

Pre-Operations Report

Operation Name: Bear Top
County: Lincoln
Management Basin: Burnt Woods Ridge

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Net Acres
	Modified Clearcut	30
Total		30

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This operation consists of a modified clearcut. The unit is in the western hemlock zone. The average annual rainfall is 78" – 100". The soils are all Valino.

The operation area is located in the headwaters of an unnamed tributary to Bear Creek at the divide with Trapp Creek. The slopes are gentle to moderate near the ridge top and in the center of the sale area but steep along the south boundary of the sale area and steep to very steep along the west boundary of the operation area. 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

Aspect for the unit is generally south.

II. CURRENT STAND CONDITION:

This operation area supports 86 year old Douglas-fir trees with a few red alder and bigleaf maple trees intermixed. Snags and down wood are present although in limited numbers. Brush species such as salal, vine maple, salmonberry, hazel, Oregon grape, and sword fern are present.

The stand type is Understory (UDS).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	RD	Acres ²
	Modified Clearcut	18800	DF	86	21	273	110	61	30

1 The source of stand inventory information is OSCUR from 1999.

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

III. DESIRED STAND CONDITION:

According to the district's landscape design, the operation area is designated as DFC General and is scheduled to be an UDS stand and not a more complex stand such as Layered (LYR) or Older Forest Structure (OFS).

Vision: When the next final harvest occurs in this operation area, the stand will be 70-80 years old and will be in the UDS condition. At that time, the stand will consist of an overstory of well stocked Douglas-fir with smaller amounts of western hemlock, western redcedar, Sitka spruce, bigleaf maple and red alder. Where there are gaps in the overstory, there will be an understory of hemlock, cedar, alder and brush (vinemaple, salmonberry, Oregon grape). Legacy trees (about 4-6 per acre) left from the first regeneration harvest will be located in small clumps and also scattered across the area. These Douglas-fir trees will average about 40 inches DBH. Both large and small snags and large and small down wood will be located throughout the unit.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
I	18800	UDS	REG	UDS	30

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:

Pathway: This harvest will be a modified clearcut prescription leaving behind about 10-12 green trees per acre that will be greater than 20 inches DBH. The majority of these reserve trees will be Douglas-fir, but some alder and bigleaf maple may also be left. Existing snags that do not pose a safety hazard and all down wood will be retained. Snags and down wood will be created naturally over time from the reserve trees. The number of snags and amount of down wood will be monitored within 5 years after harvest. If sufficient numbers or amounts have not accrued naturally, they will be artificially created.

After harvest, a site prep herbicide treatment will be applied. Due to the extremely brushy condition of the understory, a spring broadcast burn will also be planned. Prior to planting, mountain beaver will be trapped from the area.

Following completion of site prep activities, the area will be replanted with approximately 70% Douglas-fir, 15% western hemlock, 10% western redcedar

and 5% Sitka spruce at a rate of 436 trees per acre. This planting mix will help leave the option open for changing the DFC to a more complex condition if so desired. 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. By age 12 years the stand will have moved from REG to CSC.

When the planted trees reach age 12-15, it is likely that pre-commercial thinning (PCT) will be used to reduce total trees per acre to around 222. The biggest and best trees will be selected to leave, also keeping in mind the desire to leave roughly the same percent mix as was planted, and also allowing up to 10% of the mix to be comprised of hardwood.

At approximately age 30 the unit will be commercially thinned to about an RD 35. This thinning will capture harvest volume, maintain stand vigor, and will also move the stand on the pathway from CSC to UDS by opening the stand enough to allow vegetation to grow in the understory. Approximately 5-10 years following this thinning, the UDS condition will be achieved.

In 10-15 years, the unit will again be thinned to about RD 35. This thinning will capture harvest volume and maintain stand vigor. It will also keep the stand from reverting to CSC. The amount and condition of down wood and snags will be evaluated and more will be created at this time if needed.

In another 10-15 years, tree growth rates will be evaluated and a decision will be made to either conduct a third thinning or to wait until final harvest at 70-80 years old.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	X
Planned Quarter: 1			

	Conifer	Hardwood	Total
Net Volume (MBF)	1,500	0	1,500
Stumpage Value (\$/MBF)	\$450		
Estimated Gross Value	\$675,000	0	\$675,000
		Project Costs:	\$106,000
		Estimated Net Value:	\$569,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access to the operation area is from Deer Creek, Baber Ridge, the WOW and Bear Divide roads. Deer Creek, Baber Ridge, and the WOW roads are rocked and in good condition but may need some spot rock and maintenance grading during hauling. The Bear Divide road will have a lift of rock added, bringing it back to its original design standard. Deer Creek, Baber Ridge, the WOW and a portion of the Bear Divide road are across industrial forest land owners from whom access has been secured. Wet weather access is available for the entire harvesting operation.

The Bear Divide road provides access for harvesting about 20% of the operation area. The only option for conventional cable yarding of the remainder of the unit is to construct 0.1 miles of spur road on top of the gentle ridge in the north portion of the unit.

Approximately 1.4 miles of road improvement will be required with this operation.

Harvesting timber in the unit would be a combination of 90% cable yarding and 10% ground skidding.

A stream crossing culvert is planned for replacement with a fish passable structure on a tributary of Bear Creek (SE ¼ of sect. 18, T.11S., R.9W., W.M). A written plan for this crossing will be supplied by ODF.

Other transportation alternatives were considered, but not used. The existing transportation system provides the most efficient access to the timber sale area.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0.1	0
Improve	0	1.4	0	0
Maintain	0	2.4	0	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:

Waters that flow from this unit are part of the Yaquina River system.

There are no type F streams in the operation area.

Type N streams do not exist in the unit but are located on the east and west sides outside the boundary. Timber sale boundary will be posted 50'-75' horizontal distance from these streams. In the remaining portion of the riparian management area (RMA) zone, sufficient numbers of trees will be reserved to comply with current standards.

Vegetation along type N streams includes Douglas-fir and hardwood trees, and brush such as vine maple, salal, and sword fern.

There are no domestic water rights associated with this operation.

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 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 unit.

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

The Land Management Classification System for the Aquatic and Riparian category determined that there are 2 acres of Focused Stewardship. Focused Stewardship acres are distributed along type N stream RMA's.

VIII. T&E SPECIES CONSIDERATIONS:

The operation area contains suitable habitat for northern spotted owls and marbled murrelets according to the area wildlife biologist. Surveys for both species were conducted in 2004 and 2005 with no detections.

The operation area was checked against district knowledge for any listed plant location. 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:

There are bands of steep slopes along all down slope sides of the sale. The steepest slopes appear on the west side of the sale. The initial assessment from the geotechnical specialist is moderate. The geotechnical specialist will be consulted during field work and the need for field visit will be decided at that time.

X. RECREATION RESOURCES:

A portion of the Mt. Baber ATV trail system is located within the northern portion of the operation area. An access road for landing sites will be constructed on the ATV trail location. The club will be kept continuously informed of activities involved with this proposed operation. LMCS for the Recreation category determined 6 acres are included in the ATV trail.

XI. CULTURAL RESOURCES:

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

XII. SCENIC RESOURCES:

None of the operation area can be seen from paved roads.

XIII. OTHER RESOURCE CONSIDERATIONS:

No other resource considerations have been identified.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The operation area contains 2 acres of Focused Stewardship, Aquatic and Riparian Habitat along the type N stream riparian areas that are to the east and west of the unit. See Section VII, Aquatic Resources and Water Quality for management guidelines to be utilized.

The operation area contains 6 acres of Focused Stewardship-Recreation for the ATV trail that runs through the north part of the unit. See Section X, Recreation Resources for the management guidelines to be utilized.