Pre-Operations Report

Operation Name: Western Knife
County: Coos/Douglas
Management Basin: 13

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Clearcut	82	80
2	Clearcut	4	4
Total		86	84

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This operation is a two-unit timber sale totaling 84 net acres. This timber sale is located on the western slope of the Coast Range in the Deer Creek watershed within Elliott State Forest Management Basin 13. 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 80-85 inches. Temperatures range from 32-76 degrees fahrenheit throughout the year. This timber sale has an elevation of 960 to 1660 feet above sea level with slopes ranging from 30 percent to over 80 percent. Eocene age sedimentary rocks underlie the area. Area 1 is dominantly a northwesterly aspect with some south and north faces, Area 2 has a southerly aspect. Soil types consist of Preacher-Bohannon loams in Area 1 and 2. Slopes in all units are generally steep with some gentler terrain on the southwest third of Area 1.

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 104 to 124 year-old Douglas-fir with a minor component of red alder and scattered understory hemlock trees. 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	534	DF, WH	124	20	233	107	54	8
1	CC	535	DF, WH	104	22	290	110	65	11
1	CC	1418	DF, RA	107	27	197	50	40	19
1	CC	1423	DF, RA	116	24	319	105	69	19
1	CC	1452	DF, WH	122	21	292	126	67	25
2	CC	534	DF, WH	124	20	233	107	54	4
	Target[3]		DF, WH		24	10	3	1	84

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 FUTURE 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 and may have a smaller component of other conifer species including hemlock and/or red cedar. Red alder will also naturally regenerate in the stand. Green trees retained during this operation will provide for multi-story stand structures valuable for wildlife.

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 400-500 trees per acre.

Green Tree Retention - A minimum of about 258 trees (about 3 per acre) will be left in or adjacent to Areas 1 and 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 43 topped trees in Areas 1 and 2 (about one tree per 2 acres harvested).

Down Log Retention - At least 258 logs (3 logs per acre harvested) will be left in or adjacent to the timber sale area 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 OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
36%	64%		X
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,200	200	5,400
Stumpage Value ($/MBF)	450	365	
Estimated Gross Value	2,340,000	73,000	2,413,000
		Project Costs:	$40,000
		Estimated Net Value:	$2, 373,000

VI. HARVESTING AND ACCESS CONSIDERATONS:

All legal access to the sale is obtained and there are no property lines needing to be surveyed. Three original corners within Area I need to be blazed prior to operations. Access to Area 1 is from the 7105 and an unnumbered dirt spur. The 7105 is a rocked spur and will require little to no improvement before haul. The dirt spurs leading to landings in Area 1 from the 7105 and from the 7100 are old logging roads and will require improvement before they are suitable for haul traffic. Existing spurs accessing the timber sale area will be evaluated to determine if pullback of sidecast is necessary. All dirt spurs will be waterbarred and blocked at the completion of operations. Winter harvesting will require purchaser supplied rock. Final locations will be determined during the sale preparation process. Final stockpile requirements will be determined during the timber sale preparation process.

The sale areas will be cable yarded uphill. 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 2 will be cable yarded from landings in Area 1.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.0	0.0
Improve	0.0	0.0	0.0	.46
Maintain	0.0	.16	.42	0.0
Close/Block	0.0	0.0	0.0	0.0
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 Deer Creek watershed, a large size Type F tributary of the West Fork Millicoma River. The stream associated with this sale will be surveyed to ODFW protocol for fish presence in 2006. All drainages associated with the sale area were field surveyed during the 2005 summer low flow period to determine the stream channel extent and whether streamflow is perennial or seasonal. Both sale areas are adjacent to Deer Creek, a large Type F perennial stream. Area 1 appears to have five potential debris flow tracks capable of delivering to Type F Deer Creek (based on aerial photo analysis).

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. 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 basin 13 above the required reserve acres. Reserve acres in this basin include 984 acres (16%) that will be continually retained in riparian management areas, habitat conservation areas and other conservancy acres. 50% of this basin (2984 acres) must provide dispersal habitat. After this sale plan, there will be 3867 acres of dispersal habitat retained which includes 72 acres of in-growth in 2006 and 278 acres of in-growth in 2007. The Deer Creek Habitat Conservation Area is adjacent to Areas 1 and 2 to the northwest. Trees within the HCA will be protected during operations to prevent damage.

Marbled Murrelet – The sale area was surveyed according to protocol standards during the 2005 survey season, and will receive second year surveys in 2006. The sale is in the vicinity of the Knife Point MMMA. ODF's Southern Oregon Area Biologist will determine the application of seasonal restrictions during sale layout to comply with ODF's policies for the Marbled Murrelet.

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

Salmon and Steelhead – Both 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 wood 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 improving wintering habitat. Locations and quantities of large wood placement will be identified during the sale preparation process.

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 review by the 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. 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: Five small streams appear to drain this unit. All forks appear to be potential debris flow tracks. Potential debris flow track reach management standards apply. The steep slope immediately above Deer Creek appears likely to deliver an open-slope debris flow to the creek.

Area 2: The steep slopes above Deer Creek 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.

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 and improvement 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	80
2	4

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