

# Pre-Operations Report

**Operation Name: Elkhorn Ridge No. 6**

**County: Coos**

**Management Basin: 12**

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

| Area  | Type of Operation | Gross Acres | Net Acres |
|-------|-------------------|-------------|-----------|
| I     | Clearcut          | 40          | 37        |
| Total |                   | 40          | 37        |

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

This timber sale is located on the western slope of the Coast Range in the West Fork Millicoma watershed, and is in the Elliott State Forest Management Basin 12. 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 1300 to 1700 feet above sea level with slopes ranging from 50 percent to over 70 percent. The dominant aspects of the timber sale area are west and southwest. Eocene age sedimentary rocks underlie the area. The soil types are Preacher-Bohannon loams. Slopes on this unit are variable; steepest slopes are north aspect. The ridges are relatively broad and gentle.

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

This sale is second growth Douglas-fir timber that originated after the Coos Bay fire of 1868. It is composed of 117 year old Douglas-fir with a small component of red alder and scattered understory hemlock trees. 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 State 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                  | 1190                  | DF      | 117         | 31  | 219 | 42  | 42  | 4                  |
| I    | CC                  | 1458                  | DF      | 117         | 31  | 219 | 42  | 42  | 33                 |
|      | Target <sup>3</sup> |                       | WH, DF  | 117         | 31  | 6   | 3   | 1   | 37                 |

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.\* Type 1458 has been mistyped as a young plantation. Inventory information from adjacent stand 1190 was applied to the portion of sale typed as 1458.

### **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 one tree per two acres.

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 |
| 0%               | 100% |           | X        |
| Planned Quarter: |      | 3         |          |

|                         | Conifer | Hardwood             | Total   |
|-------------------------|---------|----------------------|---------|
| Net Volume (MBF)        | 2,288   | 0                    | 2,288   |
| Stumpage Value (\$/MBF) | 400     | 0                    |         |
| Estimated Gross Value   | 915,200 | 0                    | 915,200 |
|                         |         | Project Costs:       | 73,544, |
|                         |         | Estimated Net Value: | 814,656 |

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

All legal access to the sale is obtained and there are no property lines needing to be surveyed. Access is by the all weather surfaced, state maintained 9300 road, classified as a rocked spur. Three new short spurs and three new landings will be constructed within the sale area. The existing dirt spur through the north part of the sale is closed and will need improvement. The 9360 road along the south boundary is a rocked spur in good shape. Winter harvesting will require the addition of purchaser supplied rock and possibly culverts to dirt spurs. Final locations of new spurs 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 dirt spurs into the sale area will be waterbarred and blocked off. No roads associated with this sale will be decommissioned. Project costs include the completion of a rock stockpile. Final stockpile requirements will be determined during the timber sale preparation process.

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         | 0.2       |
| Improve     | 0.0      | 0.0       | 0.0         | 0.2       |
| Maintain    | 0.0      | 0.0       | 0.2         | 0.3       |
| Close/Block | 0.0      | 0.0       | 0.0         | 0.2       |
| Vacation    | 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 West Fork Millicoma River watershed, a large type F stream. All streams associated with this sale were surveyed to ODFW protocol for fish presence in 1997. 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 are classified as seasonal or perennial Type N streams transitioning to a small Type F approximately 1200 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 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. If winter hauling occurs and logs are hauled to the east, trucks should be routed to the 9200/1800 to avoid hauling up the 9000 along Elk Creek. This will minimize the potential for turbidity in Elk Creek. Some additional rock will be needed on the 9200/1800 if a winter haul occurs.

All road and landing 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 the stream. 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 927 acres (19%) that will be continually retained in riparian management areas, habitat conservation areas and other conservancy acres. Fifty percent of this basin's total acres (2484) must provide dispersal habitat. After this sale plan, there will be approximately 2674 acres of dispersal habitat retained which includes 99 acres of in-growth.

Marbled Murrelet - The sale areas were surveyed according to protocol standards during the 2003 and 2004 survey seasons. These surveys showed no occupancy. The sale area is not located within a quarter mile of any Marbled Murrelet Management Areas.

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

Salmon and Steelhead – The sale area does not border any Type F streams. The Type N tributaries flowing from the sale transition to a small Type F approximately 1200 feet below 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. This sale is a possible candidate for a log supply source for the fishlog stockpile.

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 area is located on the edge of a contiguous block of mature second growth timber and does not increase fragmentation of interior habitat.

**IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

This sale area has been map reviewed 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 meeting 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%), particularly the north aspect slopes directly above the channel. A debris flow originating on these slopes is not likely to form a channelized debris flow. However a debris flow originating in the east fork of the tributary is likely to form a channelized debris flow. Channel geometry is conducive for debris flow transport, with terminal deposition likely occurring near N43-34-9.9/W123-57-11.3 (area of channel convergence), upstream from the beginning of surveyed fish use. Small seasonal or perennial type N 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 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 in 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 for this sale.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Management Classification Summary**

| Area | Production |
|------|------------|
| 1    | 37         |

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