

# Pre-Operations Report

**Operation Name: Locked Marlow**

**County: Coos**

**Management Basin: 10**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres
I	Clearcut	50	44

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

This timber sale is located on the western slope of the Coast Range in the Marlow Creek watershed and is within Elliott State Forest Management Basin 10. 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 95-105 inches. Temperatures range from 20 to 90 degrees fahrenheit throughout the year. This timber sale has an elevation of 800 to 1200 feet above sea level with slopes ranging from 70 percent to over 80 percent. The dominant aspect of the sale area is south. Eocene age sedimentary rocks underlie the area. Soil types are Milbury-Bohannon-Umpcoos.

## **II. CURRENT STAND CONDITION:**

The timber sale is second-growth Douglas-fir and red alder that originated after logging which occurred in the 1930's. It is composed of 71 year old Douglas-fir and red alder with scattered understory hemlock and red cedar. Table 2 contains stocking, size and age information for this timber sale. There are few hard snags in the stand. Stand health is satisfactory which is typical for the Elliott Forest. 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 <sup>1</sup>	Species	Age In 2004	DBH	BA	TPA	SDI	Acres <sup>2</sup>
I	CC	1777	DF, RA	71	15	250	205	64	44
	Target <sup>3</sup>		DF	71	15	6	3	1	44

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)<sup>1</sup>**

### **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 132 trees (about 3 per acre harvested) will be left in or adjacent to the sale area. Emphasis will be given to retention of conifer species other than Douglas-fir. Some of these trees will be topped for snag creation. Single green trees will not be left unless localized soil conditions provide for wind firmness and logging conditions are suitable. The location of retained trees will be determined during the sale prep process. Emphasis may 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. Tops will be blown or sawn off green trees to leave approximately 22 topped trees in the sale area—about 1 tree per two acres harvested.

Down Log Retention - At least 132 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 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
76%	24%		X
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	225	350	575
Stumpage Value (\$/MBF)	350	300	
Estimated Gross Value	78,750	105,000	183,750
		Project Costs:	26,000
		Estimated Net Value:	157,750

**VI. TRANSPORTATION PLANNING AND HARVESTING:**

Access to the sale area will require easements across Weyerhaeuser and Lone Rock Timber Company's Lockhart Ridge Road. The eastern property boundary needs to be marked on the ground by the District Engineering Team prior to posting. A short spur and landing will be constructed to access the sale area, a portion of the new construction will fall on Lone Rock's ownership. Final location of the new spur and landing 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 spur into the sale area will be waterbarred and blocked off. Winter harvesting will require purchaser supplied rock. 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	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.0	0.1
Improve	0.0	0.0	0.0	0.1
Maintain	0.0	0.0	0.0	0.2
Close/Block	0.0	0.0	0.0	0.1
Vacate	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 Marlow creek watershed, which is a large size Type F stream. All streams associated with this sale were surveyed to ODFW protocol for fish presence in 2004. 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 and adjacent to the sale area are classified as small seasonal or perennial Type N streams transitioning to a Large Type F approximately 1500 feet below the sale area.

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

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 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.

### **VIII. WILDLIFE and T&E SPECIES CONSIDERATIONS:**

The older habitat within this sale area may be 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 844 acres (17%) that will be continually retained in riparian management areas, habitat conservation areas and other conservancy acres. Fifty percent of this basin's total acres (2465) must provide dispersal habitat. After this sale plan, there will be approximately 3795 acres of dispersal habitat retained which includes 82 acres of in-growth.

Marbled Murrelet - The sale area was surveyed according to protocol standards during the 2003 and 2004 survey season. The surveys showed no occupancy. The sale is not located within a quarter mile of a marbled murrelet management area.

Bald Eagle, Other - There are no bald eagles or other listed animal species in the vicinity of this sale.

Salmon and Steelhead – The sale does not immediately border any type F streams. 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 - The sale areas are isolated residual stands or are 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 a geotechnical specialist. A closer examination will be made during the sale layout process to determine if other site specific protection measures will be necessary. The lower quarter of the unit

has slopes which 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%). The SW flowing stream originating on the unit is a potential debris flow track reach. It is likely that potential debris flows originating in this basin will deposit near the confluence with the unnamed stream which flows adjacent to the south boundary of the unit, which is a small perennial non-fish bearing stream. However, a debris flow originating in the basin to the north (outside of the sale area) delivered to Marlow Creek. Therefore the risk of delivery to Marlow Creek is moderate. Small perennial or seasonal Type N stream 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:**

The most common recreation for this area is hunting and dispersed, undeveloped recreation. 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. 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:**

The units are not within any scenic management areas and there are no scenic management constraints for this sale.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

There are no other known resource considerations associated with this sale.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Use Classification Summary**

Area	Production
I	44

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

