

Pre-Operations Report

Operation Name: North Cruz Thin
County: Tillamook
Management Basin: Trask

Table 1. Operation Areas, Types and Acres

| Area | Type of Operation | Gross Acres | Net Acres ¹ |
|-------|-------------------|-------------|------------------------|
| 1 | PC | 237 | 191 |
| Total | | 237 | 191 |

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

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have S and E aspects and range from 5% to 75%. Elevations range from 1800 to 2550 feet. The major soil types are Jewell and Grindstone.

The landforms are gentle ridge tops and moderate slopes of the three forks of the north portion of Cruiser Creek. There are small bands of steeper slopes associated with all three forks. The underlying rocks of the northwestern portion of the sale are igneous origin rocks of the Hembre Ridge Formation. The underlying rocks of the southeastern portion of the sale area are sedimentary origin rocks mapped as Sandstones of the Trask River.

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 | 311 | Doug-fir | 42 | 18 | 208 | 119 | 50 | 191 |
| | | Target ³ | | | 20 | 120 | 52 | 26 | |

¹ The source of stand inventory information is from field reconnaissance cruise plots taken in 2005.

² The net acres are based on orthophotos and GPS and exclude roads, and 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.

The sale area burned in the 1933 Tillamook Fire and 1939 Saddle Mountain Fire and was aerially seeded and planted with Douglas-fir. These areas were pre-commercially thinned in 1989 and fertilized in 1992.

The stand in the sale area is classified as 100% CSC according to the district stand summary information (1999).

The stand is dominated by Douglas-fir that has been PCT'd and has responded by filling in the crowns. The alder is dominant along streams, where it was able to become established prior to Douglas-fir seeding. The brush is variable throughout and of several species, with few occurring together.

See Table 2 for specific stand data.

The Douglas-fir has low Swiss needle cast (SNC) symptoms. There is scattered hemlock, noble fir and alder throughout the sale. No other significant insect or disease problems have been observed at this time.

The brush component in all the sale areas is comprised primarily of vine maple, sword fern, salmonberry, Oregon grape and huckleberry. The canopy cover of the trees makes the brush component patchy at best. Some areas that were missed by aerial seeding have patches of brush in place of trees. Low lands and stream side vegetation are dominated by vine maple and salmonberry.

There are some large snags in various states of decay and/or some hard snags created from 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. PCT slash in the area has begun to enter decay class 3.

III. DESIRED STAND CONDITION and VISION:

Table 3. Stand Structure Information

| Area | Stand ID | Current | Post Harvest ¹ | Desired Future | Net Acres |
|------|----------|---------|---------------------------|----------------|-----------|
| 1 | 311 | CSC | UDS | GEN | 191 |

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.

The prescriptions described below are based on the current stand condition such as overall tree and stand growth, species mix, stand density, and stand health.

Partial Cut:

In the short term Area 1 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.

This prescription will allow for openings and gaps in the stand to allow the residual trees to grow larger in diameter and crown depth. Natural seeding is expected in the gaps and thinner areas. The openings and gaps will also allow for understory initiation of shrubs, creating horizontal and vertical diversity. The expectation is future managers will focus on density management to continue the growth of overstory trees as well as understory trees and shrubs species.

These prescriptions will combine with the adjacent stands to create a mosaic of openings over the Elkhorn basin through gaps, variable density and mixed species. Unmanaged hardwood and conifer mixes will be left in headwalls, and/or in riparian buffers as well as adjacent to the sale area.

A snag assessment will be done during sale layout. If this sale is expected to have a resulting average diameter over 15 inches after a more comprehensive cruise it will be reviewed for snag creation at time of harvest.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND ANTICIPATED PATHWAY:

See table 2 for prescription targets

Partial Cut:

In Area 1 merchantable Douglas-fir greater than 11 inches dbh will be thinned to a basal area range of 110 to 130 square feet to stimulate growth. Merchantable alder greater than 11 inches dbh will be harvested to create variable density and make growing space available. Other species will be reserved.

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 and felled snags. Small and 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. Tops resulting from ground yarding will be left in the unit. During sale preparation it will be determined if the tops will be piled in the unit, burned, or dispersed during harvest.

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. Trees topped for support will be left as snags.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

| Ownership | | Sale Type | |
|------------------|-----|-----------|----------|
| BOF | CSL | Cash | Recovery |
| 100% | % | | X |
| Planned Quarter: | | 1 | |

| | Conifer | Hardwood* | Total |
|-------------------------|-----------|----------------------|-----------|
| Net Volume (MBF) | 1662 | | 1662 |
| Stumpage Value (\$/MBF) | 175 | | |
| Estimated Gross Value | \$290,850 | | \$290,850 |
| | | Project Costs: | \$36,260 |
| | | Estimated Net Value: | \$254,590 |

* Alder will be removed according to the prescription. Current estimates are negligible.

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via North Fork Trask, Bark Shanty, Township, Murphy Grade and Cruiser Creek Roads. These are currently all weather crushed rock roads. A different haul route over the Toll Road may be considered during sale layout. See maps for specific road locations and conditions.

Approximately 0.5 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 0.4 miles of road will be constructed to provide access to cable yarding areas. Following 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 to be included with this sale is removing a culvert on Murphy Camp Road which currently is not fish passable. The culvert removal will close the road for up to three years to determine appropriate fish passage needs. A culvert replacement is also planned on Meagan Creek to benefit fish habitat. Grant monies are being pursued for the Meagan Creek culvert project.

The operation will be 60% cable yarding and 40% ground yarding. Ground yarding will generally be limited to slopes less than 35%.

Table 5. Transportation Planning Summary (Miles)⁴

| Activity | Mainline | Collector | Rocked Spur ¹ | Dirt Spur ¹ |
|----------|----------|-----------|--------------------------|------------------------|
|----------|----------|-----------|--------------------------|------------------------|

| | | | | |
|--------------------------|-----|-----|-----|-----|
| Construct | 0 | 0 | 0.3 | 0.1 |
| Improve | 0 | 0 | 0.4 | 0.1 |
| Maintain ² | 3.5 | 9.5 | 2.5 | 0 |
| Close/Block ³ | 0 | 0 | 0.5 | 0.2 |
| 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:

The sale is within the Elkhorn 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 contract development.

Oregon Department of Fish and Wildlife (ODFW) has completed stream surveys to verify fish use. A watershed analysis has been completed for the Trask basin. The riparian areas will be reviewed with ODFW during sale layout.

July Creek and Whirlwind Creek are small Type F streams that are within or adjacent to the sale area. There is another unnamed small to medium Type F adjacent to the sale area to the north. There are additional unnamed small perennial and seasonal Type N streams within and adjacent to the sale areas.

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 during the dry season, defined as 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 not yet been reviewed with the ODF Northwest Oregon Area Biologist. Surveys for marbled murrelets are not expected for North Cruz Thin due to the absence of potentially suitable habitat.

Surveys for northern spotted owls are not required for North Cruz Thin, as the sale area is within the Tillamook Burn. If the stand does average greater than

18" dbh, as determined with a more comprehensive cruise, the sale will be evaluated again. The area is being surveyed during the 2005/2006 survey seasons as part of the Tillamook Burn Monitoring.

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 initial assessment from the geotechnical specialists is low to moderate; the area where high landslide hazard locations might be of concern are along both northeast and southwest boundaries adjacent to the streams and the upper slopes in the center of the portion south of the sale. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

The sale area has 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 area is designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. Recreational use common to this area includes hunting, camping and OHV use.

User created OHV trails are present within the sale areas. Short term closure of these trails will occur to facilitate logging and public safety, long term closure may occur as directed by Recreation Coordinator. A plan will be developed to advise the public when trails are closed due to harvest activity. The District Recreation Coordinator will be consulted during sale layout and administration.

Large debris (root wads, boulders) removed for project work will be stockpiled in an accessible location for future use in limiting access to OHV trails and roads. Additional crushed rock, quality to be determined, may be stockpiled in the area to armor existing trails and trailheads nearby.

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 area has a visual classification of Level 3, low sensitivity. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

None known.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Area 1 contains Focused and Special Stewardship, Aquatic and Riparian Habitat, Wildlife Habitat and Recreation. See Section VII, Aquatic and Resources and Water Quality, and Section X, Recreation Resources, 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.