

Pre-Operations Report

Operation Name: Coast Bill (Alternative)
County: Tillamook
Management Basin: Trask

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	MC	90	87
2	MC	52	47
Total		142	134

¹ The net acres are based on orthophotos and GPS and exclude roads, stream buffers and reserve areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have an N, E and W aspect and range from 5% to 70%. Elevations range from 760 to 1680 feet. The major soil type is Killam, with minor components of Watseco and Rye.

The landforms are narrow ridgelines and steep side-slopes above with gentle lower slopes at the confluence of an un-named tributary and the South Fork of the Trask River. The underlying rocks are predominantly igneous origin of the submarine base of the Tillamook Volcanics Formation. There is a very small area in the center of the eastern portion of the sale that is sedimentary origin rocks of the Tye Formation.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information³

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	326	DF	37	12	131	140	48	87
2	MC	327	DF	37	12	131	140	48	47

¹ The source of stand inventory information is from SLI information from 2003.

² The net acres are based on orthophotos and GPS and exclude roads, and stream buffers and reserve areas. Modified clear cut acres are not contiguous and do not exceed 120 acres.

³ 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 area burned in the 1933 Tillamook, 1939 Saddle Mountain and 1951 North Fork fires and was planted with off-site Douglas-fir. These areas were fertilized in 1992 and pre-commercially thinned in 1996.

The sale areas are classified as 100% CSC according to the Stand Level Inventory (SLI). See Table 2 for specific stand data.

There is a single story of Douglas-fir with scattered patches of alder. The Douglas-fir is from an off-site seed source, is affected by Swiss needle cast (SNC), and is not healthy enough to out-compete the more vigorous alder at this stage. The density of the Douglas-fir is not enough to allow for thinning to stimulate growth. The stands are within the SNC zone and have been mapped by SNC aerial surveys.

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. The "zombie" alder occupies more growing space than unsprayed alder.

No other significant insect or disease problems have been discovered at this time.

The brush component in all the sale areas is comprised primarily of vine maple, sword fern and Oregon grape. The understory is thick in patches where initial planting was not successful.

There are some large snags in various states of decay and/or some hard snags created from animal damage. SLI indicates approximately 2.8 snags per acre greater than 24" dbh and 5.5 per acre greater than 12" dbh. Down wood consists of scattered large old logs (36"+) in Class 3, 4 and 5 stages of decay and some PCT slash in decay classes 1 and 2. SLI indicates 41 cubic feet of downed wood in early decay, and over 1900 cubic feet total. At this time there is not enough green trees to reach these landscape targets inside the sale areas and have a viable timber sale. A strategy proposed of creating snags and downed trees at conclusion of harvesting may add to general structure for the landscape.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	326	CSC	REG	GEN	87
2	327	CSC	REG	GEN	47

¹. The stand is expected to develop into this condition 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.

The prescription described below is based on the current stand condition such as overall tree and stand growth, lack of species mix, stand density, and stand health. The goal at this time is to remove potentially off-site trees infected with SNC and replace the stand with a mix of healthy conifer species. Future managers will have the opportunity to discuss an increased number of options over leaving the stand the way it is.

These prescriptions will combine with the adjacent stands to create a mosaic of openings and variable density stands throughout the South Fork Trask basin. Unmanaged hardwood and conifer mixes will be left in headwalls and riparian buffers as well as between the units. As the future stand is established and matures the residual trees from this entry will add complexity and edge to the structure.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND ANTICIPATED PATHWAY:

See table 2 for prescription targets

Modified Clearcut:

In Areas 1 and 2, a diameter limit will most likely be used to select the largest and best Douglas-fir trees to be left. These residual trees are expected to provide for future down wood and/or snags as well as seed in areas denser than planted. Merchantable alder will be removed. All other tree species will be reserved. The amount of leave trees is expected to be 3 per acre inside the units, with up to 15 per acre overall including riparian buffers.

Understory vegetation will be initially controlled until reforestation is established, then enhanced by the additional growing space available.

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. Small non-merchantable hardwood and conifer will also be retained where possible. These leave trees function as future source of snags and down wood recruitment across the landscape. Green trees will be left on precipitous slopes, headwalls, and those areas not reached by conventional logging methods. Stream buffers adjacent to small perennials and the outer Riparian Management Area (RMA) of larger creeks will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

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 ground yarding harvest. Piling of tops may be utilized to

facilitate planting seedlings and reducing fire hazard levels. 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.

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.

A treatment of girdling and felling trees around the perimeter of Area 1 after harvest is being evaluated for effectiveness and feasibility. Current estimates propose approximately 100 trees treated. This treatment should result in 50 fresh snags and approximately 5600 board feet of Class 1 downed wood. The majority of the treatment would be along riparian areas. Wildlife biologists will be consulted to determine species and size targets.

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)	1400	275	1675
Stumpage Value (\$/MBF)	250	250	
Estimated Gross Value	\$350,000	\$68,750	\$418,750
		Project Costs:	\$46,090
		Estimated Net Value:	\$372,660

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via South Coast Range, Powderhouse and South Fork of the Trask River Roads. These are currently all weather crushed rock roads. See maps for specific road locations and conditions.

Approximately 0.4 miles of abandoned road will be improved which includes grading, rocking, widening, and sidecast pullback. This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 0.9 total miles of road will be constructed to provide access to cable yarding areas and facilitate future management. 0.2 miles of will be on top of a ridge, 0.7 miles will be gentle side slope construction. At completion of harvest, roads within the sale areas will be reviewed for closure. Ground yarding

roads will be closed and water-barred following harvest. See summary document for more information on this topic.

Other project work that will be included with this sale are drilling and exploration of a possible rock source adjacent to Area 2. District engineering personnel have been involved in determining priority of project.

The operation will be 70% cable yarding and 30% ground yarding in Area 1. Ground yarding will generally be limited to slopes under 35%. Area 2 is expected to be 100% cable yarding.

An easement is required to cross Green Diamond Resource Company land to access the sale areas for harvest.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0.8	0.1
Improve	0	0	0.4	0
Maintain ²	4.5	2.5	0.2	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 evaluated 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:

A watershed analysis has been completed for the Trask basin. Stream enhancement projects associated with this sale will be based on the analysis. Oregon Department of Fish and Wildlife (ODFW) has completed stream surveys for fish presence on the most likely fish bearing streams, and will be requested to complete surveys on the remaining streams prior to sale completion.

South Fork Trask River and Bill Creek are large Type F streams that are adjacent to the sale areas and haul route. There are additional unnamed small perennial and seasonal Type N streams within and adjacent to the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain according to the *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.

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. Surveys for marbled murrelets are not required for Coast Bill due to the absence of potentially suitable habitat.

Spotted owl surveys are not required for Coast Bill, as the sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*.)

T & E Fish species: See Sections VII, and IX 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 steep upper slopes appear to be low risk to resources due to the gentle nature of the slopes below except along the south boundary of the sale area. The initial assessment from the geotechnical specialists is low to moderate. The geotechnical specialist will be consulted during sale layout to determine if a field visit is appropriate.

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. No designated OHV trails were identified within or adjacent to the sale areas. There is an undesignated trail in Area 1 that is currently closed. The District Recreation Coordinator will be consulted during sale layout and administration to evaluate opportunities in the area. Recreational use common to this area includes hunting. A dispersed campsite off the South

Fork of the Trask River Road adjacent to Area 1 will remain available during harvest activities.

Large waste material such as root wads and boulders, generated from project work, will be stockpiled in a stable and accessible location for future trail projects.

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 majority of the sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected. A section of Area 1 could be visible from the South Fork Trask River Road and has visual classification of Level 2, moderate sensitivity. Due to the proximity of private industrial clearcuts no visual impact is expected. The Public Use Coordinator will be consulted during sale layout to determine methods to minimize visual impact.

XIII. OTHER RESOURCE CONSIDERATIONS:

There is a deed restriction off the South Fork Trask River, referred to as County Resolution Land (Fund 54). The area affected will be treated appropriate to the deed restriction.

The property line with Green Diamond will be further evaluated during sale layout. All corner markers and bearing trees will be protected from harvest.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Area 1 contains Focused Stewardship, Aquatic and Riparian Habitat, Deeds and Recreation. See Section VII, Aquatic Resources and Water Quality and Section X, Recreation Resources for the management guidelines to be utilized.

Area 2 contains Focused Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality for the management guidelines to be utilized.

Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.