

Pre-Operations Report

Operation Name: Mill Creek Bridge #2

County: Douglas

Management Basin: 15

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
I	Clearcut	119	112
Total		119	112

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This timber sale is located on the western slope of the Coast Range in the Mill Creek watershed and is within Elliott State Forest Management Basin 15. This timber sale area is in close proximity to the Pacific Ocean, which has a dominant influence on the climate. The average annual rainfall is between 85-90 inches. Temperatures range from 20-90 degrees Fahrenheit throughout the year. This timber sale has an elevation of 140 to 1160 feet above sea level with slopes ranging from 10 percent to over 90 percent. Eocene age sedimentary rocks underlie the area. Soil types are Preacher-Bohannon-Blachly, Umpcoos-Damewood, and Damewood-Bohannon-Umpcoos. Slopes in the sale are generally steep and dissected.

II. CURRENT STAND CONDITION:

The timber sale is third-growth Douglas-fir, western hemlock, and red alder that originated after logging which occurred in 1959. It is composed of 42 year old Douglas-fir with thick patches of hemlock and scattered red alder in the uplands with increasing amounts of red alder and big leaf maple nearing the riparian zones. Table 2 contains stocking, size and age information for all the areas in this timber sale. Stand health is marginal. Portions of the sale area are over-dense, showing signs of density dependent mortality and reduced growth rates. The sale area is located outside of the current area of concern for Swiss needle cast.

Table 2. Stand Inventory Information

Area	Prescription	Veg Code ¹	Species	Age In 2004	DBH	BA	TPA	SDI	Acres ²
I	CC	759	DF, WH, RA, BM	42	11	208	293	72	112
	Target ³		DF		11	4	3	1	112

1 The source of stand inventory information is (OSCUR) from 2000 records.

2 The acres are based on GIS, and exclude interior roads, streams 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:

The desired condition is a young age class stand to provide early successional habitat in accordance with the Balanced Landscape strategy of the Elliott State Forest Management Plan. It will be composed of mainly Douglas-fir with a smaller component of other conifer species including hemlock and red cedar. Red alder will also naturally regenerate in the stand. Green trees retained from the previous rotation will provide for multi-story stand structures valuable for wildlife. This mix of planted and natural regeneration will comprise the next planned rotation.

Table 3. Stand Structure Information (Does not apply to Elliott State Forest)¹

IV. PROPOSED MANAGEMENT PRESCRIPTION:

The prescription for this sale is to harvest most of the overstory, leaving standing trees within buffer areas and scattered in selected locations in or along the edge of the sale unit.

Site Preparation and Planting - Site preparation will be achieved by yarding disturbance and treating residual brush with herbicide prior to planting. The site will be planted with conifer seedlings at approximately 500 trees per acre. Species mix is planned to be about 85% Douglas-fir and 15% hemlock and/or western red cedar.

Green Tree Retention - A minimum of 392 trees (about 3.5 per acre harvested, including snag recruitment) will be left in or adjacent to the sale area. Emphasis will be given to retention of conifer species other than Douglas-fir. Single green trees will not be left unless localized soil conditions provide for wind firmness and logging conditions are suitable. A buffer of green tree retention will be left around the dispersed campground, and where feasible on high visibility slopes to minimize visual impact to the BLM Loon Lake Campground. The location of retained trees will be determined during the sale prep process. Emphasis may also be given to widening riparian management areas.

Snag Retention and Creation – Existing snags within the sale area will be left, with the exception of those that endanger work crews. In addition, 1 green tree per 2 acres will be left for future snag recruitment.

Down Log Retention - At least 336 logs (3 logs per acre harvested) will be left in or adjacent to the sale area for habitat purposes in accordance with the Elliott State Forest Management Plan. Down logs shall meet the following minimum specifications: 16 feet in length and 12 inches diameter at the large end. Down logs shall be left in stable locations to minimize safety concerns to tree planters and other forest workers.

Burning - Portions of the sale may be burned depending on the amount and distribution of the slash and timing of sale completion. The main purpose of this type of burn is to provide for biological diversity and improved big game forage rather than site preparation.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	2000	63	2063
Stumpage Value (\$/MBF)	\$250	\$150	
Estimated Gross Value	\$500,000	\$9,450	\$509,450
		Project Costs:	\$37,700
		Estimated Net Value:	\$471,750

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access to the sale area will require an easement and access fee across BLM's Soap Creek Road. The eastern property boundary needs to be marked on the ground by the District Engineering Team prior to posting. A short spur and landings will be constructed to access the sale areas. Final location of the spur and landings will be determined during the sale preparation process. New spurs will be constructed to the minimum standard of 14 feet with no ditch, unless winter work is planned, in which case a ditchline, culverts and rock will be added. After log hauling each year, the spurs into the sale areas will be waterbarred and blocked off. Winter harvesting will require purchaser supplied rock. The BLM Sock Creek road will require a road use easement and fees. No roads

associated with this sale will be decommissioned because of planned future use.

Harvesting options were chosen to provide appropriate resource protection while minimizing logging costs. The sale area will be cable yarded uphill. Full suspension will be required over stream channels and single end suspension on the rest of the sale area. Trees will be felled parallel or away from the residual trees and Riparian Management Areas.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Paved Collector	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.0	0.0	0.1
Improve	0.0	0.0	0.0	0.0	0.2
Maintain	0.0	.98	0.0	0.0	.25
Close/Block	0.0	0.0	0.0	0.0	.25
Vacate	0.0	0.0	0.0	0.0	0.0

VII. AQUATIC RESOURCES AND WATER QUALITY:

Riparian areas along streams will be managed to support properly functioning aquatic habitats over time by applying the riparian management area (RMA) standards of the Northwest Oregon State Forests Management Plan. These standards are planned for adoption in the revised Elliott State Forest Management Plan. The minimum standards used for riparian buffers, are those listed in the Elliott State Forest Management Plan.

The sale area is located within the Mill Creek watershed, which is a large size Type F stream. Unknown fish use streams associated with this sale will be surveyed for fish presence in the spring of 2005. All drainages associated with the sale area were field surveyed during the 2004 summer low flow period to determine the stream channel extent and whether streamflow is perennial or seasonal. The tributaries flowing from the sale area are classified as seasonal or perennial Type N streams.

A written plan will be prepared in accordance with the Forest Practice Act for operations within 100 feet of a Type F stream. Cable layouts through or over buffer strips are needed to provide for adequate suspension of logs. To protect water quality, full suspension will be required over stream channels and single end suspension where feasible on the rest of the sale area. 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, and monitoring and managing logging and hauling operations during times of heavy rainfall.

All road construction and improvement will be done during the dry season and excavated material will be deposited on stable slope locations without the possibility of entering stream channels. Areas of bare soil associated with road and landing construction will be grass seeded when operations are completed.

There are no known water rights within or downstream of the proposed operation.

VIII. WILDLIFE and T&E SPECIES CONSIDERATIONS:

The habitat within this sale area was determined to be not suitable for certain T and E species. This sale is planned under the standards of the Elliott State Forest Management and Habitat Conservation Plans and other Oregon Department of Forestry (ODF) policy. The specific measures are as follows:

NSO Habitat Retention – There is no minimum acreage for NSO nesting, roosting, and foraging habitat in this basin other than established reserve acres. Reserve acres in this basin include 2,064 acres (44%) that will be continually retained in riparian management areas, habitat conservation areas and other conservancy acres. Fifty percent of this basin's total acres (2,328) must provide dispersal habitat. After this sale plan, there will be approximately 2,709 acres of dispersal habitat retained. Portions of this sale area are adjacent to the Tom Fool NSO core area.

Marbled Murrelet - This sale does not contain marbled murrelet habitat. The sale area is within 330 feet of potential suitable habitat. ODF's Southern Oregon Biologist will prepare a murrelet survey waiver and determine the application of seasonal restrictions during sale layout to comply with ODF's policies for the marbled murrelet.

Bald Eagle, Other - This sale is just over .25 miles from the Camp Mill alternate nest site for the Loon Lake bald eagle pair. This site has not been used since the late 1980's but the nest was present until 2002 when it blew out of the nest tree. The nest tree and suitable replacement trees are still present at this location on BLM ownership. This location is within .5 miles of the sale and is likely within line of sight for a portion of the sale area. Seasonal restrictions may be required if the eagles were to return and nest at this site. Biological review will be necessary prior to the beginning of sale harvest.

Salmon and Steelhead – Mill Creek is a Large type F adjacent to the sale along the northern and western boundaries. A written plan will be prepared in accordance with the Forest Practice Act for operations within 100 feet of a Type F stream. Cable layouts through or over buffer strips are needed to provide for adequate suspension of logs. To protect water quality, full suspension will be required over stream channels and single end suspension where feasible on the rest of the sale area. Riparian areas along streams will be managed to support

properly functioning aquatic habitats over time by applying the riparian management area (RMA) standards of the Northwest Oregon State Forests Management Plan. These standards are planned for adoption in the revised Elliott State Forest Management Plan.

Plants - 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.

Fragmentation - This sale area is located on the edge of a contiguous block of mature timber and does not increase fragmentation of interior habitat.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This sale area has had a map review by an ODF geotechnical specialist. A closer examination will be made during the sale layout process to determine if other site specific protection measures will be necessary. Portions of the sale area have slopes that meet criteria for classification as high landslide hazard locations (in the Tye Core Area uniform slopes greater than 75% and/or planform concave slopes greater than 65%). A debris flow originating on the north aspect slopes is likely to deposit in Mill Creek; potential debris flow track reach management standards apply. The steepest slopes in the west flowing basin are above the main access road. The road may capture some of the potential debris flow material; however a larger debris flow is likely to flow across the road and deposit in Mill Creek. Potential debris flow track reach management standards apply. A small NE aspect basin draining into Sock Creek is likely to deliver a potential debris flow to the creek. Potential debris flow track reach management standards apply.

To minimize yarding impacts on the slopes, single end suspension cable yarding will be required. Roads will be located on ridge-crests as much as possible and any steep sidehill portions will be constructed with full bench end-haul design and construction. Construction will be done during the dry season.

X. RECREATION RESOURCES:

This sale is located in close proximity to the Loon Lake Recreation Area, managed by the Bureau of Land Management. Green tree retention will be left where feasible on high visibility slopes to minimize the visual impact to the BLM Loon Lake Campground. Portions of the western and southern boundary of this sale are adjacent to lands classified as Recreation Use, Forest Park. Hunting and dispersed, undeveloped recreation use also occurs in this area. Harvesting this unit will provide forage area to help promote healthy deer and elk populations. In addition, areas of bare soil around road edges and landings will be grass seeded after logging to provide forage. Surrounding forest types

provide escape cover. A small, dispersed campsite is located adjacent to the sale. A buffer of green tree retentions will be left around the dispersed campground. No conflict is seen with respect to the undeveloped, dispersed recreation usage of the forest.

XI. CULTURAL RESOURCES:

There are no cultural sites associated with this sale.

XII. SCENIC RESOURCES:

A portion of this sale is within a scenic production management area. The scenic values arise from the proximity to the Loon Lake Recreation Area. These scenic concerns will be mitigated through strategically placed green tree retention.

XIII. OTHER RESOURCE CONSIDERATIONS:

Powerlines on Mill Creek Road will require safety considerations and protection during yarding operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Use Classification Summary

Area	Scenic Production	Production
I	66	46

This table summarizes the acres in each land use class within the operation.