

Pre-Operations Report 2009 Sale

Operation Name: Northwest Windy Thin
County: Douglas County
Management Basin: Umpqua

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Partial Cut	65	60
2	Partial Cut	48	45
Total		113	105

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The sale is in the upper reaches of Windy Creek on the northwest portion of the tract. A stream bisects the sale into Area 1 and Area 2. Roads reach the west and east side of the sale and come into Area 2 at the bottom. Area 1 is a southeast facing slope and area 2 is a southwest facing slope. There is also a stream in the south that flows directly east and eventually into Windy Creek.

Soils are primarily the Acker-Norling (5F & 6F) complex. Soils of these types are moderate to deep and well-drained. Seedling mortality is a concern for this type. Both of these soil types are susceptible to windthrow during periods of strong winds when the soil is saturated.

II. CURRENT STAND CONDITION:

Overstory: Both of these stands are mixed conifer¹: Douglas-fir, grand fir, and incense cedar, with some sugar pine and western hemlock. A sprinkling of madrone and chinkapin make up the hardwoods. Area 1 is very dense and area 2 is moderately dense. Only the dense patches of the stand type will be thinned in Area 2.

Understory: Area 1 (5042) has a sparse understory. The plant varieties are salal, Oregon grape, sword fern, and beargrass. The total of all overlapping understory shrub layers is 23% including 12% seedlings less than 15 feet tall. Area 2 (5043) has more understory (42%) including 34% in seedlings under 15 feet tall. The primary vegetative species found there include Manzanita, salal, and beargrass.

¹ Area 1 (Total BA= 236) DF-137, GF-20, IC-31, WH-27, MA, SP and Area 2 (Total BA=120) DF-92, GF, IC, SP, WH, MA, GC

Snags: Area 1 is snag deficient with nine 8-10” snags/acre and only 1 cedar snag in every 10 acres greater than 12”. In Area 2, there are 3 Douglas-fir snags per acre over 12” and 1 per every 2 acres over 24”. There are almost two hard snags (class 1 and 2) per acre over 12”.

Down woody debris: Area 1 has 82 cubic feet of hard down wood (class 1, 2), and 2,518 (SE = 23%) total cubic feet of down wood. There is more down wood in Area 2: 157.6 cubic feet of class 0 and 1 and 3,187 total cubic feet (SE = 29%).

Current Stand Structure: Area 1 is closed single canopy and Area 2 is in understory development. Closed single canopy stands allow less light to reach the forest floor and have less vegetation and seedlings in the understory than the understory development or layered stands.

Insects and disease: This area does not have a high occurrence of forest pathogens of concern. Root rots including laminated root rot (*Phellinus weirii*) are not a significant problem. The climate is too dry for Swiss needlecast (*Phaeocryptopus gaeumanni*) to be a concern. There is some occurrence of the fir engraver (*Scolytus ventralis*) in true firs in this area. True firs are not a significant component of these stands and thinning them will reduce the susceptibility to fir engravers. Sugar pine, if planted, may become infected with white pine blister rust (*Cronartium ribicola*).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age 06	DBH	BA	TPA	SDI	Acres ²
1	Moderate Thinning	5042	All	76	13	226	254	73	65
		Target ³	All		14	160	150	43	65
2	Light Thinning	5043	All	56	13	120	122	37	48
		Target ³			14	100	80	25	48

1. The source of stand inventory information is SLI from the year 2002. Trees over 5.6 inches.
2. The acres listed above are the total gross acres based on GIS including roads, and streams buffers.
3. The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED FUTURE CONDITION/VISION:

The purpose of the following stand management treatments is to reduce moisture stress and competition lowering the risk presented by disease and wildfire, and to raise revenue for the Counties by removing a small amount of timber. Thinning will help reduce interspecies competition and stress on the trees helping to prevent beetle outbreaks and disease. Removing some of the ladder fuels will help prevent fire from reaching the canopies and killing the dominant overstory trees.

Area 1 (stand 5042) is classified to grow into OFS sometime in the future. The thinning will help it along that trajectory. Area 2 (stand 5043) is classified to move toward a layered stand. The thinning and patch cuts will help create layering. Patch cuts will be

created in areas with unique features. An example may be to remove trees in a patch around sugar pine, to allow natural seeding, and give the parent trees more light, water, and nutrients. Interplanting patch cuts may be necessary if natural seeding is not occurring.

Table 3. Stand Structure Information:

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres ²
1	5042	CSC	UDS	OFS	65
2	5043	UDS	UDS	LYR	48

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed.
2. Gross acres.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

Stand 5042 will receive a moderate thinning that will reduce the basal area of the stand from 226 sq. ft to 160 sq ft. This stand is high density (SDI=73) and could benefit from a thinning. The thinning would help the dominant trees grow in size and stimulate growth to the understory. Area 2 would benefit in the same way. It will receive a light thinning.

Desired Silvicultural Results: The commercial prescription will primarily be a basal area thinning from below to remove the suppressed, intermediate and some of the codominant trees from these stands. Some of the healthy advanced understory will be reserved to promote layering. An upper diameter limit will be established to preserve the largest and healthiest trees in the stands. Density management will increase growth and development of the overstory and understory. Thinning these stands will increase the health and vigor of the residual conifer and hardwood trees as well as reduce the likelihood of insects, disease, wildfire, or other stand replacing events. Approximately 2-5% of the sale area will remain in unthinned patches at least 1 acre in size due to limitations in logging capabilities. The largest and healthiest trees will be left throughout the sale, as well as any trees that have the Old Growth characteristics of rough bark, large limbs and deformed tops. Hardwood trees or patches will be thinned to create growing space for conifers and to improve the health and vigor of the larger residual hardwoods. Opportunities to create small ¼ to one acre openings will be explored during sale layout. These patch cuts provide an opportunity to leave extra down wood. Openings with insufficient natural seeding will be planted with conifer. This combination of partial cutting and group selection emulates the natural processes behind the development of LYR and OFS stands.

Snags: Snag creation will be required. Area 1 is more snag deficient based on inventory information, but this will be verified on the ground to determine if one unit shall receive more of an emphasis on snag creation. An estimated 1 to 1.5 snags per acre will occur as a result of logging and natural mortality. The sale area will be assessed after logging to determine the amount of snags to create. It is likely that an additional 1 snag per 2 acres will be created by tree topping or girdling the top. All pre-existing

snags that are not safety or fire hazards will be retained. Any snags that are felled will be retained for down woody debris.

Down woody debris: Approximately 100 cu. ft. per acre of class 1 debris will be added through normal logging operations including trees that are damaged and eventually blow down and cull log segments required to be left on the ground. Additionally any time a stand is opened up from management activities the possibility of isolated blow down or top breakage exists. No yarding of down woody debris will be permitted.

Insects and disease: The sale will focus on removing the trees that have the smaller, less developed crowns, poor vigor and thus are more susceptible to insects and disease.

Fuels Modification: Residual slash, tree tops and limbs, will be burned if unacceptable accumulations remain after harvest.

Regeneration: Regeneration from seed will occur naturally as a result of the thinning, especially in group selection areas.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	525		525
Stumpage Value (\$/MBF)	\$250		
Estimated Gross Value	\$131,250		\$131,250
		Project Costs:	\$12,000
		Estimated Net Value:	\$119,250

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access: Area 1 will be accessed from the west across private land. The private road ends a few hundred feet short of the property boundary. A road will have to be built down a ridge to get to the sale, or the private landing will have to be used. Area 2 will be accessed from ODF managed lands on the eastern side.

Harvesting: The sale will be cable yarded in the summer. Area 1 will be cable yarded to one landing on the east of the unit. There will be an opening in the canopy of perhaps 2 acres where the cable corridors come together. Area 2 has better access

and opportunities for multiple landings.

Table 5. Transportation Management Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				0.5
Improve				
Maintain				0.5
Close/Block				
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

The West Fork of Windy Creek, a small fish-bearing stream, extends from the south border of area 2 into Area 1. Area 1 and 2 are bisected by a small tributary that is fish-bearing half-way into the sale. All streams will be posted according to the Southwest Oregon Forest Management Plan riparian management area rules. To the extent that harvesting will be occurring in the “inner” and “outer” RMA zones, live tree and snag retention will exceed the requirement standards in the SWO FMP.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Northern Spotted Owl: The SOA Wildlife Biologist has determined that the sale area is suitable for Northern Spotted Owls due to the age and size of the trees. Surveys for NSO’s have taken place over several years and will continue in 2008. There are no spotted owl nest sites within 1.3 miles of the sale area.

Marbled Murrelet: This sale is outside the known inland range of the marbled murrelet and will not require surveys.

Threatened and Endangered Fish: The small perennial fish stream that flows through the sale is in the upper reaches of Windy Creek. It is not known whether Coho travel up the tributary this far.

Threatened and Endangered Plants: The sale area was checked against District knowledge for any listed plant location as well as the Oregon Natural Heritage Program (ONHP) database of known listed plant locations.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

A hazard assessment of slope stability is conducted by a Geotechnical Specialist if there are any issues with structures downstream of the sale. This sale does not have any structures nearby.

X. RECREATION RESOURCES:

There are no developed trails or facilities in close proximity to the sale.

XI. CULTURAL RESOURCES:

The sale area was checked against a cultural resources database and maps. The sale area is not likely to have cultural resources. During sale preparation, the sale area will be reviewed for cultural artifacts.

XII. SCENIC RESOURCES:

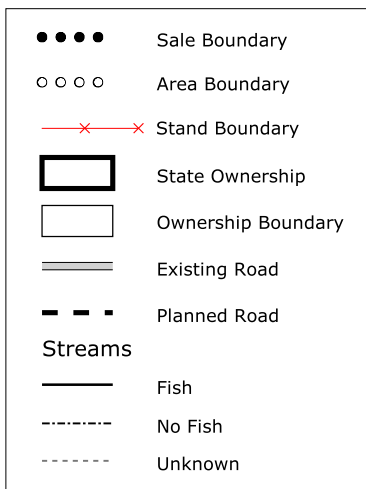
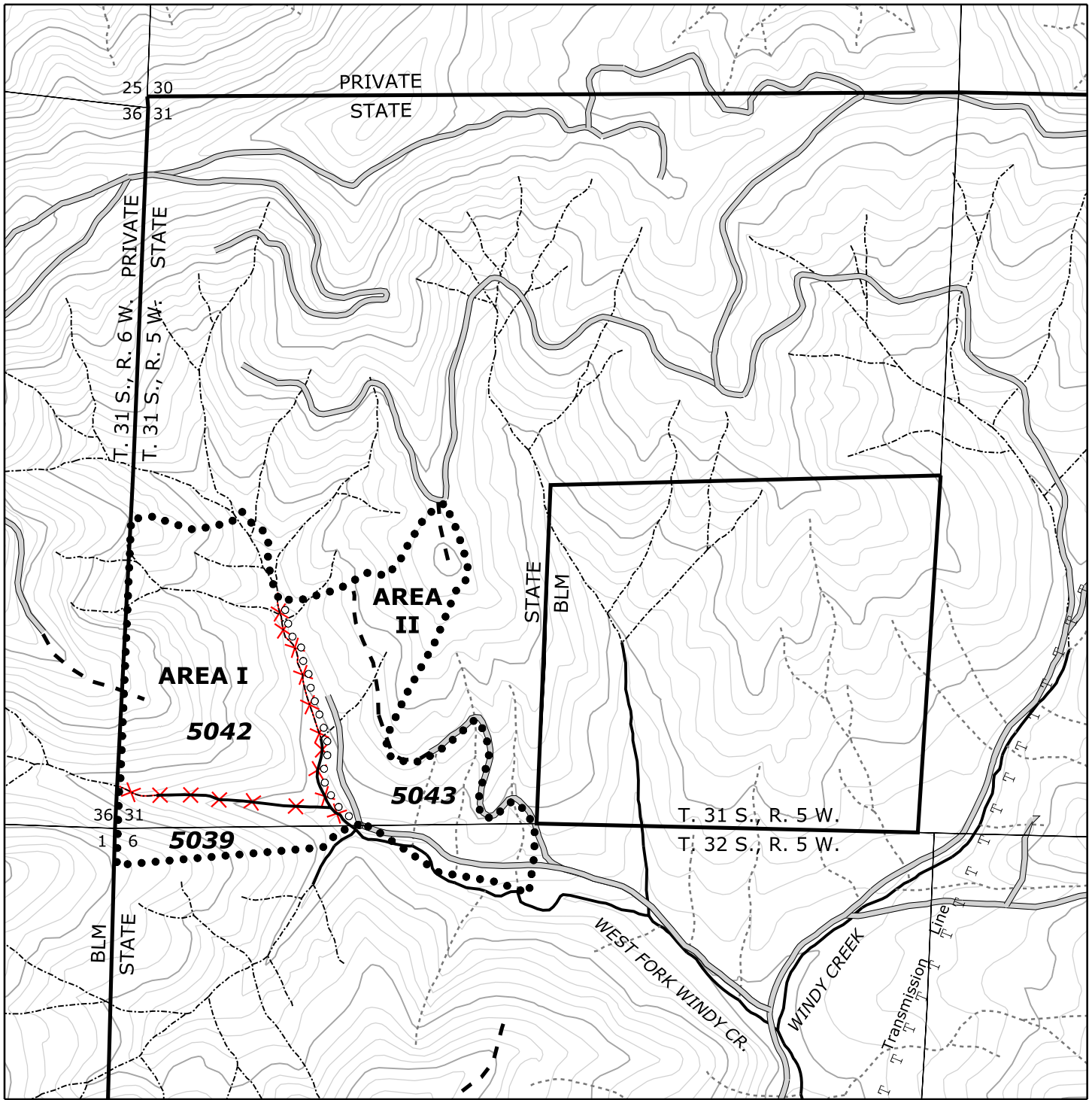
The Visual Classification is rated as Level III – Low Sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

There are no other resource considerations within or adjacent to the sale area.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale has streams that receive “focused” or “special stewardship”. Small seasonal streams receive focused stewardship in the inner and outer RMA zones where a specified basal area retention is required. Small perennial streams receive special stewardship or specific stream buffer protection in the stream bank zone. The inner and outer RMA zones of the perennial streams receive focused stewardship. The small fish-bearing streams receive the above stewardship with an added emphasis, or special stewardship in the aquatic and inner riparian management areas. The stewardship is accomplished through stream buffers of increasing size as the stream becomes larger and supports fish. Specific requirements are listed in the appendix of the Southwest Oregon Forest Management Plan riparian management area rules.



Northwest Windy Thin



S.W.O. District - 2009 Annual Operations Plan

T. 31 S., R. 5 W., Sec. 31; W.M.
Douglas County, Oregon

ACRES (est. gross)	
AREA I	: 65 acres
AREA II	: 48 acres
TOTAL	: 113 acres

500 0 500 1000 1500 2000 Feet



Contour Interval : 40 feet