists of the Millhayes series soil in Stand 203 and the Hallet series soil in stand 207. Millhayes is a moderately deep to deep, coarse textured soil developed from pumicy alluvium deposited over the surface of an indurated ashflow. Hallet is a deep, coarse textured soil developed from coarse pumice and volcanic ash. Both are operable with ground based skidding equipment at any time of year.

Vegetation Zone

Stand 203: Ponderosa pine forest zone. Plant association – Ponderosa pine/bitterbrush/sedge (CPS2-15)
Stand 207: White fir forest zone. Plant association – Mixed conifer/snowbrush-manzanita (CWS1-12)

Slope, Aspect, and Topography:
Stand 203, slopes range from level to 17%, while aspect is primarily south to southeast. Stand 193 has the same range of slopes. The stand covers both sides of a north-south ridge and has aspects ranging from west to south to east.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information.

Area	Prescription	Stand ID [1]	Species	DBH [3]	BA [4]	TPA [5]	SDI [6]	Acres [2]
1	PC	203	PP	14.2	145.7	241.4	261.8	90
			WF	18.4	5.6	325.5	20.5	
			LP	10	1.3	42	4.2	
		Totals			**152.6**	**608.9**	**286.5**	
1	PC	207	PP	13.1	69.9	191.3	138.9	124
			WF	13.6	13	101.6	31.9	
			LP	11.4	30.3	148	67.6	
			SP	12.9	4	4.4	6.6	
			IC	11.6	3.2	11.3	6.7	
		Totals			**120.4**	**456.6**	**251.7**	

1 The source of stand inventory information is from2003 field inventory.
2 The acres are based on GIS and roads, stream buffers, reserve areas, etc are included in gross acreage.
3 The DBH represented is the average DBH of trees 8" and larger for volume and value computations.
4. BA – Basal Area
5. TPA – Trees per Acre
6. SDI – Stand Density Index

Stand 203 is overstocked with stand density index (SDI) of 287. Current guidelines in this area call for keeping stands under SDI 270 in order to maintain stand health at levels to resist insect attacks. Stand 207 has overstocked clumps and significant lodgepole pine encroachment into this mixed conifer stand.

The following table shows the current condition for large trees in the sale area.

Stand	TPA >20"	TPA >30"
203	19.6	0.7
207	5	0

III. DESIRED FUTURE CONDITION/VISION:

At the next entry, 15-25 years, stands 203 and 207 will have the following characteristics:

- Healthy all aged stands with ponderosa pine in Stand 203 and mixed species in Stand 207.
- Stand composition and structure allows sustained periodic harvest entries at a 15 to 25 year interval.
- The stands are closer to the "Desired Future Condition for Large Trees in he Sun Pass State Forest" goals. The goal is to have 10 trees >20" dbh with at least 2 of those trees >30" dbh.
- There are younger cohorts of ponderosa pine in Stand 203 and ponderosa pine. sugar pine, and incense cedar in Stand 207 scattered throughout the stands individually and in small clumps.

- Fuels are arranged and at acceptable levels to reduce the adverse impacts of wildfires.
- Snags, down wood, and cover, are at the desirable levels to provide wildlife habitat.
- Shrubs and forbs are maintained at desired levels to provide forage production.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

The sale objective is to develop and maintain uneven-aged stands dominated by ponderosa pine in Stand 203 and ponderosa and sugar pine in Stand 207. Other tree species (incense cedar and Douglas fir) will be retained and planted for biodiversity and market diversity. Stand 203 is above the desired future condition goal for trees greater than 20"dbh, while Stand 207 is below the target. Both stands are under the goal for trees over 30" dbh. This management effort will result in faster growth rates for the residual trees, enabling both stands to meet the desired future condition for trees >20" dbh. Meeting the goal for trees >30" dbh will take longer than 20 years.

The forest health objectives will be accomplished by reducing stand density and by species composition manipulation. Past harvests in Stand 207 both prior to and since state ownership have led to significant increases in lodgepole pine stocking in this mixed conifer site. Silvicultural manipulation of the stand will include group selection and single tree selection generally as a thin from below favoring ponderosa in Stand 203 and ponderosa pine and sugar pine in Stand 207. Group selection in Stand 203 will focus on understocked areas and areas with any insect or disease problems. Group selections totaling 20 to 25 acres will range from 1/2 acre to 5 acres in size. In Stand 207, group selections will focus on lodgepole pine concentrations. The group selection areas in Stand 207 will be planted with ponderosa pine, sugar pine and possibly some incense cedar and Douglas fir. In Stand 203, the group selections will be planted with ponderosa pine.

Most of the existing snags and high defect trees will be retained for wildlife habitat enhancement unless their juxtaposition conflicts with the safety of the logging operation. Existing large downed wood, long butts from the logging operation, and cull logs will be left in place or skidded from the landing and scattered on the sale area.

The sale plan is intended to include the treatment of both sawlog sized material and subsawlog sized material. Designated trees 5" to 8" dbh will be required to be yarded to the landing as part of the project work. These trees will be chipped if the market allows or the piles will be burned.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Sale Type:	Recovery	Planned Quarter:	4
Fund Percentage	100	% BOF	
Net Volume	822	Conifer MBF	
Stumpage Value	$174.52	Conifer ($/MBF)	
Estimated Gross Value	$143,460		
Project Costs:	$13,910		
Estimated Net Value	$129,550		

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Existing roads and skid trails from the previous sale are present on the sale area. There are no access issues. Haul roads are all on state owned land. Because of the gentle terrain, ground based logging equipment will be employed. A mechanical feller-buncher will be required for harvesting of the smaller diameter timber and submerchantable material. This will result in minimal damage to reserved trees. Where possible, existing landings and skid trails shall be utilized.

The District will close existing an estimated 5.6 miles of roads.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Dirt Spur
Construction	0.0	0.0	0.0
Improvement	0.0	5.3	0.8
Maintenance	2.2	0.0	0.0
Vacation	0.0	0.0	0.8

See AOP Summary Document for road use level definitions.

VII. AQUATIC RESOURCES AND WATER QUALITY:

None.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Surveys for Spotted Owls have been conducted, as outlined in the LRP, and no spotted owls have been detected in or near the sale area. The forest was surveyed for owls in 2005. No owls were detected. The forest will be surveyed again in 2006.

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 (ONHP) database of known listed plant locations. No listed plant records were identified within the sale area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

None. The entire sale area is under 20% slope.

X. RECREATION RESOURCES:

Hunting and mushroom picking are the only known recreational uses of the sale area.

XI. CULTURAL RESOURCES:

The area has been surveyed for cultural resources. No cultural resources requiring protection were found.

XII. SCENIC RESOURCES:

There are no visual concerns associated with the sale area.

XIII. OTHER RESOURCE CONSIDERATIONS:

None

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY

The sale area is classified as General Stewardship.