

Pre-Operations Report

Operation Name: Trask Cutoff
County: Tillamook
Management Basin: Trask

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	MC	37	35
2	PC	122	114
3	MC	137	123
4	RC	82	74
Total		378	346

¹ The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), other stream buffers, reserve area and non-required thinning areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a varied aspect and range from 10% to 70%. Elevations range from 300 to 1240 feet. The major soil types are Enright 52% and Killam 30% with minor soil types of Rye 13%, Pinochle 4% and Cochran 1%.

The landforms are gentle ridgelines and some steeper side-slopes between Samson Creek and two un-named tributaries of the Trask River to the east of Samson Creek. The underlying rocks of the western portion of the sale area are mostly igneous origin rocks of the Tillamook Volcanics Formation, submarine basalt tuff and breccia, thin bedded to massive tuff and breccias with pillow basalts, basaltic sandstone and mudstone sedimentary origin rocks of the Yamhill Formation massive to thin-bedded dark gray siltstone commonly associated with tuff beds and thin sandstones. The underlying rocks of the eastern portion of the sale area are mostly sedimentary origin rocks of the Yamhill Formation massive to thin-bedded dark gray siltstone commonly associated with tuff beds and thin sandstones.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	316	DF/WH/RA	34	15/21/14	168	137	36	35
2	PC	317	DF/WH/RA	52	19/17/13	192	148	49	114
		Target ³	DF/WH		24/17	94	48	22	114
3	MC	318	DF/WH/RA	38	17/19/14	190	118	46	123
4	RC	319	DF/WH/RA	52	19/22/16	128	69	29	74
		Target ³	DF/WH		29/22	40	10	8	74

¹ The source of stand inventory information is from field reconnaissance cruise plots taken in 2004.

² The net acres are based on orthophotos and GIS and exclude roads, and stream buffers (special stewardship), other stream buffers, reserve area and non-required thinning areas. Modified clear cut acres are not contiguous and do not exceed 120 acres.

³ The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

⁴ These numbers are based on plot data taken to this point and final numbers may differ significantly from the actual conditions. The directive for minor and major modifications will be followed for further review.

The sale areas burned in the Tillamook Fire and the northeast section burned again in the Saddle Mountain Fire. The majority of the sale areas were planted in 1958-1962 and part in 1969-1970, the remainder has naturally regenerated. The partial cut area was pruned, and pre-commercially thinned in the late 1970's. Portions of Area 4 were commercially thinned in 1994. The remainder of the sale areas have had no prior stand management.

Approximately 130 acres of partial cut has been inventoried using the Stand Level Inventory (SLI) procedure and the stand has been identified as UDS. Approximately 15 acres of retention cut has been inventoried using the Stand Level Inventory (SLI) procedure and the stand has been identified as CSC. The remaining acres of the sale were identified as CSC according to the district stand summary information (1999).

These stands are occupied by naturally regenerated Douglas-fir and alder that initially out-competed other species. Larger diameter second growth trees are a stand component that will be reserved as this stand is treated. The stands are patchy, divided by an abandoned power line right-of-way through the sale area. There is little vertical layering evident. Area 1 is a hardwood/conifer mix adjacent to a major roadway.

See Table 2 for specific stand data.

The Douglas-fir has Swiss needle cast (SNC) symptoms and poor live crown ratios resulting in slowed diameter and/or height growth. The stands have been mapped by aerial surveys in each of the last three years.

There is scattered hemlock, spruce and cedar throughout the sale. The alder components of these stands were aerially sprayed to release planted conifer in

the 1970's resulting in alder trees with short boles and many limbs. No other significant insect or disease problems have been discovered at this time.

The understory in all the sale areas is comprised primarily of vine maple, sword fern, salmonberry, Oregon grape, huckleberry or bracken fern. The brush is controlled by the overstory. Where the canopy is open the vine maple and salmonberry have created thick stands over 15 feet high. Other species exist in minor components and not as a continual layer.

There are some large snags in various states of decay and/or some hard snags created from wind and/or bear damage. SLI reports approximately 8 snags per acre, including 5.5 over 24" DBH in Area 2. Area 4 is reported by SLI to have approximately 2 snags per acre, all of which over 24" DBH. Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow in decay classes 1 and 2 and slash from recent partial cut activity in Area 4. Area 2 has approximately 1700 cubic feet total per acre, including 195 cubic feet per acre in decay classes 1 and 2, for 130 acres. Area 4 has approximately 6200 cubic feet total per acre for 15 acres, with approximately 50 cubic feet of it in decay class 1 or 2. The levels of snags and down wood in decay classes 1 and 2 are deficient according to the FMP. Visual evidence indicates the large amounts of class 3 are still sound at the core and have just entered that decay class.

III. DESIRED STAND CONDITION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	316	CSC	REG	GEN	35
2	317	UDS	UDS	GEN	114
3	318	CSC	REG	GEN	123
4	319	UDS	UDS	GEN, LYR	52/22

¹ The stand is expected to develop into this condition in the five to ten years after this operation is completed except in REG stands which occur after harvest.

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition goals.

Partial Cut:

In the short term Area 2 will be partial cut to reduce stand density. This is a first entry operation to begin to move the stand along the pathway to more complex structure.

In the long term this operation moves the stands toward more complex structure. This prescription will allow for openings and gaps in the stand to allow the residual trees to grow larger in diameter and crown depth. The openings and

gaps will also allow for understory re-initiation of shrubs and tree species creating horizontal and vertical diversity. The expectation is future density management to continue the growth of overstory trees as well as understory trees and shrubs species. Additional opportunities to create snags will also be presented.

The stand will be evaluated by future Stand Level Inventory to determine snags per acre and cubic feet of down wood. If the stand is deficient in either of these characteristics, additional amounts will be created. At this time the amount of snags per acre meets the Forest Management Plans' goals.

Regeneration Harvest:

Area 4 is not expected to develop complex characteristics due to decreased growth caused by SNC infection. By conducting a final harvest and planting a mix of conifer species, the potential for future opportunities will be increased.

Whole treatment of 4 areas will create a mosaic over 378 acres of openings, gaps, variable densities and mixed species. Unmanaged hardwood and conifer mixes will be left in headwalls, and/or in riparian buffers as well as scattered in the unit. Areas of significance to wildlife and scenic value will be evaluated during sale preparation for best management practices.

As the future stand is established the residual trees from this harvest will add to complexity of sizes, species and densities. These trees will also add to snags and down wood over time and through the life of the stand.

Stand Level Inventory (SLI) will be scheduled for clearcut and regeneration harvest units five to seven years after stand establishment. This inventory will provide more data on down wood and snags in the harvest units. If the stand is deficient in either of these characteristics, additional amounts will be created.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

See table 2 for prescription targets

Partial Cut:

In Area 2, merchantable alder will be harvested. Douglas-fir, hemlock and spruce will be thinned to a basal area range of 100 to 120 square feet. All other species will be reserved.

Modified Clearcut:

In Areas 1 and 3, Douglas-fir and merchantable alder will be removed. A diameter limit will be used to select the largest conifer trees per acre to be left. These residual trees will provide for future down wood and/or snags. All other species will be reserved.

Retention Cut:

In Area 4, an average residual basal area will be at least 33 square feet, primarily in Douglas-fir. Douglas-fir and merchantable alder will be removed. All other species will be reserved.

Understory vegetation will be enhanced by the additional growing space available in previously unthinned portions.

Green Tree, Down Wood and Snag Strategies

See also Section III: Desired Future Condition for long term strategies

A variety of methods will be used to achieve green tree retention requirements. These residual green trees will supplement the future stand by promoting growth of dominant/co-dominant leave trees. These leave trees function as future source of snags and down wood recruitment across the landscape. In Area 1 increased amounts of conifer green trees will be reserved to add to the scenic value and allowing more of the larger trees of all species to be left.

Existing down wood will be left in the sale areas. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and tops left during harvest. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags and down wood. Areas where ground yarding is appropriate the tops will be required to be left in the units rather than on landings.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities (rub trees, lift trees, or tail trees) and over time by natural processes.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	2899	456	2745
Stumpage Value (\$/MBF) *	\$233.93	\$181.09	
Estimated Gross Value	\$678,175	\$82,575	\$763,750
		Project Costs:	\$87,500
		Estimated Net Value:	\$676,250

**Combined Douglas-fir and hemlock stumpage values based on harvest type.*

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Trask Cutoff and Samson Ridge Roads. These are currently all weather, crushed rock roads.

Approximately 0.2 miles of existing unsurfaced and 0.7 miles of abandoned road will be improved which includes grading, rocking, widening, culvert replacement, spot rocking, sidecast pullback, and adding new culverts. This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 0.8 miles of road will be constructed in order to avoid improving roads through riparian areas. Following harvest, roads within the sale areas will be reviewed for closure. See summary document for more information on this topic. Other project work that will be included with this sale is installing a fish passable culvert on Johnson Creek.

The operation will be 50% cable yarding and 50% ground yarding in Area 1. The operation will be 100% cable yarding in Area 2. Area 3 will be 90% cable yarding and 10% ground yarding. Area 4 will be 85% cable and 15% ground yarding.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0	0.8
Improve	0	0	0.9	0
Maintain ²	0	1.9	1.1	0
Close/Block ³	0	0	0	0.8
Vacate ³	0	0	0	0

¹ Additional roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest

² All roads accessing the sale area will be maintained during the life of the timber sale contract.

Maintenance miles in the table are those roads not being constructed or improved.

³ Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.

⁴ The numbers in this table reflect planned Project Work associated with the sale.

VII. AQUATIC RESOURCES AND WATER QUALITY:

Johnson Creek is a medium stream of unknown status that is within and adjacent to the sale areas. Megan Creek is a small perennial Type N streams that is within and adjacent to the sale area. There are several unnamed small perennial and seasonal Type N streams within the sale areas.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

Stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

ODFW fish biologist will work with ODF to identify possible stream enhancement projects to incorporate wood placement into the stream with harvest activities.

In order to protect water quality 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, using sediment control devices in road ditches when necessary, and monitoring logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and September 15. Operations outside of this period will be reviewed with ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale area has been reviewed with the ODF Northwest Oregon Area Biologist. It was determined that in the sale areas there is potential marbled murrelet habitat within or adjacent to the sale boundary. Tree climbing surveys were conducted with consultation with USFWS in 2004. Adjacent potential habitat will be surveyed during the 2004 and 2005 survey season for marbled murrelets. All surveys for marbled murrelet were/will be conducted in accordance with Pacific Seabird Group (PSG) protocol. Trees climbed for surveys will be reserved from harvest.

It was determined that in the sale areas there is potential northern spotted owl habitat within or adjacent to the sale boundary. Surveys will be conducted during the 2004 and 2005 survey season. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol.

T & E Fish species: See Sections VII for listed fish protection measures.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were found within the sale areas. A plant on the state candidate list was identified as being in the general location of the sale. This plant is not given special legal protection but ODF is documenting its occurrence and managing around it where possible to prevent disturbance. The plant is an understory species normally occurring in moist shady areas next to streams. All riparian areas are protected as part of the planned activity.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial assessment from the geotechnical specialists is moderate; there is one area where high landslide hazard locations might be of concern in the southwest portion of the sale area. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

X. RECREATION RESOURCES:

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator.

OHV trails were identified within or adjacent to the sale areas. There are no designated trails planned for this area. During sale layout trails within the sale area will be reviewed for closure.

Recreational use common to this area includes hunting, fishing and OHV use.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does list a cultural site adjacent to the proposed sale boundary. This resource is described as Stones Camp. The cultural resource classification for this site is Class II – ODF Identified for Protection. The district will consult the Public Use Coordinator for appropriate protection measures when necessary.

XII. SCENIC RESOURCES:

Areas 2, 3 and 4 have a visual classification of Level 3, low sensitivity. No scenic impact is expected.

Area 1 has a visual classification of Level 2, moderate sensitivity. Visual impact will be minimized due to the small size of the treatment area visible and the increased amount of residual trees after harvest. The Public Use Coordinator will be consulted during sale layout. There will be some visual impact until green up occurs.

XIII. OTHER RESOURCE CONSIDERATIONS:

There is 1-hectare permanent inventory plot # 2146062 located in Area 2.

There is currently a Special Use Permit for use of state land by Tillamook County Public Works Department in Area 1. Permit is for parking and disposing of excavated material.

Portion of Area 1 is deeded Landscape Management Area by a county resolution. See Section XII for more information.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian	3	0
1	Recreation	17	0
1	Deeds	16	0
2	Aquatic and Riparian	44	5
2	Recreation	<1	0
2	Deeds	<1	0
3	Aquatic and Riparian	47	8
4	Aquatic and Riparian	29	1

This table summarizes the acres of Focused and Special Stewardship within the operations. The acres in each operational area in this table do not necessarily add up to its gross or net acres, because of overlapping classifications under the Land Management Classification System (Feb. 2003). For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.