

Pre-Operations Report

Operation Name: Tucca Head

County: Tillamook

Management Basin: Trask (52%), Nestucca (48%)

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	PC	42	40
2	PC	24	23
Total		66	63

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 various aspects and range from 5% to 50%. Elevations range from 1800 to 2100 feet. The major soil type is Killam.

Area 1 is located on the divide between the Trask and the Nestucca River on a spur ridge and gentle to moderate slopes between an un-named tributary and the mainstem of Tucca Creek a tributary to the Nestucca River. Area 2 is located on gentle slopes on the east flank of an un-named tributary of Stretch Creek, a tributary to the Trask River. There is only one steep slope noted in Area 1 of the sale. The underlying rock is 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	PC	307	DF/WH	52	19/10	230/5	114/9	58	40
		Target ³	DF/WH		23/10	100/5	35/9	28	
2	PC	308	DF/WH	52	17/32	171/6	107/1	44	23
		Target ³	DF/WH		21/32	86/6	42/1	28	

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.

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.

Area 1 burned in the 1939 Saddle Mountain Fire and the 1951 North Fork / Elkhorn Fire and a portion was planted in 1967, the rest of Area 1 was naturally regenerated. This area was pre-commercially thinned in 1980, commercially thinned in 1991, and fertilized in 1995-96. Area 2 was planted in 1966-67 and replanted in 1972. This sale area was fertilized in 1995-96 and had no other prior stand management.

The stands in the sale areas are classified as 97% CSC and 3% UDS according to the district stand summary information (1999).

This stand is comprised mostly of Douglas fir with a minor component of scattered hemlock. The understory is beginning to develop vertical layering.

See Table 2 for specific stand data.

The Douglas-fir has low to moderate Swiss needle cast (SNC) symptoms. The stands have been mapped by SNC aerial surveys.

There is scattered hemlock, cedar, and alder 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, Oregon grape, huckleberry, and/or bracken fern. The majority of the understory is ground cover type, with some larger species near openings or streams.

There are some large snags in various states of decay and/or some hard snags created from (wind, snow, and/or bear damage). 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. A neighboring stand of similar composition was inventoried using SLI and was found to contain approximately 1.4 snags per acre and greater than 4600 cubic feet of down wood.

III. DESIRED STAND CONDITION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	307	CSC/UDS	UDS	GEN/LYR	39/1
2	308	CSC/UDS	UDS	OFS/LYR/GEN	21/1/1

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

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 Areas 1 and 2 will be partial cut to reduce stand density. This operation will begin to move the stand along the pathway to more complex structure.

In the long term 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 or sustained growth 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.

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.

Whole treatment of 2 areas will create a mosaic over 66 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.

As the stand matures the residual trees 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. Natural regeneration is expected to occur.

A snag assessment will be done approximately five years following sale completion. Partial cut units with a resulting average diameter over 15 inches will be reviewed for snag creation at time of harvest. Snags will be tallied during sale layout to determine if snag creation is appropriate at harvest.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

See table 2 for prescription targets

Partial Cut:

In Areas 1 and 2, Douglas-fir will be thinned to a basal area range of 90 to 110 square feet, all other species will be reserved.

Areas 1 and 2 will have a reduced stand density (25 to 40 SDI) which will maintain stand vigor and develop healthier and larger trees in the residual stand. These conditions will help move these areas towards LYR and OFS in the long term.

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

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. Where ground yarding is approved tops will be required to be left in the harvest units rather than brought to the 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:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	843	0	843
Stumpage Value (\$/MBF)	\$250	0	
Estimated Gross Value	\$210,750	0	\$210,750
		Project Costs:	\$30,000
		Estimated Net Value:	\$180,750

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Trask River County Road, South Fork Trask, Boundary, and Headquarters Grade Roads. These are currently all weather, crushed rock roads. See maps for specific road locations and conditions.

Since markets for Douglas-fir timber are in the Willamette Valley and log hauling to the south over BLM controlled roads is likely, an access agreement will be obtained from the BLM. If delays are encountered with obtaining agreement this sale may be delayed to a later quarter.

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 may be included with this sale is installing fish passable culvert on the East Fork of the Trask River. ODFW will be consulted during sale prep.

The operation will be 100% ground yarding in both areas.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0	0
Improve	0	0	0	0
Maintain ²	8.8	4.7	1.1	0
Close/Block ³	0	0	0	0
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:

There are no known Type F streams within or adjacent to the sale areas.

Elk Creek and Nestucca River are large Type F streams that are adjacent to the haul route. There are 3 unnamed small perennial or seasonal Type N streams within the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain.

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 project areas in Headquarters Creek to incorporate wood placement into the stream with harvest activities.

Approximately 32 net acres of the sale are within the East Fork of the South Fork Trask sub-basin. This sub-basin has been identified as a Salmon Anchor Habitat (SAH) Basin and the most current SAH Basin Strategies will be used at the time of sale layout.

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 areas have been reviewed with the ODF Northwest Oregon Area Biologist. Surveys for marbled murrelets are not required for Tucca Head, due to the absence of potentially suitable habitat.

It was determined that in the sale areas there is potential northern spotted owl habitat, and other species habitat within or adjacent to the sale boundary. Surveys will be conducted during the 2004 and 2005 survey season for northern spotted owl. 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 identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The only steep slope area within the harvest units appears to have very low risk to natural resources. The initial assessment by the geotechnical specialists is low. The geotechnical specialist may be consulted if concerns arise during sale layout.

The sale areas have been identified as SAH Basin and the most current SAH Strategies will be used at the time of contract development. See the Summary Document for more information.

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. No designated trails are planned in this area. Trails within the sale areas will be reviewed for closure during sale layout.

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

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

None known.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian	11	0
1	Wildlife Habitat	10	0
2	Aquatic and Riparian	9	0
2	Wildlife Habitat	24	0

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.