

# Pre-Operations Report

**Operation Name: Sharp Ridge**

**County: Tillamook**

**Management Basin: Miami /Kilchis**

**CSL: 100%**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	PC - Light	66	63
Total		66	63

*1. The net acres are based on orthophotos and GIS and exclude roads.*

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

The sale area has varied aspects with slopes that range from 0 to over 70% and elevations ranging from 1520-2240 feet. The major soil types are Killam and Rye.

## **II. CURRENT STAND CONDITION:**

**Table 2. Stand Inventory Information<sup>4</sup>**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	PC	406	DF/WH/SS/ WRC/RA	100	24.6	353	107	75/56	63
	PC	Target <sup>3</sup>	DF/WH/SS/ WRC/RA	100	26.2	200	58	45/34	63

*1. The source of stand inventory information is from cruise plots.*

*2. The net acres are based on GIS and exclude roads, and stream buffers.*

*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. The directive for minor and major modifications will be followed for further review.*

This sale is of conifer species that are very dense (approx. 75% SDI). There has been no previous stand management within this stand. Individual trees range in total height from 62 to 184 feet with 50% live crown ratios and an average height-to-diameter ratio of 54. The sale area is classified as layered (LYR) according to the District Stand Level Inventory (SLI). Small shrub and herb communities and a younger cohort of trees are occupying canopy openings due to mortality of overstory species. Snag and down woody debris data is unavailable at this time.

See Table 2 for specific stand data.

### **III. DESIRED STAND CONDITION and VISION:**

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	406	LYR	LYR	OFS	57
1	406	LYR	LYR	LYR	6

*1. The stand is expected to develop into this condition in 20 to 30 years post 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.

Area 1: The DFC for this stand is 90% Older Forest Structure (OFS) and 10% Layered (LYR). This stand is located adjacent to an expansive area of privately owned forestland that has had several recent clearcuts. The sale area is also adjacent to the Tillamook district Northern Spotted Owl Habitat Cluster. The Doty Hill and Jacoby-Patterson Marbled Murrelet Management Areas (MMAs) are located along the main haul route. On State Forest land there have been several timber sales, partial cut and clearcut within the same management basins.

In the short term, the vision is to release the overstory in order to keep healthy crowns on the residual trees and enhance the vertical layering. This will also promote understory regeneration, which will be of a mixed species, including hemlock, Sitka spruce, and western red cedar and other understory species.

The long term vision is to promote further development of the understory strata and create, in time, other older forest structural components. The understory will likely consist of varying diameter classes and densities, both horizontal and vertical, of reinitiating conifers and hardwoods. Snags and down wood will be created during this operation to move this stand closer to the Older Forest Structure.

### **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. See Table 2 for prescription targets.

#### **Partial Cut**

##### **Prescription**

Area 1: This partial cut will remove conifer in all diameter classes, leaving approximately 200-220 ft<sup>2</sup> of basal area and 60 trees per acre.

**Pathway**

The sale area will be partial cut to reduce stand density, add down wood and snags and move this stand closer to the DFC. Given the stand age and the live crown ratios, this entry will serve to provide key structural components. The resulting stand density index (SDI) will be approximately 45%. This should maintain an adequate stocking level that opens the canopy to provide growing space for a developing understory and, given the height to diameter ratios, this stand should endure wind events. It is expected that this will be the last entry in this stand, except for possible future snag and down wood creation. Periodic monitoring and an evaluation of stand progress toward the DFC will likely be required.

**Down Wood**

The existing down wood will be left in the sale areas and additional down wood will be created during this harvest operation. In accordance with the Landscape Management Strategies in the Forest Management Plan for down wood creation 600 cubic feet of logs in decay classes 0-2 per acre will be added to enhance down woody debris. The goal for down wood creation will likely be completed by bucking and leaving obvious defect and butt logs from felled western hemlocks.

Additional down wood will not be created because the stand is in an area where windthrow is common and additional down wood is expect to be created during future wind storms. Non-merchantable hardwoods and conifers will be retained in both areas with the expectation that some of them will eventually become down wood.

**Snags**

Snag creation will be done with this harvest operation. The OFS structure in the Landscape Management Strategies in the Forest Management Plan is defined as having 6 snags per acre. This stand will be managed for creation of at least 2 snag per acre that are 24 inches in diameter or larger.

**V. ESTIMATED TIMBER AND REVENUE INFORMATION:**

**Table 4. Timber and Revenue**

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

	Conifer	Hardwood	Total
Net Volume (MBF)	1999	0	1999
Stumpage Value (\$/MBF) *	\$133	0	
Estimated Gross Value	\$265,867	0	\$265,867
		Project Costs:	\$54,505
		Estimated Net Value:	\$211,362

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

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale area will be accessed via 4<sup>th</sup> street through the city of Bay City to Patterson Creek Road to Doty Ridge Road to Sharp Ridge Road. There will be seasonal restrictions along the haul route where it is adjacent to the Jacoby-Patterson and Doty Hill Marbled Murrelet Management Areas.

Approximately 0.44 miles of road will be constructed which includes, clearing grading and rocking. Following harvest these roads will be closed. See summary document for more information on road closure.

The logging operation is 100% cable ground. See summary document for more information on this topic.

**Table 5. Transportation Planning Summary (Miles)<sup>4</sup>**

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct			0.44	
Improve				
Maintain <sup>2</sup>		4.75		
Close/Block <sup>3</sup>			0.44	
Vacate <sup>3</sup>				

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:**

59 acres of the sale area is located within the Miami River basin, a Salmon Anchor Habitat (SAH). The remaining 4 acres of the sale area are within the Middle Kilchis River basin, also a SAH. The SAH Basin Strategies will be used in addition to the FMP Riparian Strategies during sale layout and contract prep.

There is one unknown stream within the sale area. This stream will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain.

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

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

## **VIII. T&E SPECIES CONSIDERATIONS:**

The sale areas have been reviewed by the ODF Northwest Oregon Area Biologist.

It was determined that there is potential marbled murrelet habitat within and adjacent to the sale boundary. Marbled murrelet surveys have been conducted in 2007. Because of a detection in the vicinity of the sale, but not in the sale, surveys for an additional will be conducted two years, during the 2008 and 2009 survey seasons. All surveys for marbled murrelets will be conducted in accordance with the Pacific Seabird Group (PSG) protocol.

The eastern portion of the sale area shares a common border with the Kilchis Northern Spotted Owl Habitat Cluster. Surveys have been and will be conducted during the 2007, 2008, and 2009 survey for the northern spotted owl. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. There were no northern spotted owl detections during the 2007 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:**

This assessment is based on analysis of USGS 1:24,000 topographic maps.

There are high landslide hazard locations scattered throughout the sale. The sale drains into Moss Creek and Sharp Creek. The risk of landslides delivering directly from the sale to Moss Creek is moderate to high and to Sharp Creek is moderate.

The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

**X. RECREATION RESOURCES:**

This sale is a 100% motorized zone. This sale has been reviewed by the District Recreation Coordinator. An unmapped dead end OHV trail was in the sale area and will be closed with the harvest operation.

**XI. CULTURAL RESOURCES:**

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

**XII. SCENIC RESOURCES:**

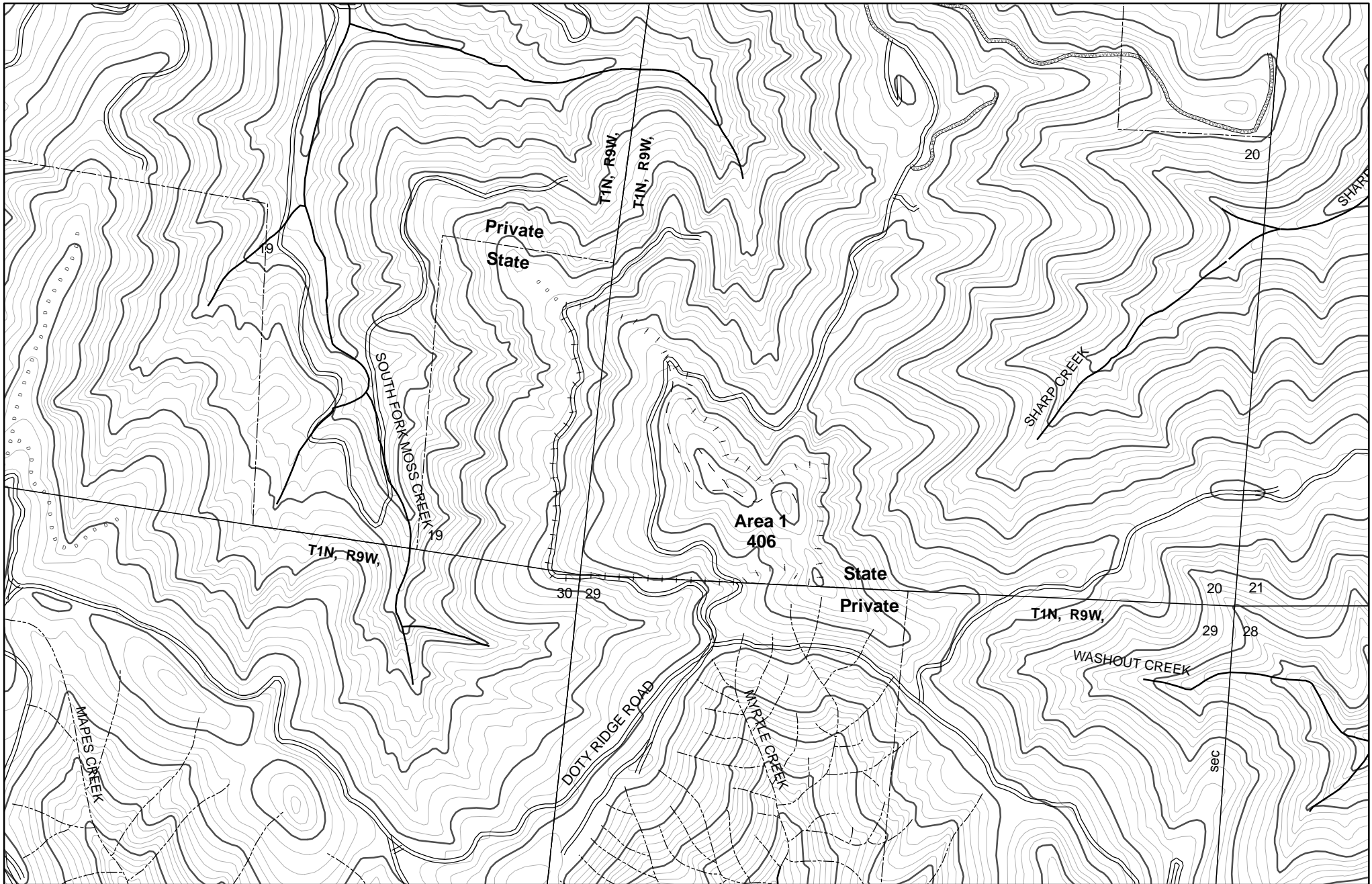
The sale area has a scenic classification of Level 2 – moderate sensitivity. No scenic impact is expected.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

No additional resources will be considered within the sale areas.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

The sale areas contain Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII. for management guidelines.



- 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

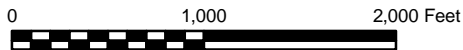
**3**

**Sharp Ridge  
-- Topography --  
2009 SALE PLAN  
TILLAMOOK DISTRICT**

Portions of Sections 19, 20, 29 and 30  
T1N, R9W, W.M.,  
Tillamook County, Oregon

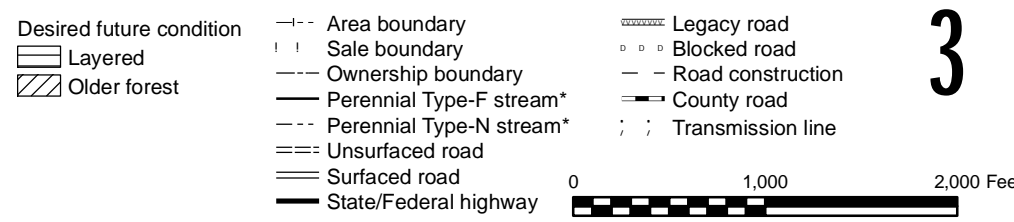
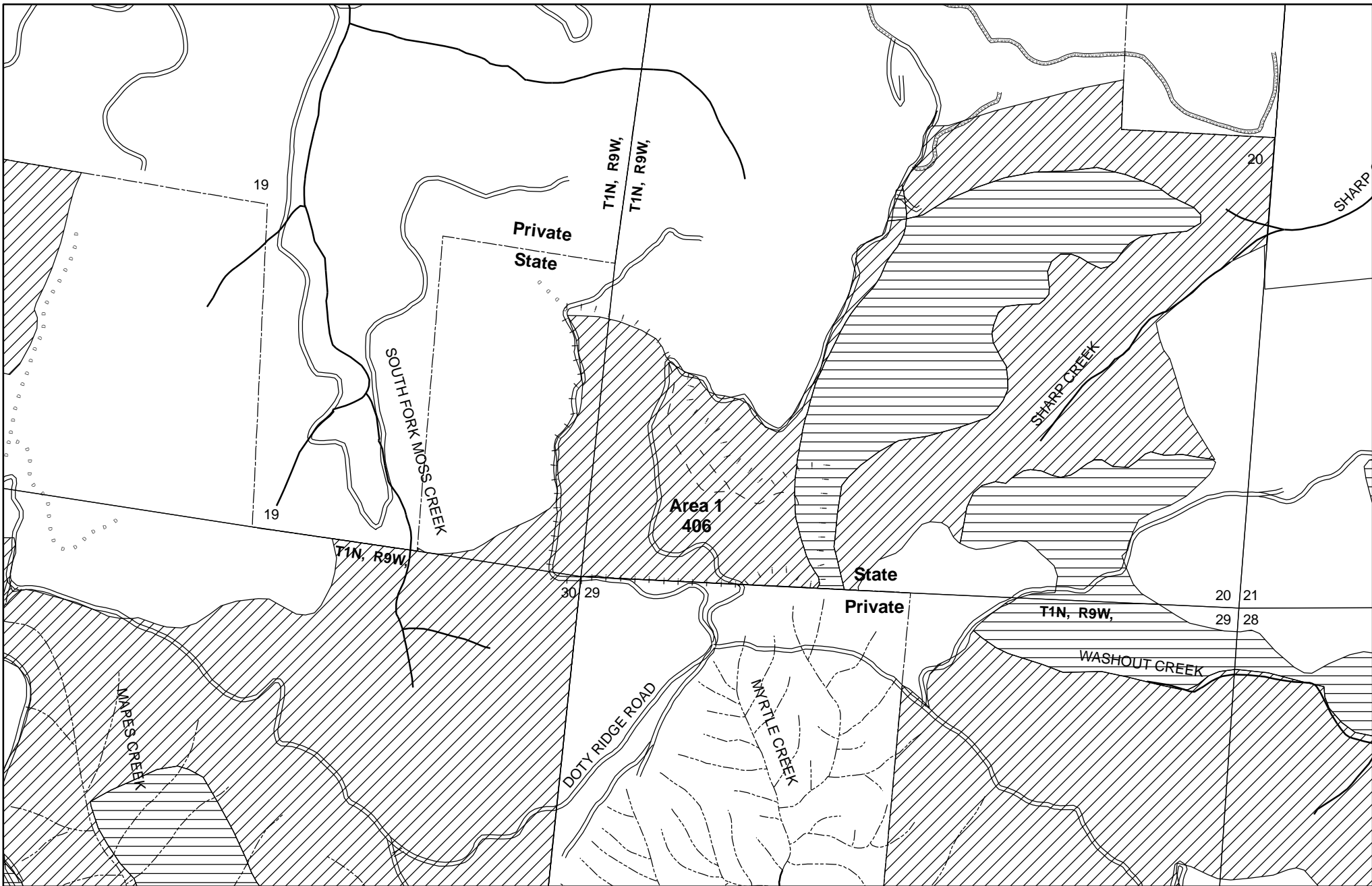
\*Streams of unknown fish presence are not shown but will be surveyed prior to the sale

Area	Type of Operation
1	Partial Cut

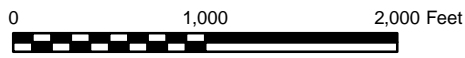


Tillamook District GIS  
10/24/2007

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**3**



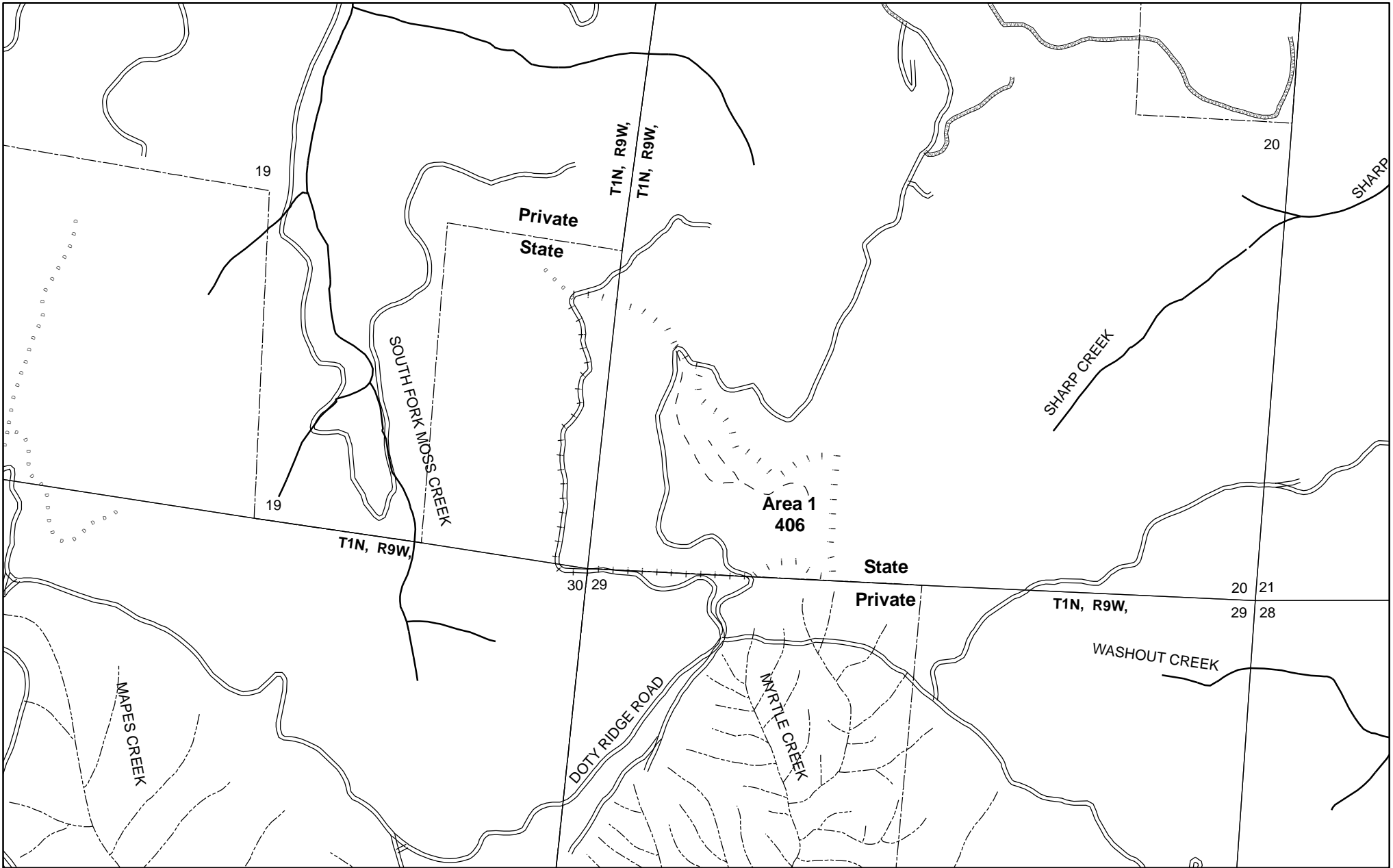
**Sharp Ridge**  
**-- Current and Future Condition --**  
**2009 SALE PLAN**  
**TILLAMOOK DISTRICT**  
 Portions of Sections 19,20,29 and 30  
 T1N, R9W, W.M.,  
 Tillamook County, Oregon










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






Area 1	Type of Operation Partial Cut
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 01/08/2008  
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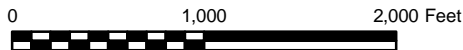
Attachment B



-  Buffer
-  Green Tree Retention
-  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

3



**Sharp Ridge  
-- Key Resources --  
2009 SALE PLAN  
TILLAMOOK DISTRICT**

Portions of Sections 19, 20, 29 and 30  
T1N, R9W, W.M.,  
Tillamook County, Oregon

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01/08/2008

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Area 1	Type of Operation Partial Cut
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