Pre-Operations Report

Operation Name: Mid Fork Alder
County: Tillamook and Clatsop
Management Basin: Lower Nehalem

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres[1]
1	Modified Clearcut	110	72
2	Modified Clearcut	120	115
Total		230	187

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

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes in Area 1 have primarily a southern aspect. Area 2 has mainly a northern aspect. Elevations range from 400 to 1680 feet. The major soil types are Rye and Killam.

The sale is located on the ridgeline divide between the North Fork and Middle Fork of Cronin Creek and the moderate to steep side-slopes associated with both creeks. There are steep slopes throughout the sale and scattered very steep slopes associated with the headwaters of the tributary draws of the upper portions of both Areas 1 & 2. The sale is underlain by igneous origin rocks of the Tillamook Volcanics Formation. Refer to the Overview of Harvest Operations in the Summary document for information.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information[3]

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Net Acres [2]
1	MC	224	RA, DF,WH	55	15.4	169	131	44	72
2	MC	214	RA, DF,WH	55	15.2	205	162	53	115

1. The source of stand inventory information is from SLI and cruise plots.
2. The net acres are based on orthophotos and GIS and exclude roads, and stream buffers, and non-required thinning 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. The directive for minor and major modifications will be followed for further review.

The sale areas burned in the 1945 Salmonberry Fire and naturally regenerated and have had no prior stand management. Stand Level Inventory (SLI) has not been completed on the sale areas but Area 1 is classified as Closed Single Canopy (CSC) and Area 2 is classified as Understory (UDS) according to the district stand summary information (1999).
Area 1 and Area 2 will be further evaluated (as defined by the July 2004 guidance, "*Planned Sale Inventory Requirements – Alternative to Full Stand Level Inventory*"). See Table 2 for specific stand data.

Both of these areas are predominately alder stands that have a salmonberry, sword fern, vine maple understory. There are also pockets of large remnant conifer that did not burn in the 1945 fire and are mainly in the draws. In Area 2, there is also a component of dense hemlock and Douglas-fir located on the main ridge. Due to stand age, the alder has poor height and diameter growth. The crown closure in the conifer pockets is reaching 70%, causing the live crown ratios in the dominate trees to recede and causing mortality in the understory species.

There are some large snags in various states of decay and some hard snags created from wind and snow. 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.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Net Acres
1	224	CSC	REG	GEN	72
2	214	UDS	REG	GEN	115

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 (DFC) goals.

The DFC for these areas is General (GEN). Due to the slow growing alder and dense conifer the present stand is not a good candidate for establishing a pathway that maintains productivity. After the regeneration harvest the stand will be composed of legacy structures retained from the present stand and a young cohort of Douglas-fir, western hemlock and Douglas-fir trees. The green trees including some hardwoods retained on the site provide a scattered overstory and also contribute to the down wood and snag recruitment as mortality occurs.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:

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.

Area 1 and 2: Merchantable alder, Douglas-fir, and hemlock will be harvested. A diameter limit will be used to select an average of 9 trees per acre for green tree retention. All other species will be reserved.

The regeneration harvest will remove the slow-growing alder and conifer to facilitate logging. Due to difficult topography this prescription also has been designed to facilitate logging. Residual trees will be both clumped and scattered throughout the resulting stand. These residual trees will provide future down wood and/or snags. The area will be reforested with a mixture of conifer species: western hemlock, SNC tolerant Douglas-fir, western red cedar and/or noble fir. A minor component of other conifer species will be scattered across the area and alder will be retained in stream buffers. A precommercial thinning is anticipated at 12 to 17 years when the crowns begin to close. A commercial thinning will then be planned at age 35 to 40. At this time managers will review density, stand health, and landscape goals to decide future management prescriptions.

Green Tree, Down Wood and Snag 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) will also contribute additional green trees. Many of these areas will be posed 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 harvest. Obvious defect in conifer logs will be bucked out in all harvest areas to enhance down wood 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. Tops resulting from ground yarding will also be left in the unit. Down wood in decay class 1 will be created in Areas 1 and 2 to meet FMP requirements of regeneration harvests. A prescription will be developed after the cruise has been completed.

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. Snags will be created in Areas 1 and 2 to meet FMP requirements. A prescription will be developed after the cruise has been completed.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	590	2354	2944
Stumpage Value ($/MBF)*	$133	$250	
Estimated Gross Value	$78,470	$588,500	$666,970
		Project Costs:	$146,190
		Estimated Net Value:	$520,780

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

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via North Fork Cronin Creek which is an all weather crushed rock road. An easement will be needed to access the sale areas across private timberland. This road is currently gated at the Highway 26 junction. See maps for specific road locations and conditions.

Approximately .85 miles of existing unsurfaced and 0.80 miles of blocked road will be improved this includes grading, rocking, widening, sidecast pullback, and adding new culverts. This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 1.0 mile of road will be constructed to provide access to cable yarding areas. It is anticipated that 0.8 miles of the new construction will be closed after harvest. Following reforestation the remaining roads within the sale areas will be reviewed for closure. See summary document for more information on road closure. The operation will be 100% cable yarding

Table 5. Transportation Planning Summary (Miles)[4]

Activity	Mainline	Collector	Rocked Spur[1]	Dirt Spur[1]
Construct			1.0	
Improve			1.65	

Maintain[2]		3.5		
Close/Block[3]			0.8	
Vacate[3]				

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:

Cronin Creek, North Fork Cronin Creek, and Middle Fork Cronin Creek are large Type F streams that are adjacent to the sale areas. There are additional unnamed small Type N streams within the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain. The inner and outer riparian zones of these Type N streams will be managed towards mature forest condition where feasible.

The Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys prior to sale layout. 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.

The ODFW fish biologist has identified this sale as having some possible stream enhancement project areas in Middle Fork Cronin Creek. These opportunities will be looked at during sale contract preparation.

Refer to Aquatic Resource Protection Strategies in the Summary document for information on in the “in stream work period’ road work and stream improvement projects.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas have 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. Surveys have been and will be conducted during the 2006 and 2007 survey season for marbled murrelets. All surveys for marbled murrelet were and will be conducted in accordance with Pacific Seabird Group (PSG) protocol. There have been no marble murrelet detections during the 2006 survey season.

It was determined that in the sale areas there is potential northern spotted owl habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2006 and 2007 survey season for northern spotted owl. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. There have been no northern spotted owl detections during the 2006 survey season.

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:

Steep and very steep slopes are present throughout the sale mostly associated with the tributary streams of the upper portions of Areas 1 and 2. The initial risk assessment by the geotechnical specialist for the sale is high. The geotechnical specialist will be consulted during sale layout field work. The landslide deposit mapped in Area 2 is not expected to represent significant risk in relation to the sale, due to the deep-seated nature of the deposit, however if active movement is observed during timber sale layout field work the geotechnical specialist will be consulted.

X. RECREATION RESOURCES:

The sale areas are designated as Non-Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. No OHV trails were identified within or adjacent to the sale areas.

XI. CULTURAL RESOURCES:

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

XII. SCENIC RESOURCES:

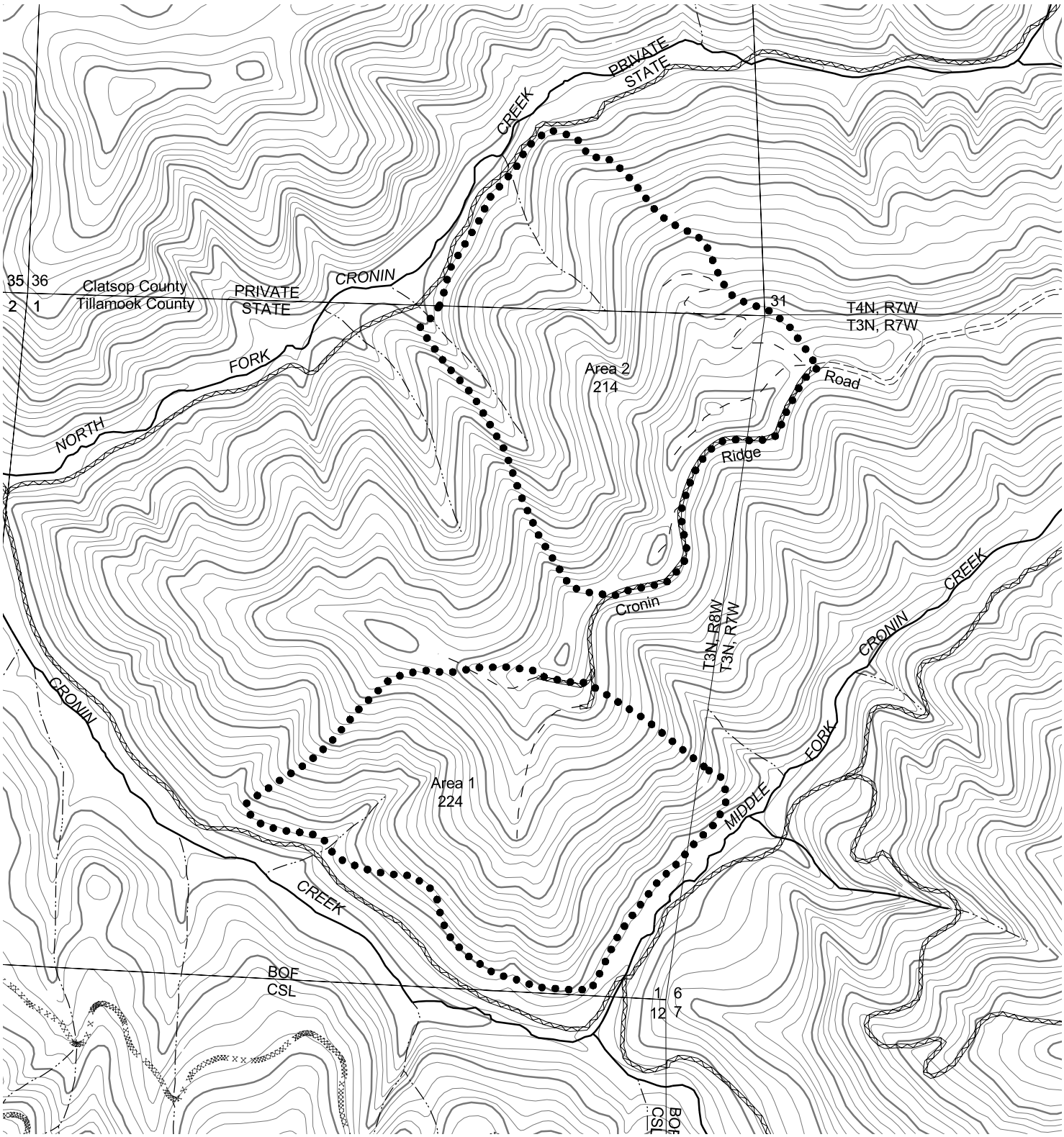
The sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

In order to harvest this sale area a special use permit will need to be obtained for tailholds that may be needed on private land.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale areas contain Focused and Special, Aquatic and Riparian Habitat. See section VII. Aquatic Resources and Water Quality, for the management guidelines to be utilized.



Contour Interval 40'

- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream *
- Perennial Type-N stream *
- Unsurfaced road
- Surfaced road
- State/Federal highway
- Legacy road
- Blocked road
- Road construction
- County road
- Transmission line

Mid Fork Alder
-- Topography --
2008 SALE PLAN
TILLAMOOK DISTRICT

Portions of Section 36, T4N, R8W, Portions of Section 31, T4N, R7W,
Poirtions of Sections 1 and 12, T3N, R8W,
Portions of Section 6 T3N, R7W, W.M.,
Tillamook County, Oregon

Area	Type of Operation
1	MC
2	MC

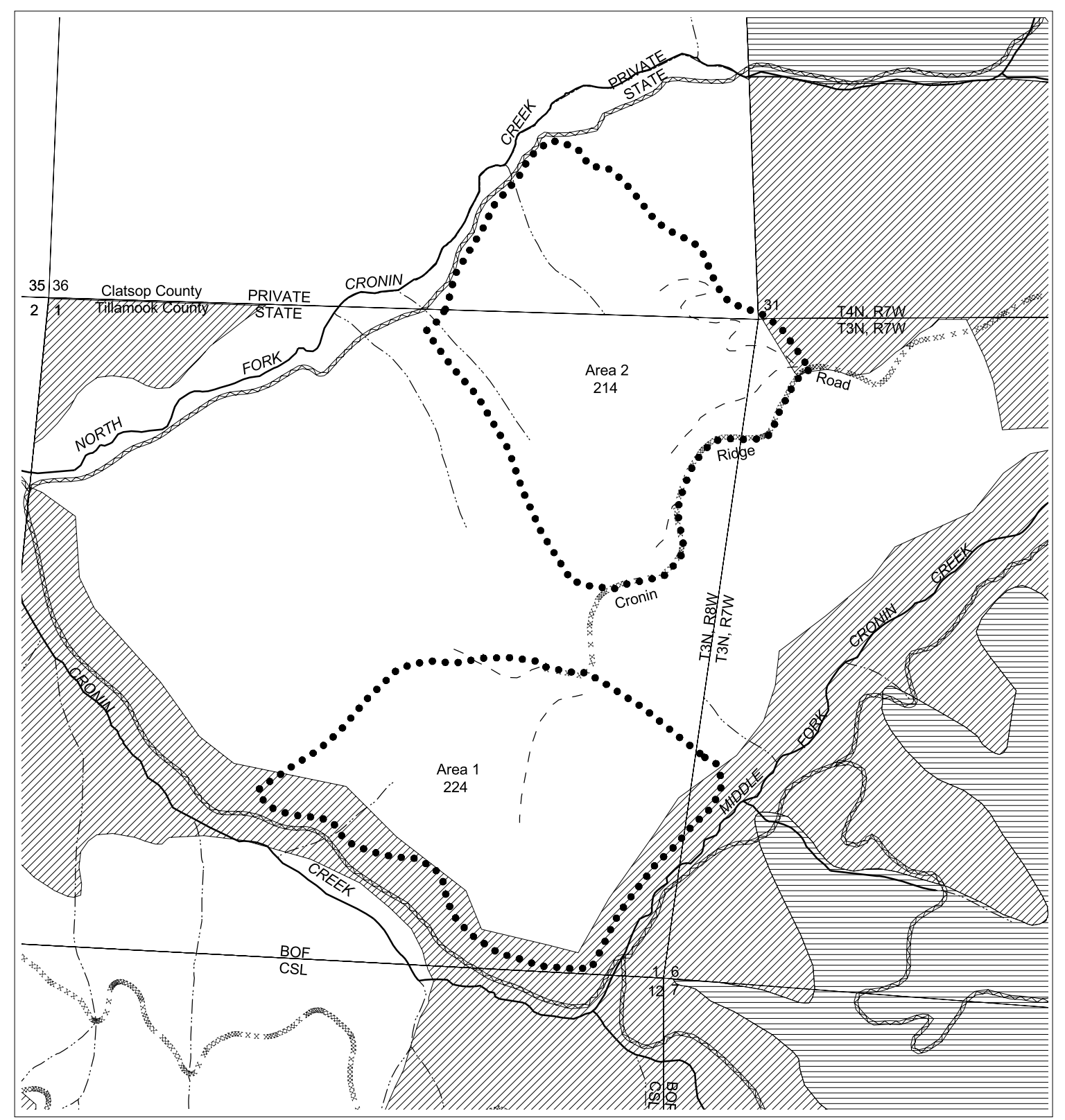
N

1000 0 1000 Feet

Tillamook District GIS
Jan. 2007
This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

* Streams of unknown fish presence are not shown but will be surveyed prior to the sale

Attachment A



Desired future condition
- Layered
- Older forest

- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream *
- Perennial Type-N stream *
- Unsurfaced road
- Surfaced road
- State/Federal highway
- Legacy road
- Blocked road
- Road construction
- County road
- T T Transmission line

Mid Fork Alder
-- Current and Future Condition --
2008 SALE PLAN
TILLAMOOK DISTRICT

Portions of Section 36, T4N, R8W, Portions of Section 31, T4N, R7W,
Poirtions of Sections 1 and 12, T3N, R8W,
Portions of Section 6 T3N, R7W, W.M.,
Tillamook County, Oregon

Area	Type of Operation
1	MC
2	MC

1000 0 1000 Feet

N

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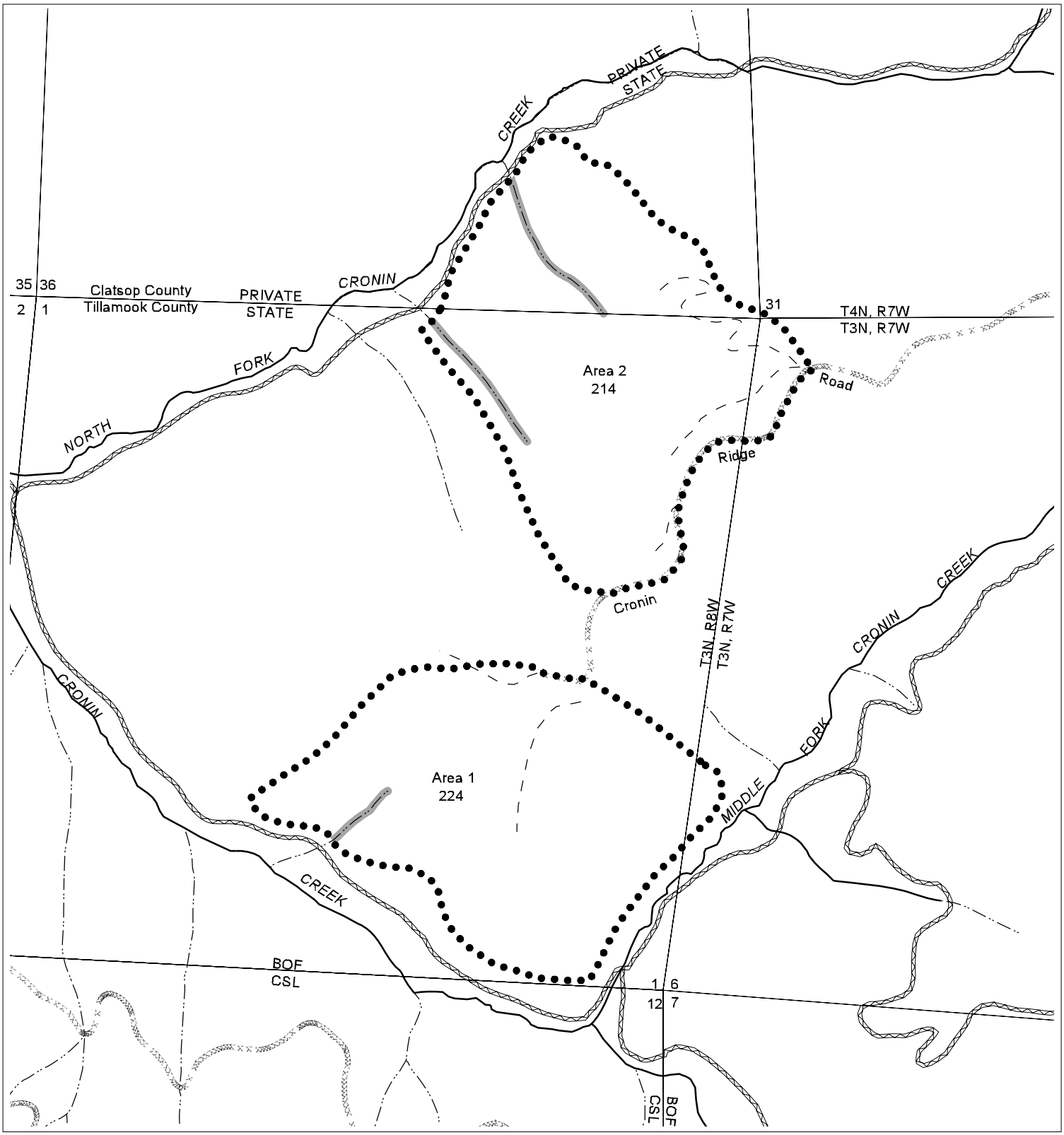
Attachment B



Buffer

Non-required thinning

Area boundary

Sale boundary

Ownership boundary

Perennial Type-F stream *

Perennial Type-N stream *

Unsurfaced road

Surfaced road

State/Federal highway

Legacy road

Blocked road

Road construction

County road

Transmission line

Mid Fork Alder
-- Key Resources --
2008 SALE PLAN
TILLAMOOK DISTRICT

Area	Type of Operation
1	MC
2	MC

Portions of Section 36, T4N, R8W, Portions of Section 31, T4N, R7W,
Poirtions of Sections 1 and 12, T3N, R8W,
Portions of Section 6 T3N, R7W, W.M.,
Tillamook County, Oregon

1000 0 1000 Feet

N

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Attachment C