

# Pre-Operations Report

**Operation Name:** SW Barney

**County:** Washington

**Management Basin:** Sunday Creek

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

Area	Harvest Type	Gross Acres	Net Acres
1	Modified Clear Cut	107	105
2	Moderate Partial Cut	13	13
<b>Total</b>		<b>120</b>	<b>118</b>

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

The sale has a variable aspect and ranges from north to east. Slope ranges from 15% to 65%. The elevation ranges from 1,700 to 2,100 feet. Soils are Killam, Rye and Grindstone.

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

The sale area burned in 1933 and 1939 as part of the Tillamook fires. The sale area was seeded in 1956.

The sale has been inventoried using the Stand Level Inventory (SLI) procedure. The sale area has been classified as understory development stage (UDS). (see Tables 2 and 3)

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	MC	8235	DF	51	15	235	203	62	105
2	PC-M	8235	DF	51	15	235	203	62	13
		<b>Target<sup>3</sup></b>	<b>DF</b>		<b>18</b>	<b>106</b>	<b>60</b>	<b>25</b>	<b>13</b>

<sup>1</sup>The source of stand inventory information is SLI grown forward to 2008 for trees 8 inches or larger in diameter.

<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 Sunday Creek Basin (*Forest Grove District Implementation Plan, 2009*), Areas 1 and 2 are designated for General (GEN) stands.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	8235	UDS	REG	GEN	105
2	8235	UDS	UDS	GEN	13

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

Area 1 will be managed for timber production. Replacement stands will be converted to regeneration about every 60 years. This stand appears to be a productive site with few access, harvesting, or riparian issues. Recent Phellinus surveys show a great deal of disease presence in the sale area. The concentration of root disease patches makes a modified clear cut the best management option in the short term if Douglas-fir is the desired species for future rotations. The next replacement stand however, will be planted with alternate tree species across most of the sale area. Maintaining and creating some species diversity, legacy trees (scattered and clumped), snags and down wood components will continue to enhance wildlife habitat potential.

The goal for Area 2 is to manage for mature forest structure in the riparian zone. The intent of this harvest is to keep the overstory healthy and growing rapidly to create several trees per acre that are large in size. Initiate and maintain a healthy understory layer of trees and vegetation. Eventually it will become a much more complex stand than its current state, in terms of species composition, decadent material, tree size, and density variation. Douglas-fir will dominate the overstory with <15% of the stand in other conifer species. Intermediate layers of shade tolerant conifers will be present as well.

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

**Area 1**

This is a modified clearcut. In this stand, approximately 9 green trees per acre will be retained. An average of 2 snags per acre will be created from these green trees. Future recruitment of down wood is expected to occur naturally. Following harvest, site prep will consist of a chemical application to treat salal and vine maple. The stand will be reforested with a mix of tree species, with only small amounts of Douglas-fir, to mitigate the effects of Phellinus in the unit.

Another regeneration harvest will take place in approximately 60 years post harvest. In the interim, management activities will include a pre-commercial thin at age 15 and a moderate partial cut at age 40.

**Area 2**

This will be a commercial thinning. Due to the location of the stand, it will receive no further management. Basal area will be taken down to 106 square feet leaving approximately 60 trees per acre. SDI will be around 25. Creating additional small openings in the tree canopy to treat the presence of Phellinus and create a more diverse structure may be evaluated during sale preparation.

The prescription will allow the development of an abundant understory to achieve an UDS condition for the next several years. By preserving all trees other than Douglas-fir the total species composition will shift to a higher percentage of western hemlock and noble fir and western red cedar. Understory and intermediate layers of conifer will develop over the next several years. Some of the snag creation required in Area 1 will take place in Area 2 to add additional structural complexity. More snags and down woody debris (DWD) will recruited naturally.

**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>4,400</b>		<b>4,400</b>
Stumpage Value (\$/MBF)	<b>\$180</b>		
Estimated Gross Value	<b>\$792,000</b>		<b>792,000</b>
		Project Costs:	<b>\$60,000</b>
		Estimated Net Value:	<b>\$732,000</b>

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale area access is Turner Creek Mainline to the Flora Mainline to more Weyerhaeuser roads which will eventually get you to the sale area. All of these roads are currently all-weather, crushed rock surface roads. It is approximately 12 miles to the county road. Approximately 400 feet of the planned new construction will be through Weyerhaeuser ownership before it enters State.

Access crosses several miles of private ownership and a little bit of BLM. ODF has easements for all roads. There are 2 gates along the route which require keys. There will be no road use fees.

Approximately 1.0 miles of road will be constructed to provide sale access costing approximately \$60,000. Road construction is necessary to access landing locations for cable yarding operations. A small amount of new construction will cross private ownership. By using this proposed location, new construction will be limited to ridge tops, moderate side slopes, and will not have any stream crossings. All new spur roads will have sustainable grades and will be rocked to facilitate year round logging and hauling.

Total Estimated cost of project work is \$60,000.

The operation will be 65% cable yarding and 35% ground based yarding.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	1.0	0
Improve	0	0	0	0
Maintenance	6	4	2	0
Block (Closed)	0	0	0	0
Vacate	0	0	0	0

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

The sale is located at the headwaters of the North Fork Trask River. There are no perennial streams located in the sale area. The eastside of the sale borders Barney Reservoir, a municipal water source.

Any streams will be buffered and protected according to Forest Management Plan (FMP) strategies. The reservoir will be treated the same as a Type-F stream. There will be a minimum 25 foot no harvest buffer. The moderate partial cut in Area 2 will provide additional green tree retention within close proximity to Barney Reservoir. Area 2 is a 100 foot wide strip that parallels the no harvest buffer. The combination of a no harvest zone with a 100 foot moderate thinning strip is expected to promote structural development in the inner zone while providing protection for the reservoir. Any seasonal streams will be evaluated more closely during sale layout.

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. Restrictions may include limiting the number of loads hauled per day and not hauling during periods of heavy moisture.

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

The sale area has been reviewed by the ODF Northwest Oregon Area Biologist.

The sale was surveyed during the 2008 survey season for Northern Spotted Owls with no detections. The sale will be surveyed again during the 2009 survey season. All surveys will be/were conducted in accordance with USFWS protocol.

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.

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 the Middle Fork of the North Fork of the Trask in which listed Coho salmon

are present. This stream was last surveyed in 2002. The riparian and aquatic strategies combined with road and harvest practices described in this Annual Operations Plan and our FMP are designed to minimize impacts and or restore aquatic habitats that influence aquatic species.

The sale was 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.

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

This assessment is based on USGS 1:24,000 topographic maps and available geologic maps. There are no high landslide hazard locations in the sale area. The sale area drains into Barney Reservoir. The risk of landslides delivering to Barney Reservoir from the sale area is low.

#### **X. RECREATION RESOURCES:**

The sale is in the area of the forest designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). There are no recreation facilities in or adjacent to the sale 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:**

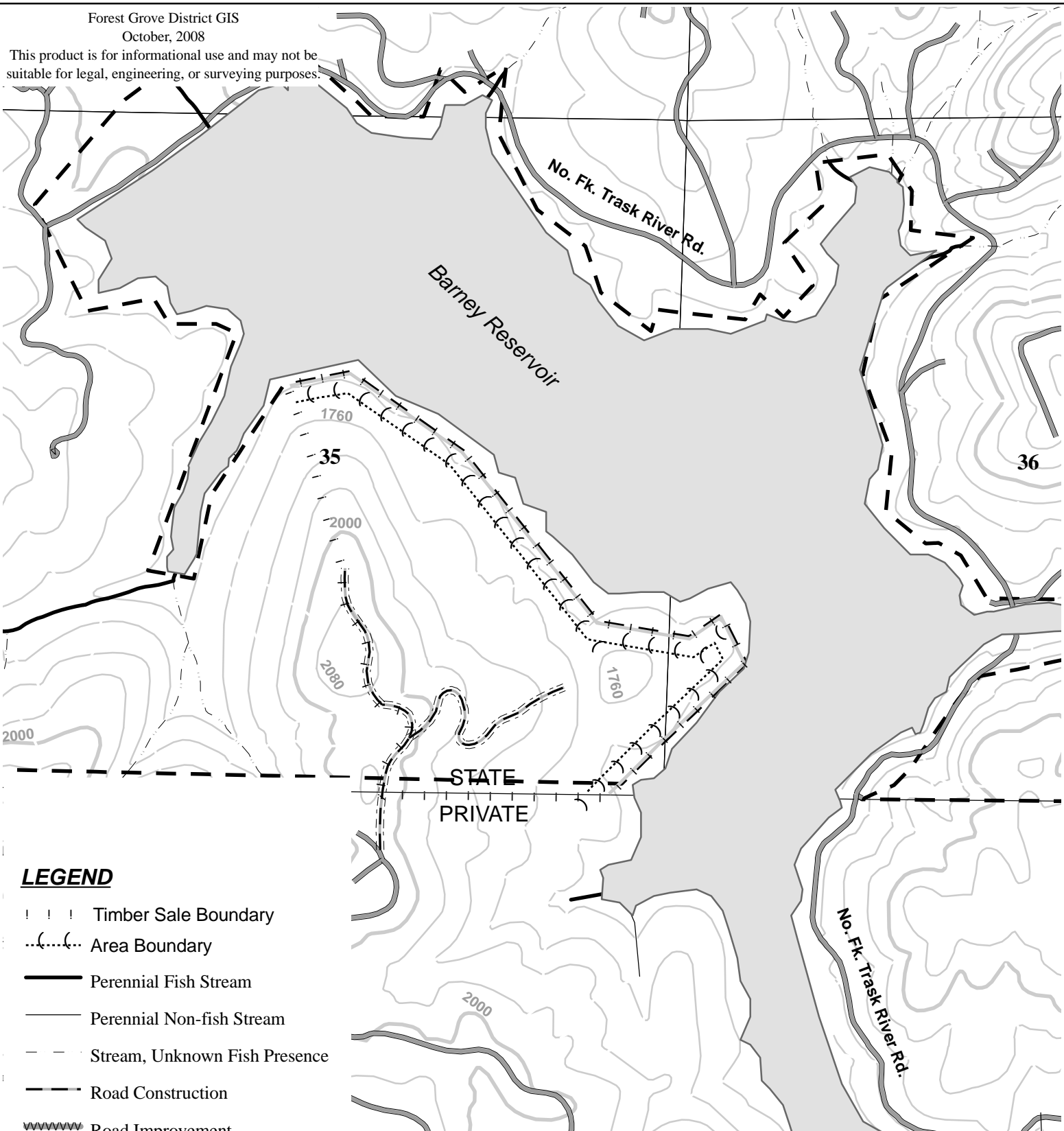
There is an ODF permanent plot located within the sale. The guidelines sent out by the Cruising and Inventory Forester on July 12, 1999 for managing operational impacts to permanent plot markings will be followed.

85% of the sale is surrounded by two other landowners. The south boundary line has been surveyed and marked with blazes. The ownership line around the reservoir needs to be established and marked prior to field preparation. There already may be pvc pipe marking a surveyed line already in place. Further research and field recon will be necessary.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

The sale is classified as Focused Stewardship, Domestic Water Use as the sale is along the edge of the Barney Reservoir. See Section VII "Aquatic Resources and Water Quality", for the strategies to mitigate impact to the reservoir. The sale area also 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**

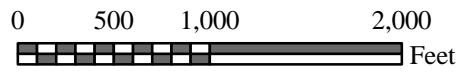
- ! ! ! Timber Sale Boundary
- ..... Area Boundary
- Perennial Fish Stream
- Perennial Non-fish Stream
- - - - Stream, Unknown Fish Presence
- — — Road Construction
- ~~~~~ Road Improvement
- - - - Right-of-way Boundary
- Existing Roads
- No touch buffer
- ODF Ownership
- 400' Contour Intervals
- 80' Contour Intervals

FY 2010  
SW BARNEY  
PORTIONS OF SECTIONS 35 & 36, T01S, R06W, W.M.,  
WASHINGTON COUNTY, OREGON

Attachment A: Topography

Scale  
1:12000

1 inch = 1000 feet

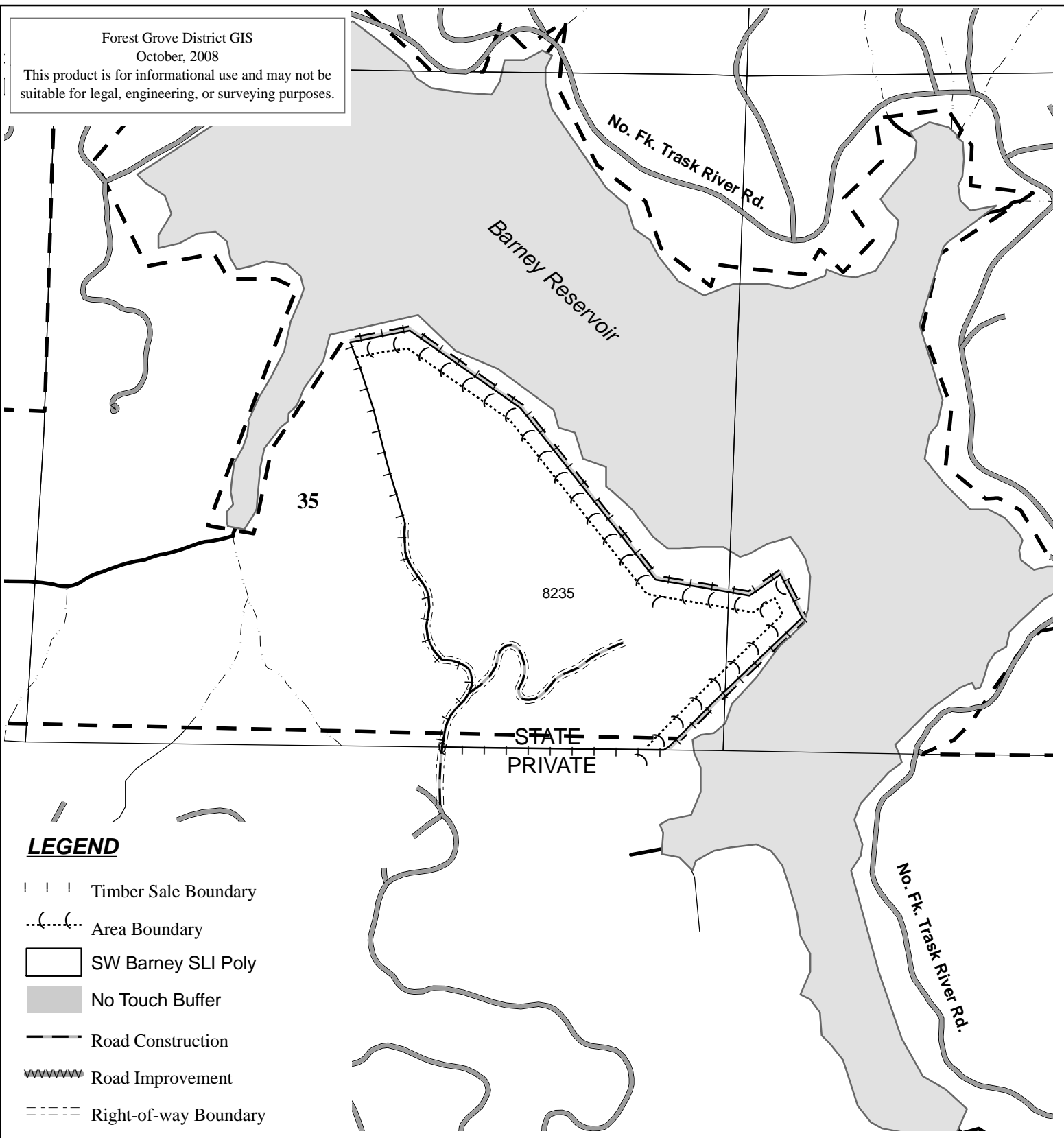


**3**

APPROXIMATE NET ACREAGE

AREA 1	105	ACRES (MC)
AREA 2	13	ACRES (PC-M)
<b>TOTAL</b>	<b>118</b>	<b>ACRES</b>

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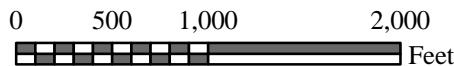
**LEGEND**

- ! ! ! Timber Sale Boundary
- Area Boundary
- SW Barney SLI Poly
- No Touch Buffer
- Road Construction
- ~~~~~ Road Improvement
- - - Right-of-way Boundary
- Existing Roads
- ▨ DFC - LYR
- ▩ DFC - OFS
- ⊠ ODF Ownership
- Perennial Fish Stream
- Perennial Non-fish Stream
- - - Stream, Unknown Fish Presence

FY 2010  
SW BARNEY  
PORTIONS OF SECTIONS 35 & 36, T01S, R06W, W.M.,  
WASHINGTON COUNTY, OREGON  
Attachment B: Desired Future Condition

Scale  
1:12000

1 inch = 1000 feet

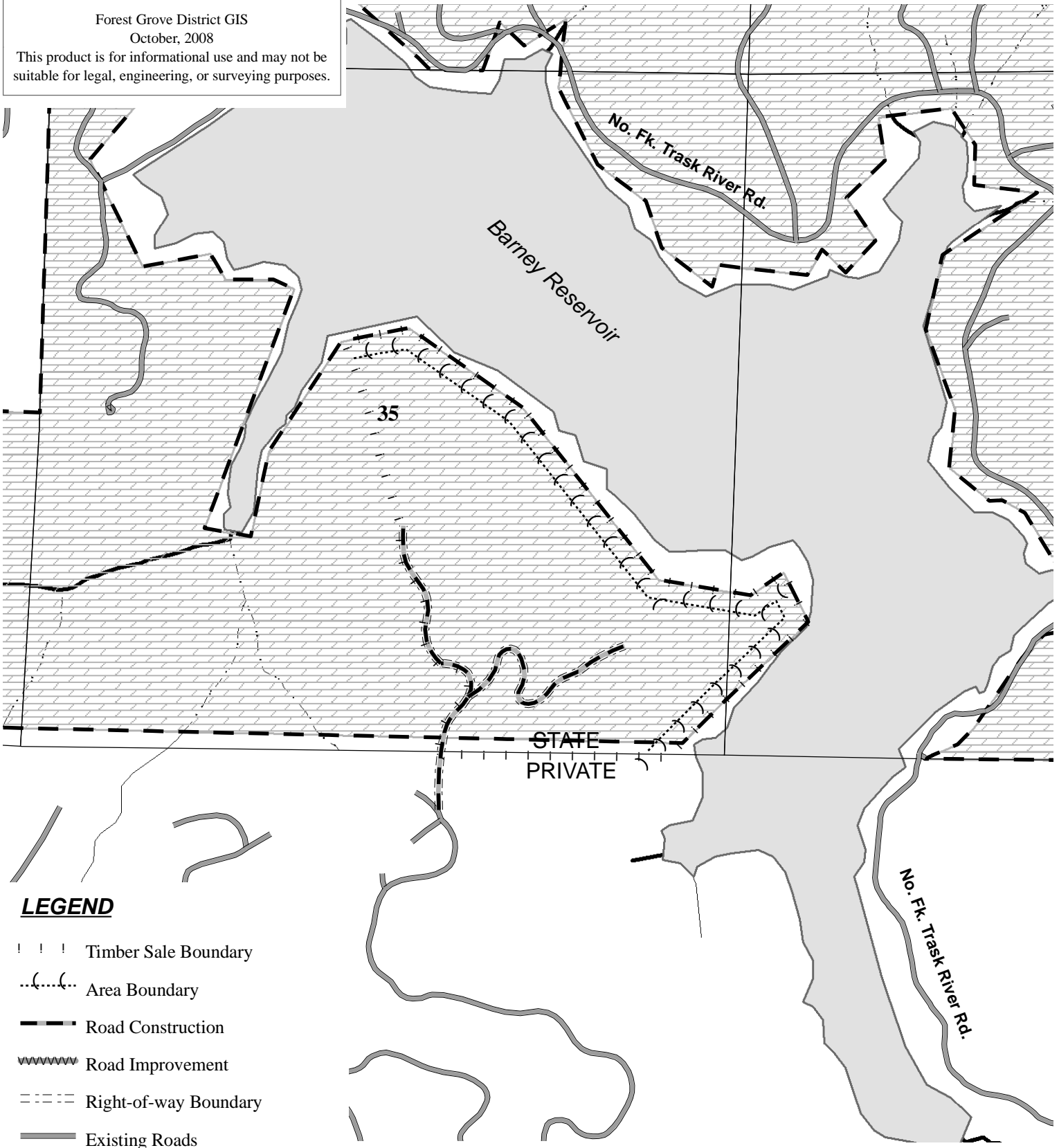


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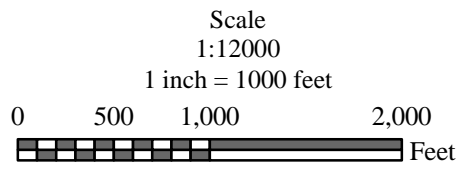


**LEGEND**

- ! ! ! Timber Sale Boundary
- ... Area Boundary
- Road Construction
- ~~~~~ Road Improvement
- - - Right-of-way Boundary
- Existing Roads
- ODF Ownership
- ▨ Domestic Water Use
- Perennial Fish Stream
- Perennial Non-fish Stream
- - - Stream, Unknown Fish Presence
- Stream/Lake Buffer

FY 2010  
 SW BARNEY  
 PORTIONS OF SECTIONS 35 and 36, T01S, R06W, W.M.,  
 WASHINGTON COUNTY, OREGON

Attachment C: Key Resources



**3**

**APPROXIMATE NET ACREAGE**

AREA	ACRES	TYPE
AREA 1	105	ACRES (MC)
AREA 2	13	ACRES (PC-M)
<b>TOTAL</b>	<b>118</b>	<b>ACRES</b>