

# Pre-Operations Report

**Operation Name:** Rusty Ford

**County:** Clatsop

**Management Basin:** McGregor

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

Area	Harvest Type	Gross Acres	Net Acres
1	Partial Cut - Moderate	13	12
2	Partial Cut - Moderate	284	249
<b>Total</b>		<b>297</b>	<b>261</b>

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

Slopes have a north aspect and range from 20% to 60%. The sale elevation is approximately 1,600 feet. Grindstone and Humbug are the major soil types of the sale area.

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

The stands within the sale were burned in the 1933 Wolf Creek fire. Both areas of the sale were fertilized in 2005.

The entire sale has been inventoried using the Stand Level Inventory (SLI) procedure. The sale areas have been classified as UDS and LYR (see Tables 2 and 3 below).

### **Area 1:**

This is a 65-year-old stand of predominantly Douglas-fir. There are some scattered western hemlock, noble fir, western red cedar, and red alder throughout the sale areas. The understory consists primarily patches of sword fern, salal, and dwarf Oregon grape. Some of the densest areas of the stand are void of any herbaceous understory. Average ground cover from SLI data is 70%.

### **Area 2:**

This is a 65-68 year-old mixed conifer stand of Douglas-fir and western hemlock. Stocking is uniform and dense. Current condition has developed into UDS. There is little evidence of *Phellinus weirii*. The understory consists primarily of sword fern, salal, dwarf Oregon grape, western hemlock, western red cedar, bracken fern, and oxalis. Average ground cover from SLI is 77%.

There is an estimated 400 cu. ft. of classes 1 & 2 down woody debris per acre. There is an estimated 4,000 cu. ft. of classes 3-5 large down wood per acre.

Numerous, old-growth soft snags persist throughout the stand. Estimate from field observation is 2 per acre. Hard snags are present and continue to be recruited through natural processes.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	PC-M	7219	DFCX	65	18	248	145	60	12
		<b>Target<sup>3</sup></b>			<b>20</b>	<b>140</b>	<b>90</b>	<b>35</b>	<b>12</b>
2	PC-M	7219	DFCX	65	18	248	145	60	206
		7220	DF	58	21	194	84	45	23
		7223*	DFCX	68	17	217	136	54	20
		<b>Target<sup>3</sup></b>			<b>20</b>	<b>140</b>	<b>90</b>	<b>35</b>	<b>249</b>

<sup>1</sup>The source of stand inventory information is SLI grown forward to 2008 for trees 8 inches and larger. Stand ID's shown with a (\*) are unmeasured stands, the source of inventory information for these stands is data imputed from similar stands.

<sup>2</sup>The acres are based on GIS and exclude roads, stream buffers, reserve areas, etc.

<sup>3</sup>The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

### III. DESIRED FUTURE CONDITION/VISION:

According to the landscape design for the McGregor Basin (*Forest Grove District Implementation Plan, 2009*), the desired future condition (DFC) for Area 1 is OFS. The DFC for Area 2 is 9% LYR and 91% OFS.

#### Area 1 & 2:

This is a first entry moderate partial cut. By conducting a moderate partial cut, the area will receive a much-needed release allowing for increased diameter growth in reserve timber, as well as allowance for understory development. The harvest operation will maintain the LYR structure of this stand where it exists. This prescription is expected to develop the UDS structure of this stand into layered (LYR) structure in 15-25 years and older forest structure (OFS) in the longer term. The prescription is designed for only one entry to be made to move the stand along its desired pathway. All western redcedar, noble fir, and red alder will be reserved from cutting during the partial harvest. This, along with the hemlock in the overstory, will help to maintain the species diversity and allow additional natural seeding to enhance the developing understory of shade tolerant conifers.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	7219	LYR	LYR	OFS	12
2	7219	LYR	LYR	OFS	206
	7220	UDS	UDS	LYR	23
	7223	UDS	UDS	OFS	20

<sup>1</sup> The stand is expected to develop into this condition in the five to ten years after this operation is completed.

**IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:**

**Partial Cut - Moderate:**

The target standard density index (SDI) is approximately 35. Douglas-fir and western hemlock will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 140 square feet. The average diameter breast height (DBH) of the residual stand will be approximately 20 inches. Residual trees will be trees with the largest DBH and height, and which are of the best form and vigor. All trees less than 8 inches, western redcedar, noble fir and hardwoods shall be reserved and shall not count toward the target basal area.

This stand has been designated for a single entry prescription which will result in a LYR stand condition 15-25 years after harvest. It is expected to remain in a LYR condition for an additional 20-30 years. At that time future managers will have the option of moving the stand into an OFS stand and a portion of General condition or applying another harvest prescription.

Existing snags determined not to be a safety hazard will be retained and any felled snags will be left for down wood. Additional snags will be created over time through natural processes.

No underplanting is planned because it is anticipated that natural regeneration from shade tolerant species will enhance the understory vegetation.

All existing down woody debris (DWD) will be reserved in the sale areas. DWD recruitment is expected through mortality, windthrow of residual trees, felled snags, and logging slash.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
<b>100%</b>	<b>%</b>		<b>X</b>
Planned Quarter:		<b>4</b>	

	Conifer	Hardwood	Total
Net Volume (MBF)	<b>4,100 MBF</b>		<b>4,100 MBF</b>
Stumpage Value (\$/MBF)	<b>\$150.00</b>		
Estimated Gross Value	<b>\$615,000.00</b>		<b>\$615,000</b>
		Project Costs:	<b>\$130,000</b>
		Estimated Net Value:	<b>\$485,000</b>

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Music Road, off of HWY 26 and approximately one mile to the sale areas. Music Road (approximately 2.0 miles) will be resurfaced with crushed rock from the lower Rock Creek stockpile at an estimated cost of \$35,000.

Approximately 1.34 miles of rock road will be constructed to provide access to cable yarding landing locations. New construction is limited to ridgetops and gentle to moderate sideslopes and will have sustainable grades upon completion. Proposed roads will not cross any streams. Estimated cost is \$95,000.

Total project costs: \$130,000.

All haul roads will have high quality crushed rock or pit run surfacing. Roads will provide access to all timber within the sale area and allow for logging methods and hauling which will minimize impacts to soils, residual timber, streams, and riparian areas.

Following harvest, roads and skid trails within the sale areas will be evaluated for closure.

The operation will be 70% cable yarding and 30% ground yarding. (percentages are based on area). The maximum cable yarding distance will be approximately 1,200 feet in Area 2. The maximum ground based yarding distance will be approximately 500 feet.

All cable yarding will have at least one end suspension when yarding across streams and at least full suspension when yarding in the Inner Zone of a riparian area.

**Table 5. Transportation Management Summary (Miles)**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	1.34	0	0
Improve	2.0	0	0	0
Maintenance	0	0	0	0
Closure/Vacation	0	0	0	0

**VII. AQUATIC RESOURCES AND WATER QUALITY:**

Several small Type N and Type F tributaries drain from within and adjacent to the sale areas, into a small Type F tributary of North Fork Wolf Creek, a large Type F stream. The North Fork Wolf Creek drains into the Nehalem River. Appropriate riparian management areas (RMA's) will be applied as per the Forest Management Plan. RMA's provide leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat.

Small type N streams can influence stream temperature of downstream fish-bearing streams. Sufficient trees will be retained within 500' of the confluence with type F streams to achieve 80% shade over streams.

A 170' RMA is established on all fish streams. Management is allowed beyond 25 feet on the "Inner Zone". The goal for harvesting within Inner Zones 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. The harvest operation will maintain the UDS structure of this stand and develop it into the LYR structure (15-25 years) and in longer term to OFS in adjacent uplands from the Inner Zone. Once mature forest condition is achieved there will be no management in the Inner Zone of type F streams.

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 seasonal restrictions on logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and Aug. 31. Operations outside of this period will be reviewed with ODFW.

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

Both sale areas have been reviewed with the ODF Northwest Oregon Area Biologist.

Northern Spotted Owl surveys were conducted during the 2008 survey season with no owls detected. The sale will be surveyed again during the 2009 survey season. All surveys will be/were conducted in accordance with USFWS protocol.

This operation involves an activity that is listed in the National Marine Fisheries Service adopted rules under Section 4(d) of the Endangered Species Act. The sale area is in proximity to streams in which listed salmon and/or steelhead are present. For a discussion of protection measures for listed fish, see sections VI and VII.

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale. The District T&E Coordinator made the determination that the sale is non-suitable habitat for marbled murrelets. The ODF wildlife biologist for the NW Oregon Area reviewed and approved this determination.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records. No listed plant records were identified within or adjacent to the sale areas.

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

This assessment is based on USGS 1:24,000 topographic maps and available geologic maps. There are a few high landslide hazard locations in Area II. There may be a few high landslide hazard locations in Area I. The entire sale area drains to the North Fork of Wolf Creek. The risk of landslides delivering to the North Fork of Wolf Creek is low from Area I and low to moderate from Area II. Area II appears to be located on a large,

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

**X. RECREATION RESOURCES:**

The sale area is located within an area designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

Recreational use common to this area includes hunting and mushroom picking. Following harvest, roads and skid trails within the sale areas will be evaluated for closure.

**XI. CULTURAL RESOURCES:**

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format). No cultural resource records were identified within or adjacent\* to the operation areas. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

*\*Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

**XII. SCENIC RESOURCES:**

The sale area has a visual classification of Level 3, low sensitivity.

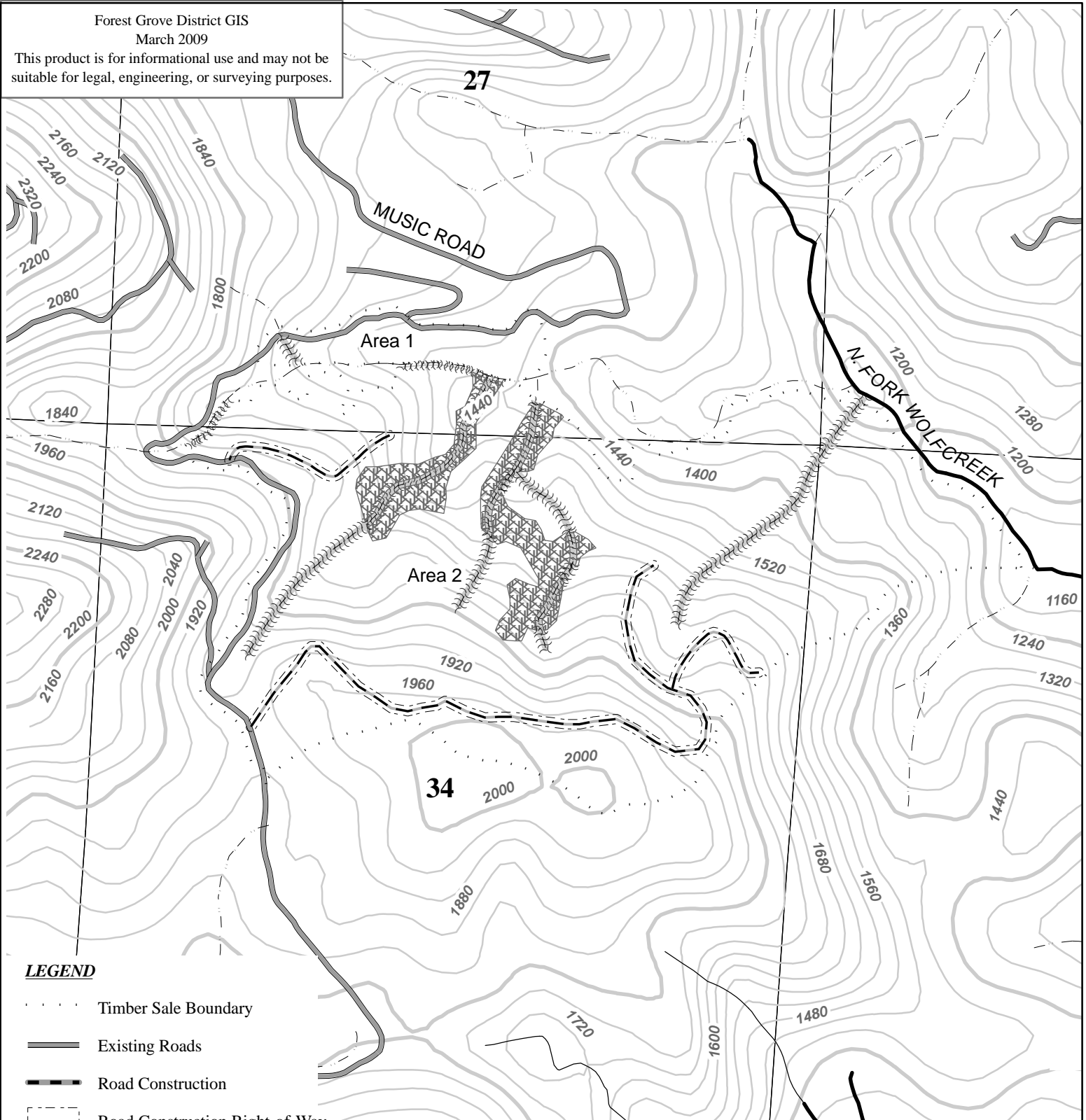
**XIII. OTHER RESOURCE CONSIDERATIONS:**

No property survey is needed. No other resources of significance are involved. All known survey corners and witness trees shall be protected from damage during any operations

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

The sale area contains Focused and Special Stewardship, Aquatic and Riparian Habitat due to the presence of streams within the sale. Section VII "Aquatic Resources and Water Quality" describes the management guidelines to be applied in these areas.

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



**LEGEND**

- Timber Sale Boundary
- Existing Roads
- Road Construction
- Road Construction Right-of-Way
- Perennial Fish Stream
- Perennial Non-fish Stream
- Stream, Unknown Fish Presence
- Stream Buffer
- ODF Ownership
- 200' Contour Lines
- 40' Contour Lines
- Non-Thinnable Area

FY 2010  
 RUSTY FORD  
 PORTIONS OF SECTIONS 27 & 34 T04N, R06W, W.M.  
 CLATSOP COUNTY, OREGON

Attachment A: Topography

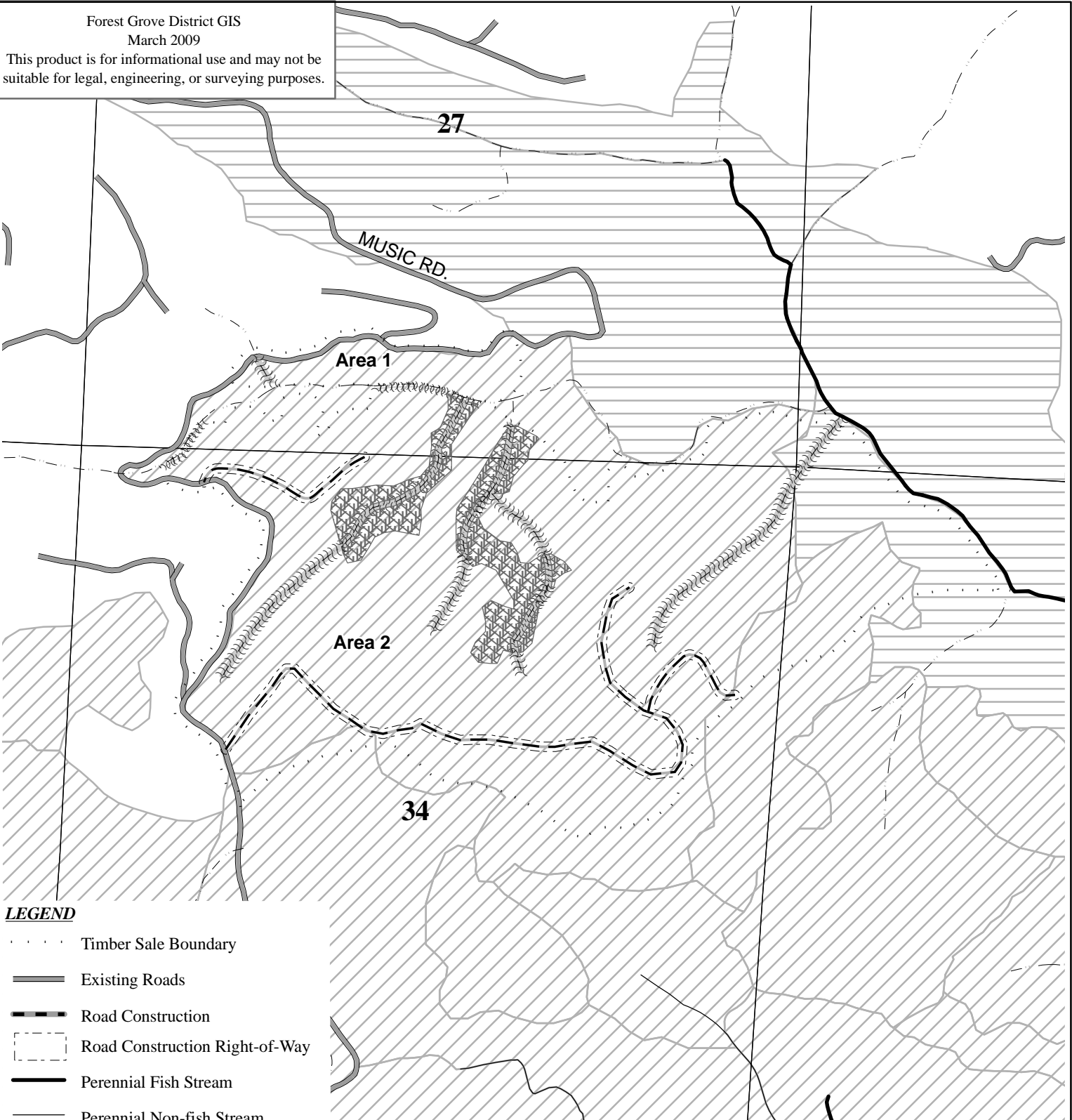
Scale  
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 1 inch = 1000 feet



**APPROXIMATE NET ACREAGE**

Area 1	12	ACRES (PC)
Area 2	249	ACRES (PC)
<b>TOTAL</b>	<b>261</b>	<b>ACRES</b>

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**LEGEND**

- Timber Sale Boundary
- Existing Roads
- Road Construction
- Road Construction Right-of-Way
- Perennial Fish Stream
- Perennial Non-fish Stream
- Stream, Unknown Fish Presence
- Stream Buffer
- Non-Thinnable Area
- ODF Ownership
- Stand ID
- DFC - Layered
- DFC - Older Forest Structure

FY 2010  
RUSTY FORD  
PORTIONS OF SECTIONS 27 & 34 T04N, R06W, W.M.  
CLATSOP COUNTY, OREGON  
Attachment B: Desired Future Condition

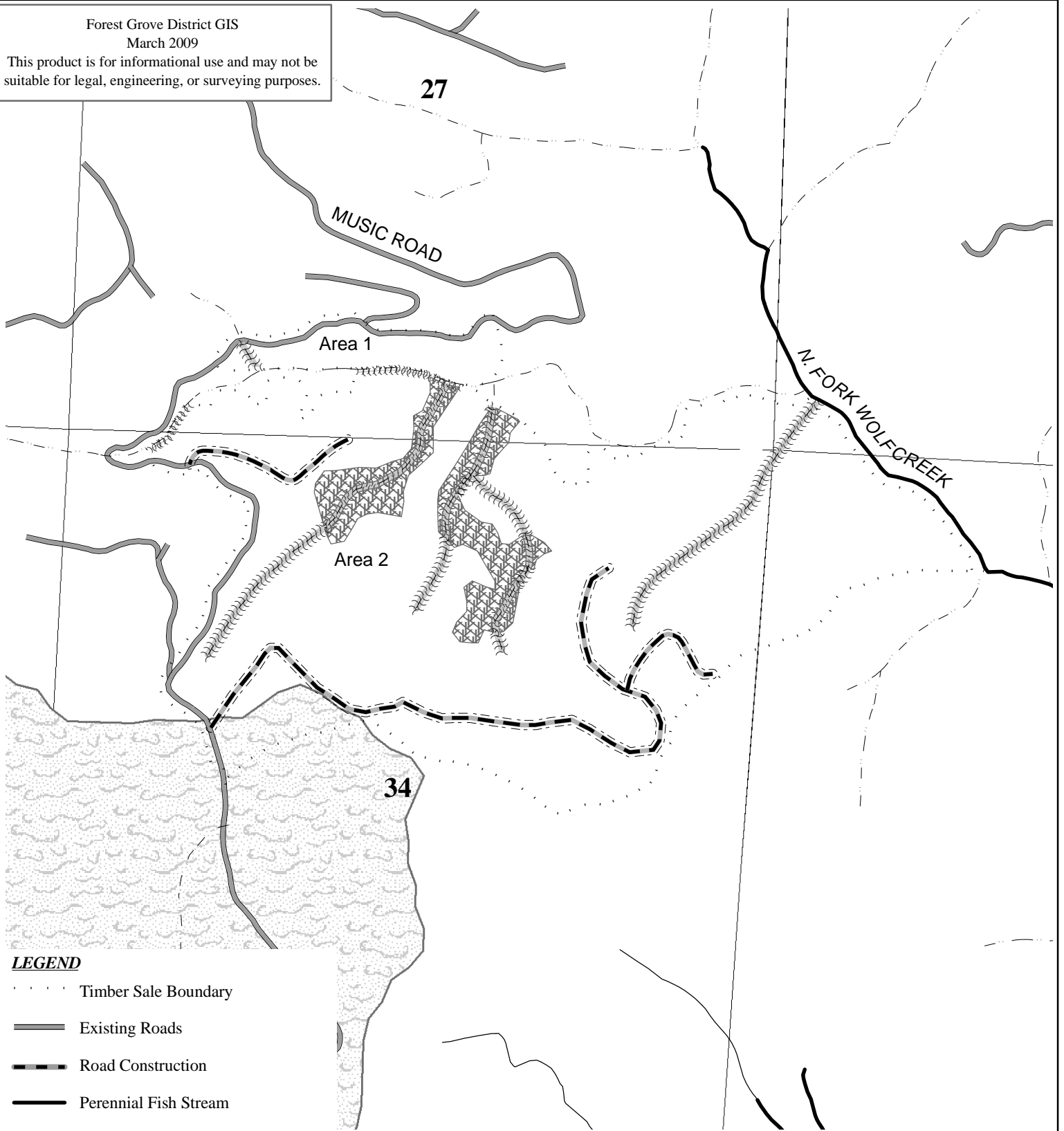
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- LEGEND**
- Timber Sale Boundary
  - Existing Roads
  - Road Construction
  - Perennial Fish Stream
  - Perennial Non-fish Stream
  - Stream, Unknown Fish Presence
  - Stream Buffer
  - ODF Ownership
  - Road Construction Right-of-Way
  - Salmon Anchor Habitat (SAH)
  - Non-Thinable Area

FY 2010  
RUSTY FORD  
PORTIONS OF SECTIONS 27 & 34 T04N, R06W, W.M.  
CLATSOP COUNTY, OREGON  
Attachment C: Key Resources

**APPROXIMATE GROSS ACREAGE**

Area 1	12	ACRES (PC-M)
Area 2	249	ACRES (PC-M)
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