

# Pre-Operations Report

**Operation Name: Helloff Point**

**Legal: Portions of Sections 11, 12, 13, and 14, T3N, R9W, W.M., Tillamook County**

**Management Basin: Lower Nehalem**

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

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	Partial Cut - Moderate	225	205
Total		225	205

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

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

Slopes in the sale have a north aspect. Elevations range from 400 to 1400 feet. The major soil type is Killam (95%) and Rye (5%).

**II. CURRENT STAND CONDITION:**

**Table 2. Stand Inventory Information<sup>3</sup>**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	PC	108	DF,WH,RA	70	16	233	162	59	205
	Target		DF,WH,RA		22	140	56	32	205

*1. The source of stand inventory information is from cruise plots taken in the 2008 cruise contract.*

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

*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.*

This sale was harvested in the early 1900's and has naturally regenerated into a mix of native conifers with patches of red alder. Approximately 20 acres in the southwest portion of the sale was seeded in 1964 and 1965.

**Stand Structure**

According to SLI stand data, this sale is classified as 100% UDS structure. There are some large snags in various states of decay and some hard snags. SLI estimates approx. 7 snags per acre greater than 12" DBH and 3 of those over 24"DBH. Some larger snags (Approx. 3 per acre) are in decay classes 0-2. Down wood consist of scattered large old logs (36"+) in classes 3 and 4 stages of decay and some windthrow that is in decay classes 1 and 2. The Stand Level

Inventory data indicates 2500 cubic feet of down wood in all decay classes and 900 cubic feet of down wood in decay classes 1 and 2.

### **Stand Conditions**

This sale is predominantly composed of Douglas-fir and western hemlock with scattered western red cedar and Sitka spruce. The Douglas-fir in this sale have crown ratios of approximately 40%; however, the stand density index (SDI) is 59% and tree cores suggest slowed diameter growth. There is a small western hemlock understory component. The sale area contains a component of trees with defect and natural damage.

The brush component in all sale areas is comprised primarily of sword fern, salmonberry, and small patches of vine maple. The hemlock understory trees are competing with these brush species with varying degrees of success.

**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	101	UDS	LYR	GEN	17
1	101	UDS	LYR	LYR	50
1	101	UDS	LYR	OFS	138

*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.

### **Sub-Basin**

The Helloff Sub-basin has had very little impact from timber harvesting in the last 10 years. One thinning adjacent to the northern sale boundary was completed in 2000. The majority of the basin is designated OFS and LYR and contains three Marble Murrelet Management Areas. Helloff Creek is the primary drainage into the Nehalem River. A small thinning is also planned in the north eastern portion of this basin adjacent to Wooley Creek. No other sales are planned in the short term for management within this sub-basin.

### **Short Term**

The short term objective for this sale will be a 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 in the stand to allow the residual trees to grow larger in diameter and crown depth. The thinning will allow for increased understory initiation of shrubs and shade tolerant species, creating horizontal and vertical diversity.

### **Long Term**

The long term vision for this sale is to create a complex stand with differing age classes, hemlock understory and dominating conifer overstory. Hardwoods will be retained in headwalls and riparian areas adding to short term and long term decadence. The stand is expected to move toward layered and older forest stand structure in a short amount of time.

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.

## **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.**

### **Prescription:**

#### **Partial Cut**

The Douglas-fir, hemlock, and red alder will be thinned to a basal area range of 140-160 square feet with a target stand density index (SDI) of 30-35.

Merchantable red alder will also be harvested. Approximately 5 red alder trees per acre will be reserved. Sitka spruce, western red cedar and other minor species will also be reserved. Douglas-fir and hemlock greater than 26 inches DBH and less than 12 inches DBH will be reserved to insure that a younger and older cohort of timber is reserved.

#### **Snags**

The number of hard snags in the sale area is less than 2 per acre with an average DBH greater than 15". No snags will be created with this operation because snags are abundant in this basin due to recent windstorms. Snags are anticipated to be created over time in the residual stand. Existing snags will be reserved in the sale area and if any are felled they will be left for down wood.

#### **Down Wood**

Existing down wood will be reserved and retained in the sale area. No new down wood will be created due to the presence of more than 600 cubic feet of down logs in decay class 1 and 2 in sale area.

In addition to the above strategies, short term decadence will be met by the residual alder left in headwalls and riparian buffers.

**Pathway**

This entry into the stand may be the last to move it toward more complex Layered and Older Forest Structure. One additional entry may be made 20+ years from now to further release the understory and manage density. However, the expectation would be to retain all overstory/legacy trees in future entries.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	<input type="checkbox"/>	X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	982	1434	2,415
Stumpage Value (\$/MBF)*	\$39.19	\$150	
Estimated Gross Value	\$38,463	\$215,035	\$253,498
		Project Costs:	\$90,414
		Estimated Net Value:	\$163,084

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale area is accessed via God's Valley County Road, Hansen Road, Helloff Ridge Road and Salal Point Road. These are currently all-weather crushed rock roads. Helloff Ridge Road is within the Helloff Creek Marbled Murrelet Management Area (MMMA) and seasonal restrictions will be required.

Approximately 3.2 miles of existing surfaced road will be maintained which includes grading, rocking, widening, culvert replacement, spot rocking, side cast pullback, and adding new culverts. This work will bring all roads up to standards described in the Forest Roads Manual.

Approximately 0.7 miles of road will be constructed to provide access to cable yarding areas. Following harvest, all roads within sale areas will be closed or blocked. The operation will be 100% cable yarding. During dry weather, some shovel logging may be possible on ridges.

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

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct			0.7	
Improve				
Maintain <sup>2</sup>		3.2		
Close/Block <sup>3</sup>			0.7	
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:**

Portions of streams within the sale area have been surveyed for fish presence (see exhibits for additional information on location). Additional surveys will be completed before the sale to verify fish/non-fish streams.

There are large type F streams within the sale area. These streams will be reviewed and posted with appropriate buffers during sale layout. All stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. A sub-set of those standards are highlighted below for this sale.

A 170' riparian management area is established on all fish streams. Management is allowed beyond 25' in the "inner zone". The goal for harvesting within 100 feet (inner zone) of type F streams is to achieve mature forest condition in a timely manner. Management in the inner zone will result in larger diameter trees in a shorter time frame than if no harvesting were to take place and will maintain all snags and downed wood. Once mature forest condition is achieved there will be no management in the inner zone of type F streams.

Riparian management areas result in leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat.

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

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist. It was determined that surveys for marbled murrelets are not required for due to the absence of potentially suitable habitat within the sale boundary. Areas of potential habitat have been identified adjacent to the sale area and will be protected with seasonal operating restrictions. 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 2008 and will be during the 2009 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 2008 survey season.

T&E Plant Species: The sale areas were checked against the Oregon National 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.

Streams in this sale are in the headwaters of the Nehalem basin. As of March 2008, coastal coho salmon are listed as threatened for the Oregon Coast. The riparian and aquatic strategies combined with road and harvest practices described in this Annual Operations Plan and our Northwest Oregon State Forests Management Plan (FMP) are designed to minimize impacts and or restore aquatic habitats that influence aquatic species.

## **IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

This assessment is based on USGS 1:24,000 topographic maps and available geologic maps. There are high landslide hazard locations in the sale area. The sale area drains to Helloff Creek. The risk of landslides delivering to Helloff Creek from the sale area is high. The geotechnical specialist will be consulted during sale layout.

## **X. RECREATION RESOURCES:**

The sale area is designated as Non-motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). No recreation trails or sites are located within the sale boundary. Recreational use common in this area is hunting

## **XI. CULTURAL RESOURCES:**

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

There is a newly identified culture site located on the northern sale boundary. Site will likely fall within stream buffer and have no impact on harvest activities. The ODF cultural resource specialist will be contacted during sale layout to ensure that the site is protected.

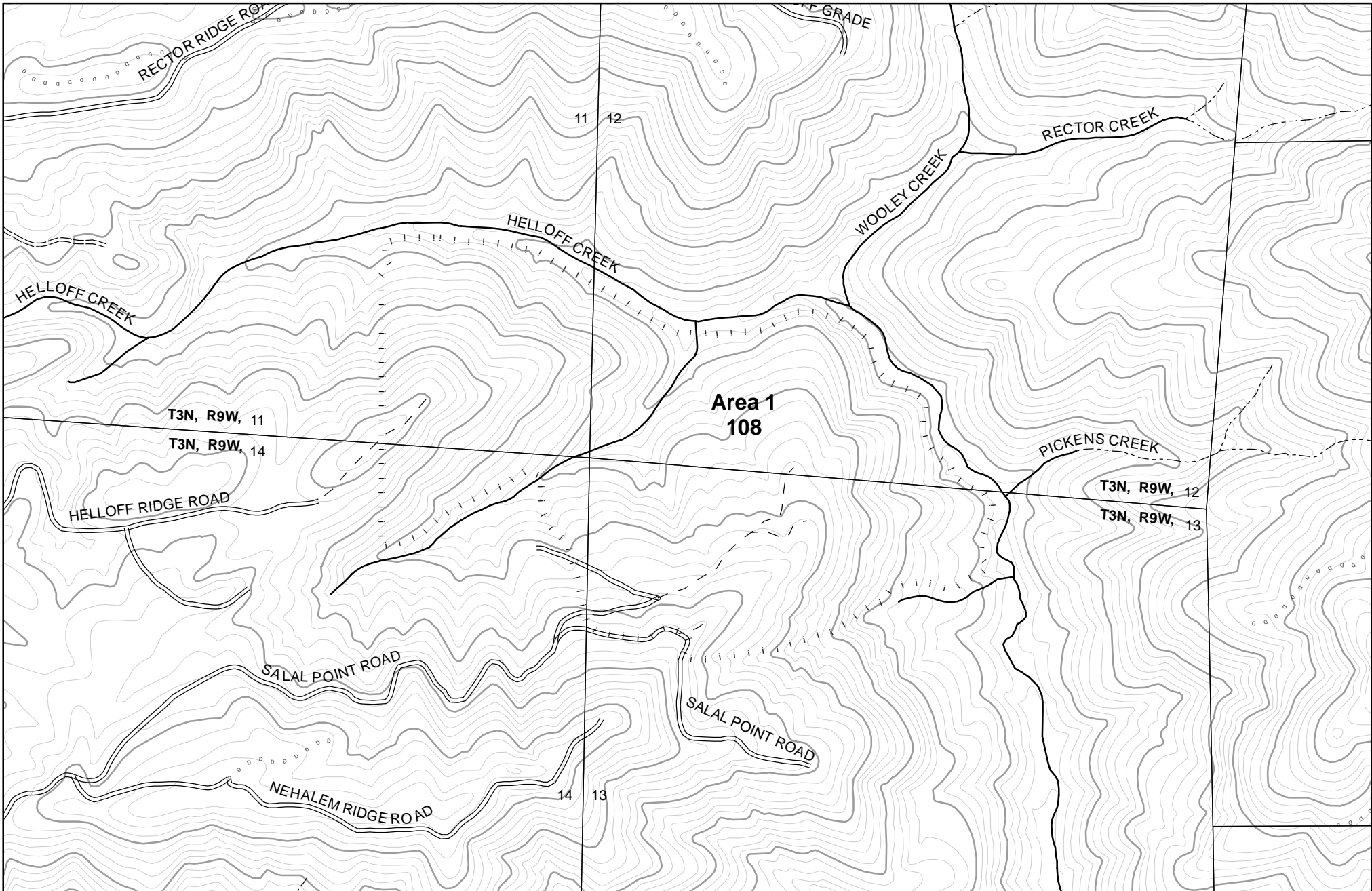
**XII. SCENIC RESOURCES:**

No portions of the sale are visible from State or County Road. The sale area has a visual classification of Level 3, low sensitivity. No scenic impact is expected.

**XIII. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

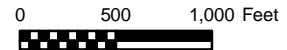
The sale area contains Focused and Special Aquatic Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.

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



Contour Interval 40'

- Area boundary
- ! ! Sale boundary
- Ownership boundary
- Perennial Type-F stream\*
- - - Perennial Type-N stream\*
- == Unsurfaced road
- == Surfaced road
- State/Federal highway
- ==== Abandoned road
- o o o Blocked road
- - - Road construction
- County road
- ; ; Transmission line



**3**

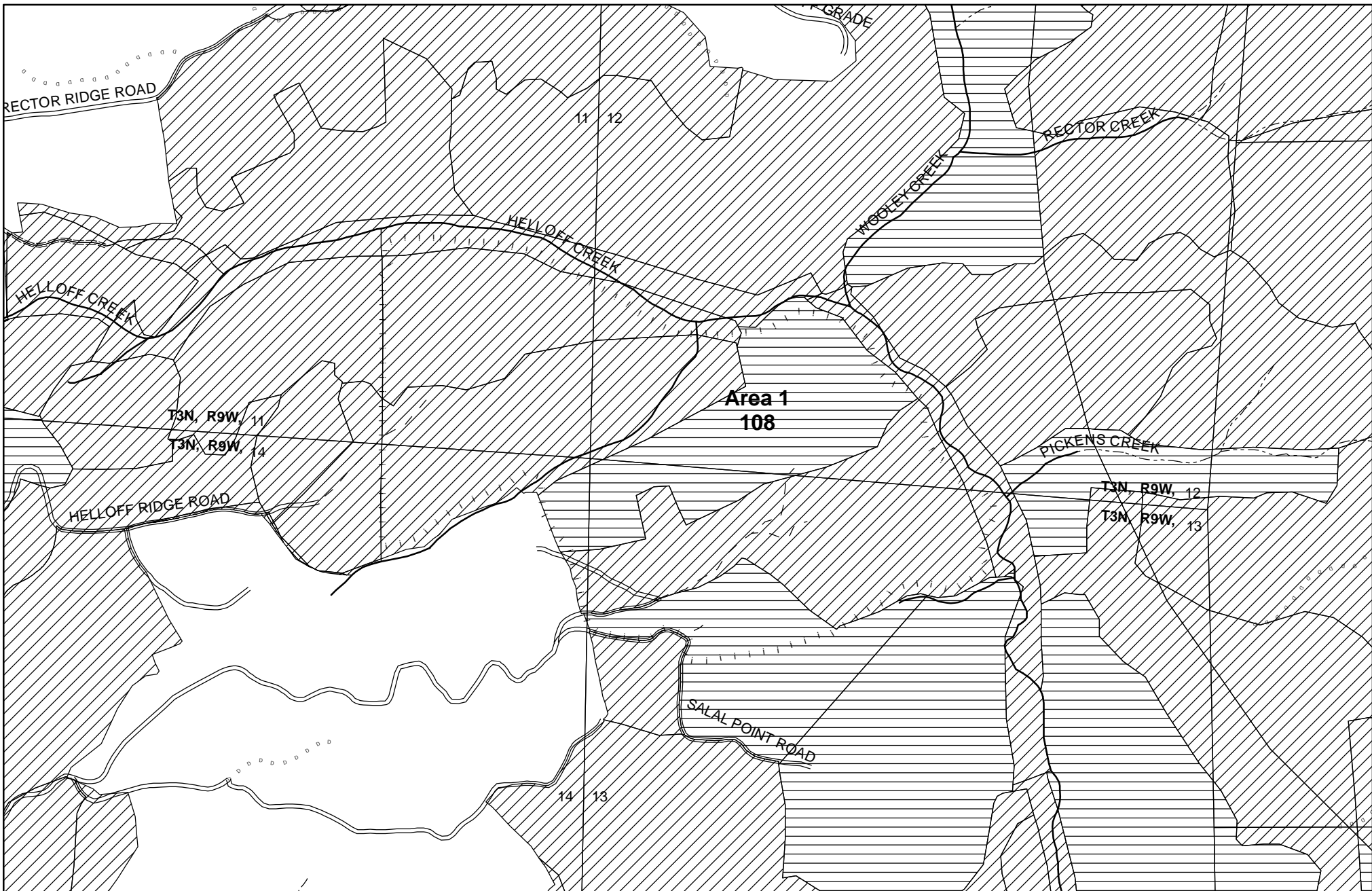
**Helloff Point  
-- Topography --  
2010 SALE PLAN  
TILLAMOOK DISTRICT**

Portions of Sections 11, 12, 13 and 14  
T2N, R9W, W.M.,  
Tillamook County, Oregon

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

Tillamook District GIS  
10/14/2008  
This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

Area	Type of Operation
1	Partial Cut



- |                          |                                |                           |
|--------------------------|--------------------------------|---------------------------|
| Desired future condition | - - - Area boundary            | Abandoned road            |
| Layered                  | - ! - Sale boundary            | Blocked road              |
| Older forest             | - - - Ownership boundary       | - - - Road construction   |
|                          | — Perennial Type-F stream*     | — County road             |
|                          | - - - Perennial Type-N stream* | - ; - Transmission line   |
|                          | — Unsurfaced road              | OHV trail                 |
|                          | — Surfaced road                | ..... Non-motorized trail |
|                          | — State/Federal highway        |                           |

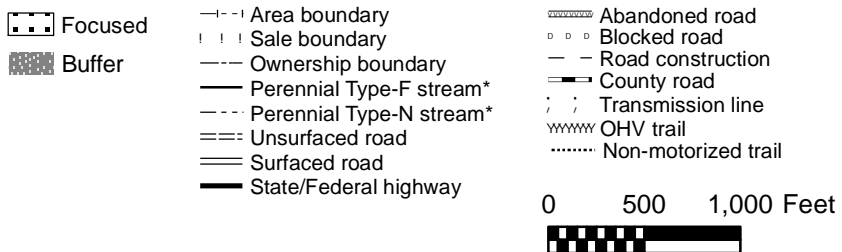
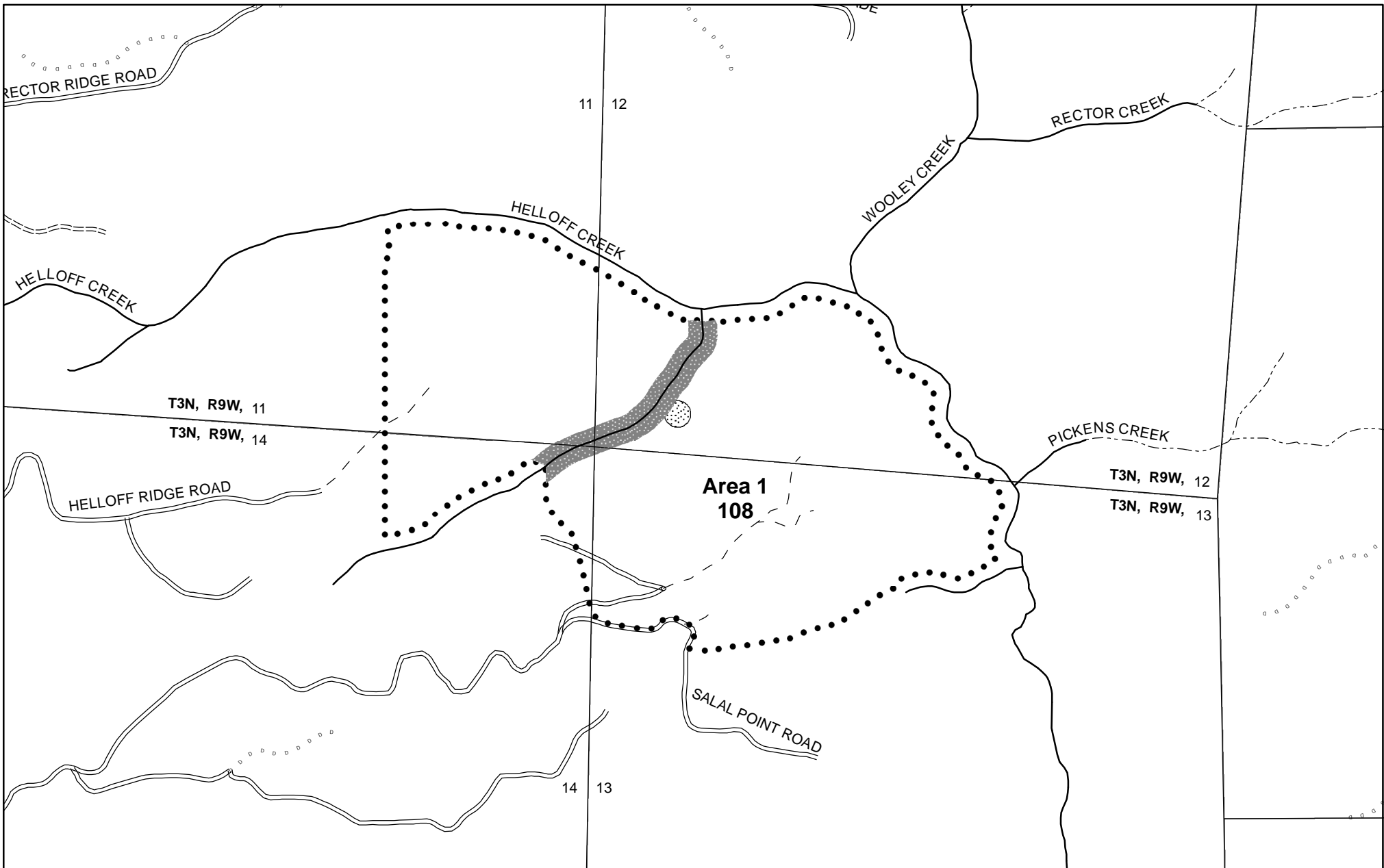
**3**

**Helloff Point**  
**-- Current and Future Condition --**  
**2010 SALE PLAN**  
**TILLAMOOK DISTRICT**  
 Portions of Sections 11, 12, 13 and 14  
 T3N, 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  
 6/20/2009  
 This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.



**3 -- Key Resources/Research/Monitoring --**  
**2010 SALE PLAN**  
**TILLAMOOK DISTRICT**  
 Portions of Sections 11, 12, 13 and 14  
 T3N, R9W, W.M.,  
 Tillamook County, Oregon

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

Tillamook District GIS  
 10/14/2008

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

Type of	Area	Operation
	1	Partial Cut