

# Pre-Operations Report

**Operation Name:** Johnny Hairpin  
**County:** Washington  
**Management Basin:** Sunday Creek

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

Area	Type of Operation	Gross Acres	Net Acres
1	Moderate Partial Cut	203	191
<b>Total</b>	<b>Partial Cut Harvest</b>	<b>203</b>	<b>191</b>
2	Modified Clearcut	146	104
<b>Total</b>	<b>Regeneration Harvest</b>	<b>146</b>	<b>104</b>

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

Slopes have a varied aspect and range from 20 to 60%. Elevations range from 1600 to 2500 feet. The major soil types are Rye and Killam. The sale extends from the ridge tops to the lower slopes adjacent to the North Fork of the North Fork of the Trask River.

The landform is a gentle divide between two tributaries of the North Fork of the Trask River including some steep slopes in Area 1 along the stream running through the center of the sale area. The underlying rocks are mostly igneous origin flows of the Basalts of Hembre Ridge (informal formation) and intrusive diabase sills.

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

The sale areas burned in the 1933, 1939, and 1945 Tillamook Burns.

Approximately 184 acres (96%) of Area 1 and 104 acres (100%) of Area 2 has been inventoried using the Stand Level Inventory (SLI) procedure and those stands have been classified as UDS. The remaining 7 acres of Area 1 (4%) are classified as CSC according to the Current Condition map that appears in the Forest Grove District Implementation Plan (*March 2003*).

Area 1 is composed of well stocked Douglas-fir with scattered hemlock. Red alder is confined to wet areas and draws. *Phellinus weirii* is present. The need for treatment will be determined when the *Phellinus weirii* survey results are received.

Area 2 is a mix of well stocked Douglas-fir and large areas of scattered conifers and brush. The poorly stocked patches contain significant amounts of *Phellinus weirii*.

The understory in Area 1 is mostly sword fern, salal and dwarf Oregon grape. Area 2 contains significant amounts of vinemapple as well as sword fern and dwarf Oregon grape.

SLI data shows that there are approximately 4 to 6 snags per acre and 3,500 to 4500 ft<sup>3</sup>/acre of DWD. Most of the snags and DWD are classes 3, 4 and 5.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age <sup>4</sup>	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	PC-M	8055	DF	44-50	13	209	236	58	152
		8069	DF	40-42	13	226	246	62	32
		8074*	DF, WH	43 est.	16	217	154	55	7
		<i>Target</i> <sup>3</sup>			16	130	93	33	191
2	MC	8055	DF	44-55	13	209	236	58	7
		8056	DF	38-44	15	218	177	56	19
		8057	DF	38-41	13	217	235	60	24
		8059	DF	31-40	13	207	218	57	54

<sup>1</sup> The source of stand inventory information is from SLI inventory grown to 2005. Stand ID shown with (\*) is from expanded SLIP information based on similar stands as of 11/2/2005.

<sup>2</sup> The acres are based on GIS and exclude existing and planned roads, stream buffers, green tree retention areas, and non-thinnable areas. Clear cut acres do not exceed 120 acres.

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

<sup>4</sup> Actual measured breast height ages are shown unless labeled "est."

### **III. DESIRED FUTURE CONDITION/VISION:**

The first entry partial cut will continue the development of Area 1 toward LYR. Area 2 will be REG in the short term. According to the Forest Grove District's landscape design for the Sunday Creek basin, the desired future condition (DFC) for Area 1 is 93% General and 7% OFS. The DFC for Area 2 is 100% General.

The harvest operation in Area 1 will continue the development of UDS structure in the short term. All trees less than 8 inches and all species other than Douglas-fir shall be retained. All existing snags which do not present a safety hazard, and down woody debris of all decay classes shall be retained. As the understory develops, future operations will remove more of the overstory. This will provide more light and nutrients to promote the continued vigor of the understory. In time, a second and third layer of trees and other vegetation will develop, producing the desired complex structure.

Area 2 is a modified clearcut. The vision for this area is to establish a vigorous growing plantation of *Phellinus* resistant tree species. This area will be clearcut again in 50 to 60 years at which time the site could be returned to predominantly Douglas-fir. At the time of the second modified clearcut, it is anticipated the stand will be in the UDS condition.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	8055	UDS	UDS	GEN	152
	8069	UDS	UDS	GEN	32
	8074	UDS	UDS	GEN	7
2	8055	UDS	REG	GEN	7
	8056	UDS	REG	GEN	19
	8057	UDS	REG	GEN	24
	8059	UDS	REG	GEN	54

<sup>1</sup> 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.

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

**Partial Cut - Moderate:**

Area 1 is a PC- M. The target SDI is approximately 33.

Douglas-fir will be selected for harvest. All other species will be reserved. Area 1 will be thinned to a target basal area of 120 to 140 square feet. The average DBH of the residual stand will be approximately 16 inches. Residual trees will be the largest DBH and height, and have the best form and vigor. All trees less than 8 inches shall be reserved and shall not count toward the target basal area.

All existing snags which do not present a safety hazard, and down woody debris of all decay classes shall be retained. Additional DWD recruitment is expected through felled snags, tree topping and logging slash. Due to the small tree diameter and young age of this stand, snag creation will be delayed until the second entry partial cut approximately 20 years after this first entry partial cut. In the interim it is anticipated that snag and DWD recruitment will occur through natural processes.

**Modified Clearcut:**

Area 2 is a MC.

Hemlock and noble fir will be reserved from harvest.

Two trees per acre shall be topped in Area 2 to create hard snags. Snags shall be evenly distributed throughout Area 2 and the green tree retention areas, have a DBH of at least 18 inches, and be at least 60 feet in height.

Approximately 80 large trees will be dropped to add class 1 DWD on the gentle slopes within the area. All existing DWD will be reserved

A variety of methods will be used to achieve green tree retention requirements. This includes two green tree retention areas, stream buffers, and trees scattered across Area 2. These methods will be used in combination to meet the green tree requirement in the Forest Management Plan (FMP) and provide snags and DWD to the stand, which are expected to develop through natural processes.

Some portions of the site will be planted with *Phellinus* resistant species. The location depends on the results of the *Phellinus* survey. Following harvest, the sale areas will be reviewed to determine if site preparation is needed. The new stand will be precommercially thinned around age 15 and then clearcut at approximately age 50.

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

**Table 4. Timber and Revenue**

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

	Conifer	Hardwood	Total
Net Volume (MBF)	6,000		
Stumpage Value (\$/MBF)*	\$400		
Estimated Gross Value			\$2,400,000
		Project Costs:	\$270,000
		Estimated Net Value:	\$2,130,000

\*Combined Douglas-fir and hemlock stumpage values

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Stimson Mainline, the 2500 Mainline and unnamed spur roads. Most are currently crushed rock roads although some of the unnamed spurs are dirt. An access easement will need to be obtained from Stimson Lumber Company. Road use fees will apply.

Approximately 3.7 miles of existing unsurfaced 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. See maps for specific road locations and conditions.

Approximately 0.6 miles of road will be constructed to provide access to cable landing locations. New construction is limited to ridgetops. New roads will not cross streams.

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.

A 3,000 cubic yard stock pile of 6"-0" rock will be provided for recreational trail maintenance at a cost of \$20,000.

Estimated cost of project work is \$270,000.

Area 1 is 100% cable. Area 2 is 75% cable and 25% ground yarding.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	0.6	0
Improvement	0	0	3.7	0
Maintenance	15 <sup>1</sup>	6 <sup>1</sup>	4.3	0
Vacation	0	0	0	0

<sup>1</sup> Third party roads.

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

The North Fork of the North Fork of the Trask River, a large type F stream, and an unnamed medium type F tributary flow adjacent to the sale. There are two small unnamed type F streams within Area 1. There are several unnamed small perennial and seasonal Type N streams within both sale areas. All streams flow into the North Fork of the North Fork of the Trask River.

During sale layout, all streams will be field verified as to size, type, locations, and/or source.

Riparian area stand types along these streams are a mix of conifer and hardwood.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

Stream buffers within harvest unit boundaries will be managed according to FMP Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

The Trask Watershed Analysis will be checked for recommendations that could be applied during this sale.

Seasonal hauling restrictions will be applied in order to protect the water quality on all streams along the haul route. Restrictions may include limiting the number of loads hauled per day, not hauling during periods of heavy moisture, or having an alternate haul route.

ODFW fish biologist Dave Plawman will assess the potential for stream enhancement projects on the North Fork of the North Fork of the Trask River. Projects to incorporate wood placement in streams will be accomplished concurrent with harvest activities.

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 September 15. Operations outside of this period will be reviewed with ODFW.

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

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist (Area Biologist).

Spotted owl surveys are not required for Johnny Hairpin, as the sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*).

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale area. The ODF wildlife biologist for the NW Oregon Area made the determination that the sale area is non-suitable habitat for marbled murrelets.

This operation does not involve an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. Neither the sale area nor the haul route is in close proximity to a stream with listed fish.

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

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

There are steep slopes along the stream in Area 1. The initial hazard and risk assessment from the geotechnical specialist is low for Area 2 and high for Area 1. The geotechnical specialist will be consulted during field work to determine if a field visit is needed for Area 1.

**X. RECREATION RESOURCES:**

The sale is designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). The District Recreation Coordinator reviewed this sale and had no comments on the planned operation. A stock pile of 6"-0" rock was requested. The rock will be used for recreational trail maintenance not associated with this operation.

Restricted access through Stimson Lumber Company land prevents recreational use in this area.

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

**XIII. OTHER RESOURCE CONSIDERATIONS:**

Property lines have been true blazed and posted.

All known survey corners and witness trees shall be protected from damage during any operations.

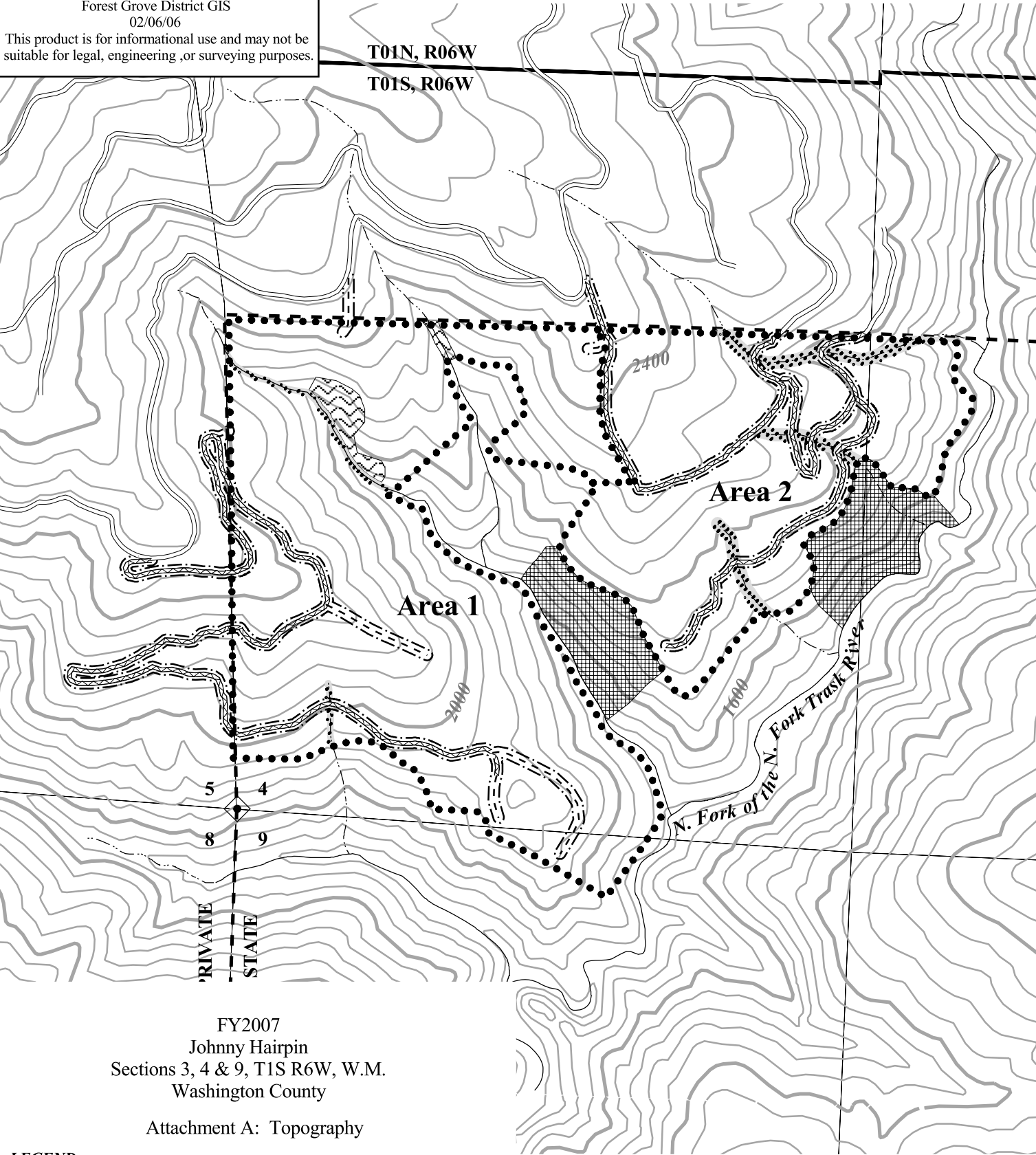
**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

Area 1 contains Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.

Area 2 also contains Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.

T01N, R06W

T01S, R06W



FY2007  
Johnny Hairpin  
Sections 3, 4 & 9, T1S R6W, W.M.  
Washington County

Attachment A: Topography

**LEGEND**

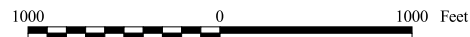
- Timber Sale Boundary
- ▣ Green Tree Retention Area
- ▤ Non-Thinnable Area
- 400' Contour Intervals
- 80' Contour Lines
- Existing Roads
- - - Road Construction
- ▨ Road Improvement
- Right-of-Way Boundary
- - - ODF Ownership
- Perennial Type F stream
- Perennial Type N stream



Scale  
1:12000  
1 Inch = 1000 Feet

APPROXIMATE NET ACREAGE

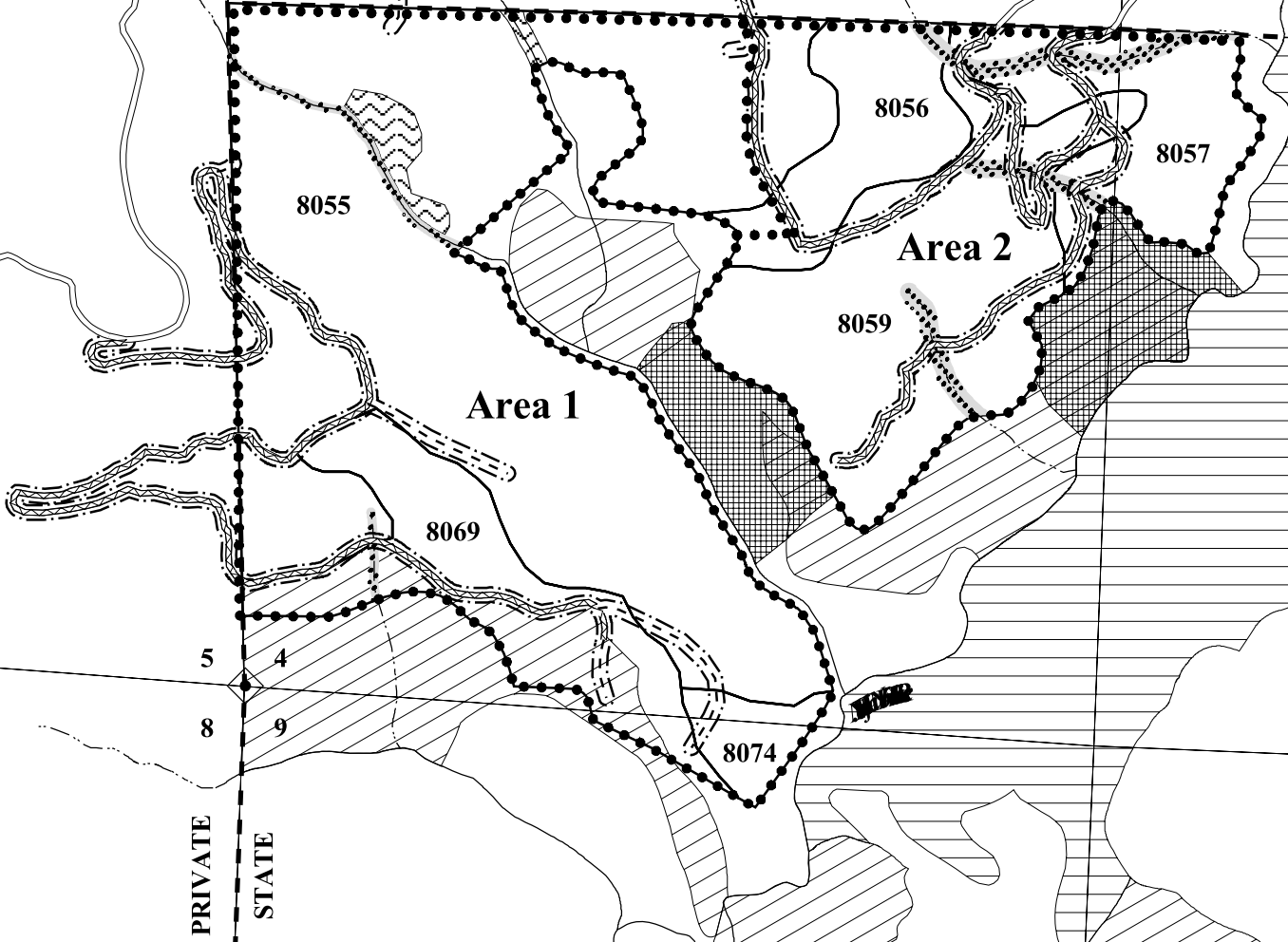
AREA 1	191 ACRES (PC-M)
AREA 2	104 ACRES (MC)
<b>TOTAL</b>	<b>295 ACRES</b>



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

T01N, R06W

T01S, R06W



PRIVATE  
STATE

FY2007  
Johnny Hairpin  
Sections 3, 4 & 9, T1S R6W, W.M.  
Washington County

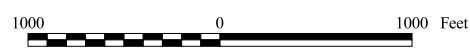
Attachment B: Desired Future Condition

**LEGEND**

- |                |                           |         |                         |
|----------------|---------------------------|---------|-------------------------|
| ●●●●●          | Timber Sale Boundary      | ====    | Existing Roads          |
| ▒▒▒▒           | Green Tree Retention Area | - - - - | Road Construction       |
| ▒▒▒▒           | Non-Thinnable Area        | ▒▒▒▒    | Road Improvement        |
| DFC Stand Type |                           | ·-·-·   | Right-of-Way Boundary   |
| ▒▒▒▒           | Layered                   | - - - - | ODF Ownership           |
| ▒▒▒▒           | Older Forest Structure    | ====    | Perennial Type F stream |
| □              | SLI Polygons (Stand ID#)  | ·-·-·   | Perennial Type N stream |



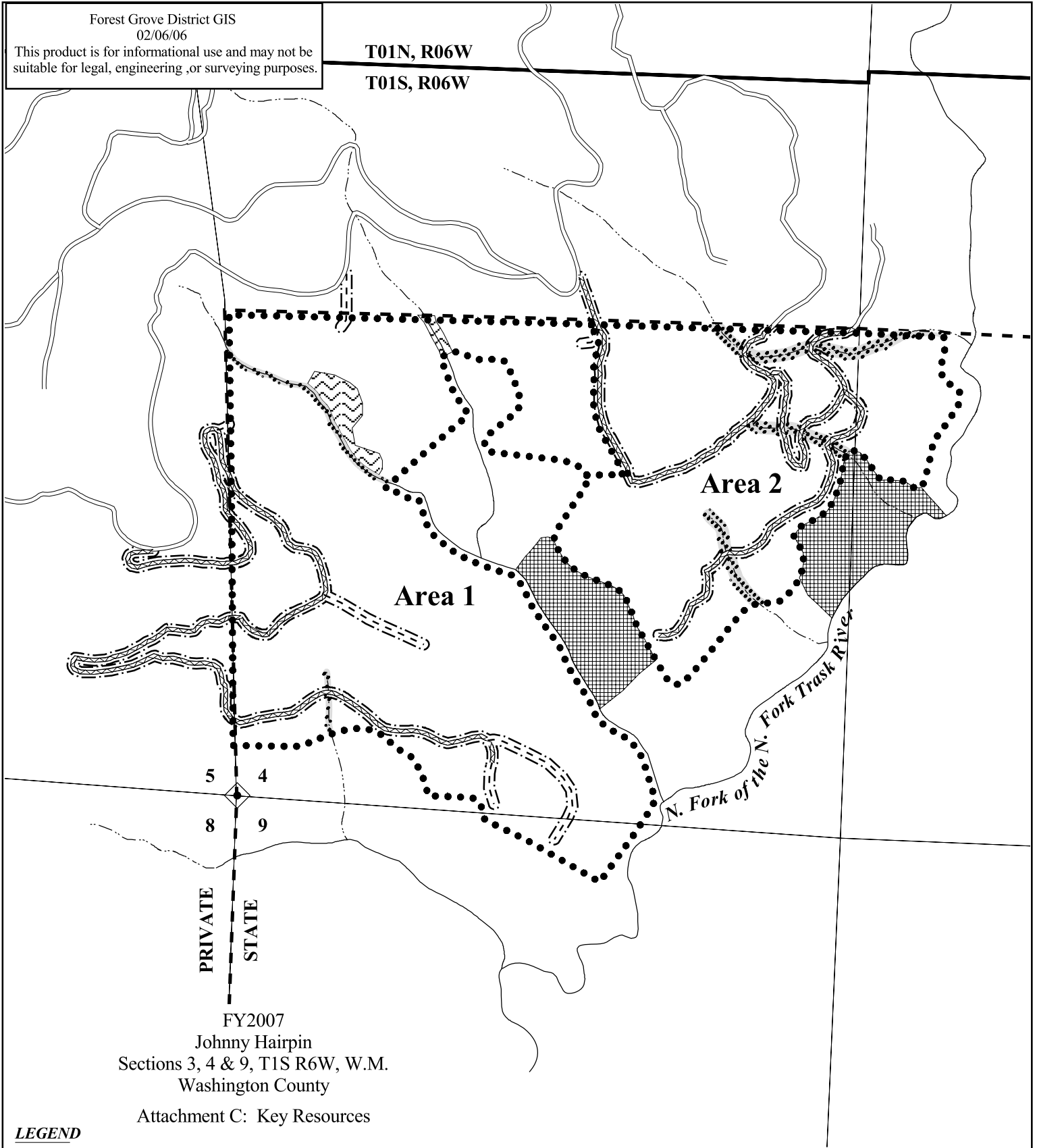
Scale  
1:12000  
1 Inch = 1000 Feet



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AREA 2	104 ACRES (MC)
<b>TOTAL</b>	<b>295 ACRES</b>

T01N, R06W

T01S, R06W



5 4  
8 9  
PRIVATE STATE

Area 2

Area 1

N. Fork of the Trask River

FY2007  
Johnny Hairpin  
Sections 3, 4 & 9, T1S R6W, W.M.  
Washington County

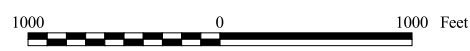
Attachment C: Key Resources

**LEGEND**

- Timber Sale Boundary
- ▒ Green Tree Retention Area
- ▒ Non-Thinnable Area
- ══ Existing Roads
- - - Road Construction
- ▨ Road Improvement
- — — Right-of-Way Boundary
- - - ODF Ownership
- Perennial Type F stream
- · - · - Perennial Type N stream
- ▒ Stream Buffer



Scale  
1:12000  
1 Inch = 1000 Feet



APPROXIMATE NET ACREAGE	
AREA 1	191 ACRES (PC-M)
AREA 2	104 ACRES (MC)
<b>TOTAL</b>	<b>295 ACRES</b>