

Pre-Operations Report

Operation Name: Cougar Divided
County: Coos/Douglas
Management Basin: 14

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Clearcut	46	35
2	Clearcut	44	33
3	Clearcut	8	6
Total		98	74

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This operation is a three-unit timber sale totaling 74 net acres. This timber sale is located on the western slope of the Coast Range in the Cougar Creek watershed within Elliott State Forest Management Basins 14. 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 32-76 degrees fahrenheit throughout the year. This timber sale has an elevation of 1230 to 1850 feet above sea level with slopes ranging from 30 percent to over 70 percent. Area 1 is dominantly a westerly aspect with some south and east faces, Area 2 has a southerly aspect with some west faces, and Area 3 has a north aspect. Eocene sedimentary rocks underlie the area. Soil types consist of Preacher-Bohannon loams with some Milbury-Bohannon-Umpcoos association in the western part of Area 2. Slopes in all units are generally steep with some gentler terrain and benches in Area 2.

II. CURRENT STAND CONDITION:

The timber sale is second growth Douglas-fir that originated after the Coos Bay fire of 1868. It is composed of 95 to 136 year-old Douglas-fir with a minor component of red alder and scattered understory hemlock trees, and approximately 4 acres of 25 to 39 year-old Douglas-fir. Table 2 contains stocking, size and age information for all the areas in 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 ¹	Species	Age in 2004	DBH	BA	TPA	SDI	Acres ²
1	CC	802	DF	39	14	184	184	50	1
1	CC	803	DF	136	25	171	50	36	3
1	CC	786	DF	120	23	198	72	44	17
1	CC	787	DF	122	22	258	100	58	14
3	CC	721	DF	99	19	313	162	74	6
	Target ³		DF, WH		24	10	3	1	208
2	CC	791	DF, RA	113	21	297	126	68	33
	Target ³		DF, WH		21	17	5	2	33

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:

Area 2 will be prepared under the wildlife emphasis option of the Elliott management plan, providing for green trees, down logs, and snag creation to create and maintain forest structure for wildlife habitat. 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 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 western red cedar.

Green Tree Retention - A minimum of about 162 trees (about 3 per acre) will be left in or adjacent to Areas 1 and 3. A minimum of about 220 trees (about 5 per acre) will be left in Area 2. 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 27 topped trees in Areas 1 and 3 (about one tree per 2 acres harvested), and 22 topped trees in Area 2 (about 2 trees per acre harvested).

Down Log Retention - At least 162 logs (3 logs per acre harvested) will be left in or adjacent to Areas 1 and 3. 220 logs (5 logs per acre harvested) will be left in Area 2 for habitat purposes in accordance with the Elliott State Forest Management Plan.

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:		1	

	Conifer	Hardwood	Total
Net Volume (MBF)	4,070	75	4,145
Stumpage Value (\$/MBF)	450	365	
Estimated Gross Value	1,831,500	27,375	1,858,875
		Project Costs:	35,000
		Estimated Net Value:	1,823,875

VI. TRANSPORTATION PLANNING AND HARVESTING:

All legal access to the sale is obtained and there are no property lines needing to be surveyed. Access to portions of Areas 1 and 2 are from unnumbered dirt spurs. These dirt spurs will require improvement and will be waterbarred and blocked at the completion of operations. Winter harvesting will require purchaser supplied rock. New landings and short access spurs may be constructed in Areas 1 and 2. Final locations will be determined during the sale preparation process. Access to the remaining portions of Areas 1 and 2 are from the 7000 and the Cougar Pass fire lookout access road, all rocked collector spurs. The rocked collector spurs are in good shape and will require only maintenance or minor improvement. The segment of the 7000 mainline that is within/adjacent to Area 1 will be examined to determine if pullback of sidecast is necessary. Unnumbered dirt spurs in Areas 1 and 2 will be evaluated for vacating and for the need for any sidecast pull back since all of these roads were built prior to full containment construction requirements. Project costs include the completion of the Cougar Pass rock stockpile. Final stockpile requirements will be determined during the timber sale preparation process.

The sale areas will be cable yarded up hill with small portions of the sale being down hill yarded in Area 1. Full suspension will be required over stream channels and single end suspension on the remainder of the sale area. Trees will be felled parallel or away from the residual trees and Riparian Management Areas. Area 3 will be cable yarded from landings in Area 2.

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	.45
Maintain	0.0	0.0	0.0	0.0
Close/Block	0.0	0.0	0.0	.55
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 Cougar Creek watershed, a large size Type F tributary of the West Fork Millicoma River. The stream associated with this sale was surveyed to ODFW protocol for fish presence in 1997, and again 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. All of the sale units, Areas 1, 2 and 3, are adjacent to a medium Type F perennial stream. Area 1 has two small Type N perennial streams flowing from it. A small type N transitions to a small type F near the junction of Cougar Creek, bisecting Area 2 And area 3. The remainder of the drainages in the sale area are classified as small seasonal N's.

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

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.

VIII. 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:

Basin 14 - There is a minimum acreage for NSO nesting, roosting, and foraging habitat in this basin above the required reserve acres. Reserve acres in this basin include 645 acres (13%) that will be continually retained in riparian management areas, habitat conservation areas and other conservancy acres. Basin 14 has a 135 year target harvest age and a requirement to retain a minimum of 40% of the basin (2031 acres) in nesting, roosting, and foraging habitat. After this planned harvest, there will be 2261 acres retained. 50% of this basin (2539 acres) must provide dispersal habitat. After this sale plan, there will be about 2842 acres of dispersal habitat retained which includes 139 acres of in-growth in 2005 and 100 acres of in-growth in 2006.

Marbled Murrelet - Two years of protocol surveys were completed. The sale areas were surveyed according to protocol standards during the 2003 and 2004 survey seasons. These surveys showed no occupancy. No portion of any of the sale units are 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 – All of the sale units are within 100 feet above Type F 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. 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. Opportunities for placement of large woody debris have been identified for all of the sale units where cable layouts cross Type F streams. These placed log structures will create pools and gravel beds, and improve wintering habitat.

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 an office and initial field review by an ODF geo-tech specialist. A closer examination will be made during the sale layout process to determine if other site specific protection measures will be necessary. Generally, the lower portions of the slope (lower half to lower third) appear to meet criteria for classification as high landslide hazard locations (in the Tyee Core Area uniform slopes greater than 75% and/or planform concave slopes greater than 65%).

Area 1: Two small streams drain this unit. Both forks appear to be potential debris flow tracks. Potential debris flow track reach management standards apply. The steep slope immediately above Cougar Creek appears likely to deliver an open-slope debris flow to the creek.

Area 2: The steep slopes above Cougar Creek and the Cougar Creek tributary (south boundary of the unit) appear likely to deliver an open-slope debris flow to the creek. The small south aspect basin near the section line appears to be a potential debris flow track. Potential debris flow track reach management standards apply.

Area 3: The steep slopes above the Cougar Creek tributary appear likely to deliver an open-slope debris flow to the stream.

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 of these units 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. There are no scenic management constraints for this sale. No significant conflicts with users are anticipated.

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
1	35
2	33
3	6

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