

# Pre-Operations Report

**Operation Name: South Gawley**  
**County: Clackamas**  
**Management Basin: Butte Creek**

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

Area	Harvest Type	Gross Acres	Net Acres
1	MC	132	114

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

The operation is located within a temperate climate area. Typically the fall and winter seasons are wet. This area receives approximately 70 to 90 inches of rainfall per year. The operation is located within the *Tsuga heterophylla* Zone (Natural Vegetation of Oregon and Washington, Franklin & Dyrness, 1973). The landform is a gentle ridge with a generally north aspect. The elevation of the operation ranges from 3,220 to 3,600 feet. The slopes range from 0 to 40%.

Soil within the operation consists of Goodlow soils. The Goodlow series are deep, well-drained, medium-textured colluvial soils developing from Miocene age andesite. They are very dark to dark brown sandy to gravelly loams in the A and B horizons. The weakly structured C horizons or bedrock occur at 40 inches. Rock volume ranges from 10 to 40 percent in the solum. These soils occur on gentle to steep mountain slopes at elevations over 3200 feet in areas where the mean annual precipitation varies from 80 to 110 inches.

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

The stands within the operation are currently classified as Understory and are between the ages of 68 to 85 years. The overstory consists of a mixture of Douglas-fir, noble fir, western hemlock and red alder. The understory consists of huckleberry, rhododendron, vine maple, salmon berry, salal, Oregon grape, ocean spray, dogwood, oxalis, grass and ferns.

Field inventory (SLI 2002) found approximately 0.2 snags per acre 24 inches and larger in decay classes 3 through 5. There are 70 cubic feet per acre of sound down wood less than or equal to 24 inches and 0.7 pieces totaling 400 cubic feet per acre greater than 24 inches. In decay classes 3 through 5 there are 39 pieces totaling 4,600 cubic feet larger than 24 inches and 1,400 cubic feet per acre of down wood 24 inches and smaller.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	MC	12266	DF, WH, NF, RA	72	14	237	208	77	47
		12267	DF, WH	85	18	400	229	97	22
		12268	DF, WH, NF, RA	68	14	136	120	44	1
		12271	DF, WH, NF, RA	69	15	176	140	50	3
		12272	DF, WH, NF, RA	74	17	187	122	49	49
		12760	DF, WH, NF, RA	70	19	167	81	40	10
		Target <sup>3</sup>			16	15	10	23	

<sup>1</sup>The source of stand inventory information is SLI 2002

<sup>2</sup>The acres are based on GIS and include roads, streams 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:

The DFC for the Timber Sale Area is a mature fully stocked closed single canopy stand of mixed conifer species consisting primarily of Douglas-fir with lesser amounts of noble fir. Large remnant green trees, snags and down wood from previous rotations will persist in the stand. Younger remnant trees in small patches and along riparian areas add to the over-all diversity of the site.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>2</sup>	Desired Future	Acres
1	12266	UDS	REG	CSC	47
1	12267	UDS	REG	CSC	22
1	12268	UDS	REG	CSC	1
1	12271	UDS	REG	CSC	3
1	12272	UDS	REG	CSC	49
1	12760	UDS	REG	CSC	10

<sup>1</sup> Field reconnaissance indicated UDS (SLI reported CSC structure).

<sup>2</sup> The stand is expected to develop into this condition in the 5 to 10 years after this operation is completed.

### IV. PROPOSED MANAGEMENT PRESCRIPTION:

The objective of the operation is to rehabilitate an underproductive stand, establish an intensively managed new stand, while maintaining or developing structural components important to habitat diversity.

- The process begins with a regeneration harvest of the existing stand utilizing a modified clear cut.

- Approximately 7-10 trees per acre will be retained. These trees will be concentrated in 3 reserve areas totaling 6 acres, and riparian management areas totaling 10 acres.
- All existing old growth trees will be retained.
- All existing down wood will be retained and will be supplemented with cull logs and trees generated by the operation.
- Existing snags that do not pose a safety hazard will be retained. These will be supplemented with approximately 2 snags per acre greater than 15 inches in diameter which will be created within the reserve areas and riparian management areas.
- The brush and logging slash will be piled and burned to prepare the site for planting.
- The operation area may also receive a chemical treatment to manage the growth of vegetation that would compete with newly planted seedlings.
- After the site preparation is completed, the area will be planted with a mixture of Douglas-fir and some noble fir seedlings.

As the stand initiated with this operation grows, it is expected that the overstory crowns will close in and a closed single canopy condition (CSC) will develop. In the years to come, this stand will receive a series of thinnings designed to maximize volume and value, and promote stand health and vigor. It is expected that the stand structure will shift between CSC and UDS as the cutting cycles are implemented over time. Structural development to something more complex is not anticipated. This balance between CSC and UDS will persist over time until the stand is harvested.

## V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

**Table 4. Timber and Revenue**

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

	Conifer	Hardwood	Total
Net Volume (MBF)	2,650	26	2,676
Stumpage Value (\$/MBF)	\$300	\$400	
Estimated Gross Value	\$795,000	\$10,400	\$805,400
		Project Costs:	\$90,000
		Estimated Net Value:	\$715,400

## VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to this sale will be via Sawtell Road, Butte Creek Mainline, BC700 and BC710. These are currently all weather roads. The project work will consist of crushing and stockpiling 5,000 cubic yards of 1.5" – 0 crushed rock for future maintenance meets.

This sale is located on a ridge top with gentle side slopes. Following harvest skid trails within the sale area will be evaluated for closure. This sale is 100% ground yarding.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0	0
Improve	0	0	0	0
Maintain	3.6	0	0	0
Close/Block	0	0	0	0
Vacate	0	0	0	0

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

There are two small seasonal streams and one small perennial stream located within the operation. The seasonal stream in the western portion of the sale area is a tributary of Boar Creek. The perennial stream is Devils Creek, a tributary of Gawley Creek. The other seasonal stream is a tributary of Devils Creek. These were all surveyed for fish presence and found to be Type N (non-fish). To protect aquatic and riparian resources and maintain the functions and ecological processes of the streams, riparian management areas (RMAs) will be established by posting 40 foot buffers on either side of all in-unit streams. The RMA on Devils Creek will be expanded to include an associated wet area.

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

While the sale is not located within any Northern Spotted Owl circles, the sale area was determined to be suitable habitat for this species. Surveys for Northern Spotted Owls were completed in the years 2003 through 2007. In the 2003 survey season there was one response but none on the following visits. There were also responses in 2006 which were attributed to the Shoofly Creek pair. There were no responses in 2004, 2005, or 2007.

There are no listed fish in any of the streams in or near this proposed operation. The operational area was checked against the Oregon Natural Heritage Program's database of known plant locations. No records of threatened, endangered, rare, or candidate plant species were found within the operation area.

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

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

There are isolated high landslide hazard locations in the eastern portion of the sale. The sale drains into Slide Creek and Gawley Creek. The risk of landslides delivering directly from the sale to Slide Creek and Gawley Creek is low.

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

**X. RECREATION RESOURCES:**

While there are no recreational resources within close proximity to the operation, a portion of the haul route is also an access route for Rhody and Butte Lakes. Access to the lakes will be not be obstructed by this operation, but may be affected by increased log truck traffic.

**XI. CULTURAL RESOURCES:**

The district cultural resource inventory and pre-operation reconnaissance revealed no visible cultural resource features or artifacts. If discovery is made, the cultural resource will be protected and field staff will consult with the Cultural Resource Specialist in Salem.

**XII. SCENIC RESOURCES:**

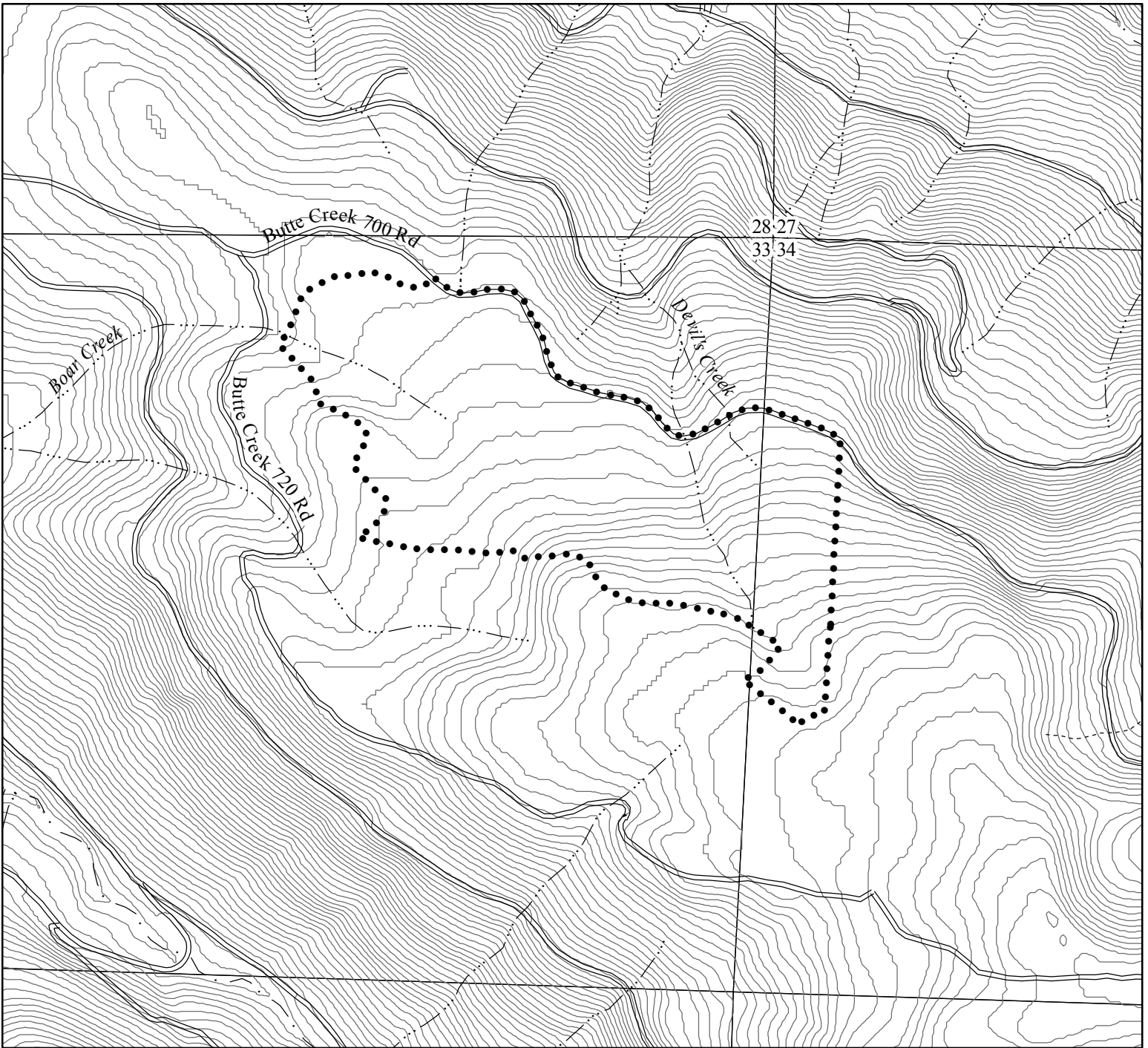
There are no scenic resources within the operation.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

There are no other resource considerations associated with this proposed operation.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

Of the 132 gross acres in the operational area, 115 are classified as General, 16 are classified as Focused and one classified as Special. All are within the Aquatic and Riparian Habitat subclass.

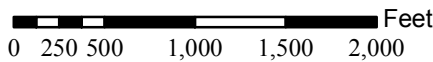


**Legend**

- Sale Boundaries
- ==== Surfaced Road
- ==: Unsurfaced Road
- New Road Construction
- Type F Stream
- Type N Stream
- Unknown Stream
- State Forest Property Boundary
- 40 Foot Contours
- Common School Land

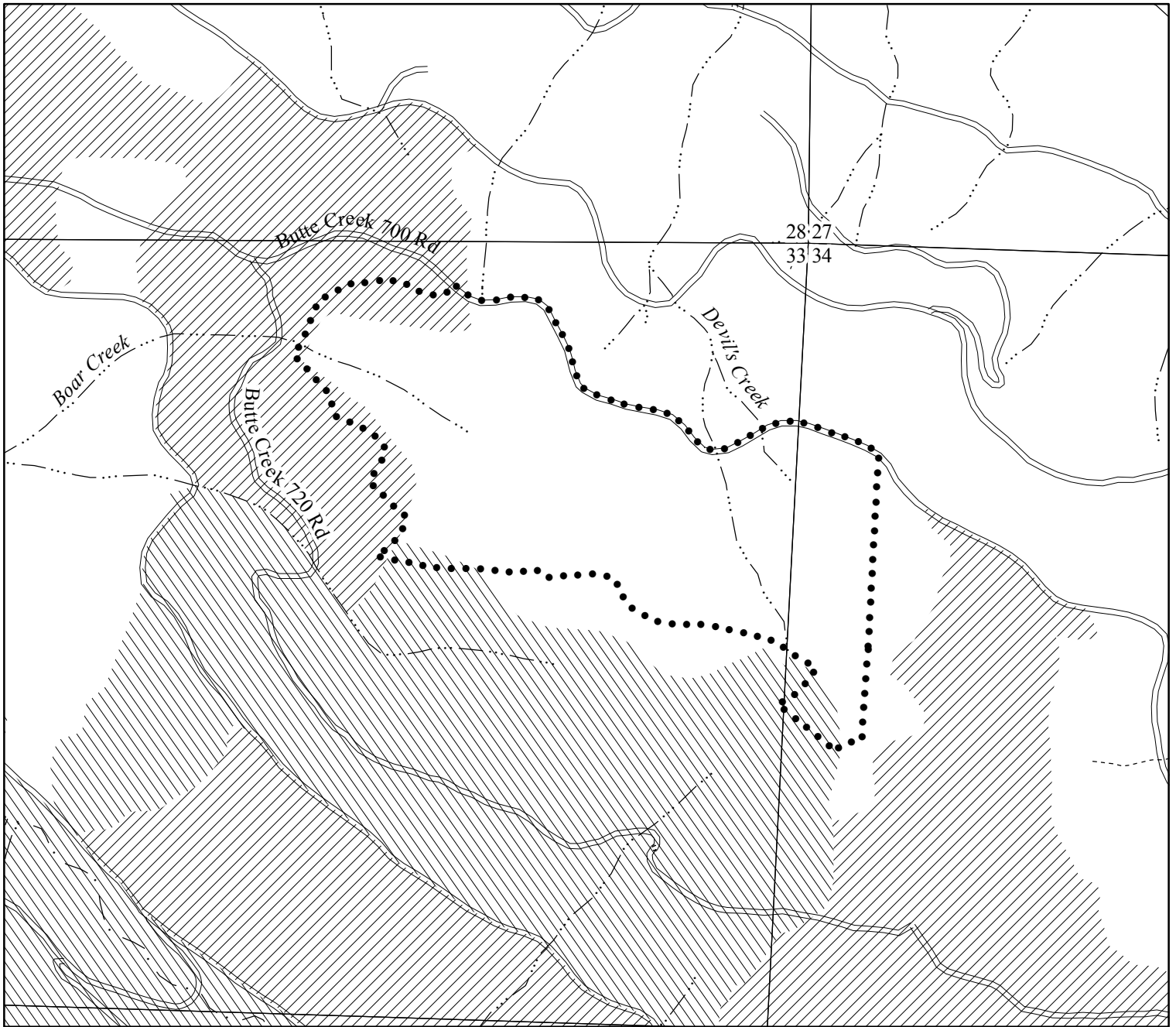
**SOUTH GAWLEY**  
 FY 09 AOP  
 NORTH CASCADE DISTRICT  
 ATTACHMENT A : TOPOGRAPHY  
 PORTIONS OF SECTION 33 & 34  
 T7S, R3E, W.M.  
 CLACKAMAS COUNTY, OR

Scale  
 1:12,000  
 1 inch = 1000 feet



APPROXIMATE NET ACRES: 114 (MC)

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



## SOUTH GAWLEY

FY 09 AOP  
 NORTH CASCADE DISTRICT  
 ATTACHMENT B : DESIRED FUTURE CONDITION

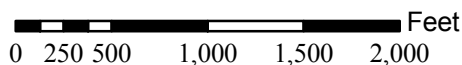
PORTIONS OF SECTION 33 & 34  
 T7S, R3E, W.M.  
 CLACKAMAS COUNTY, OR



**Legend**

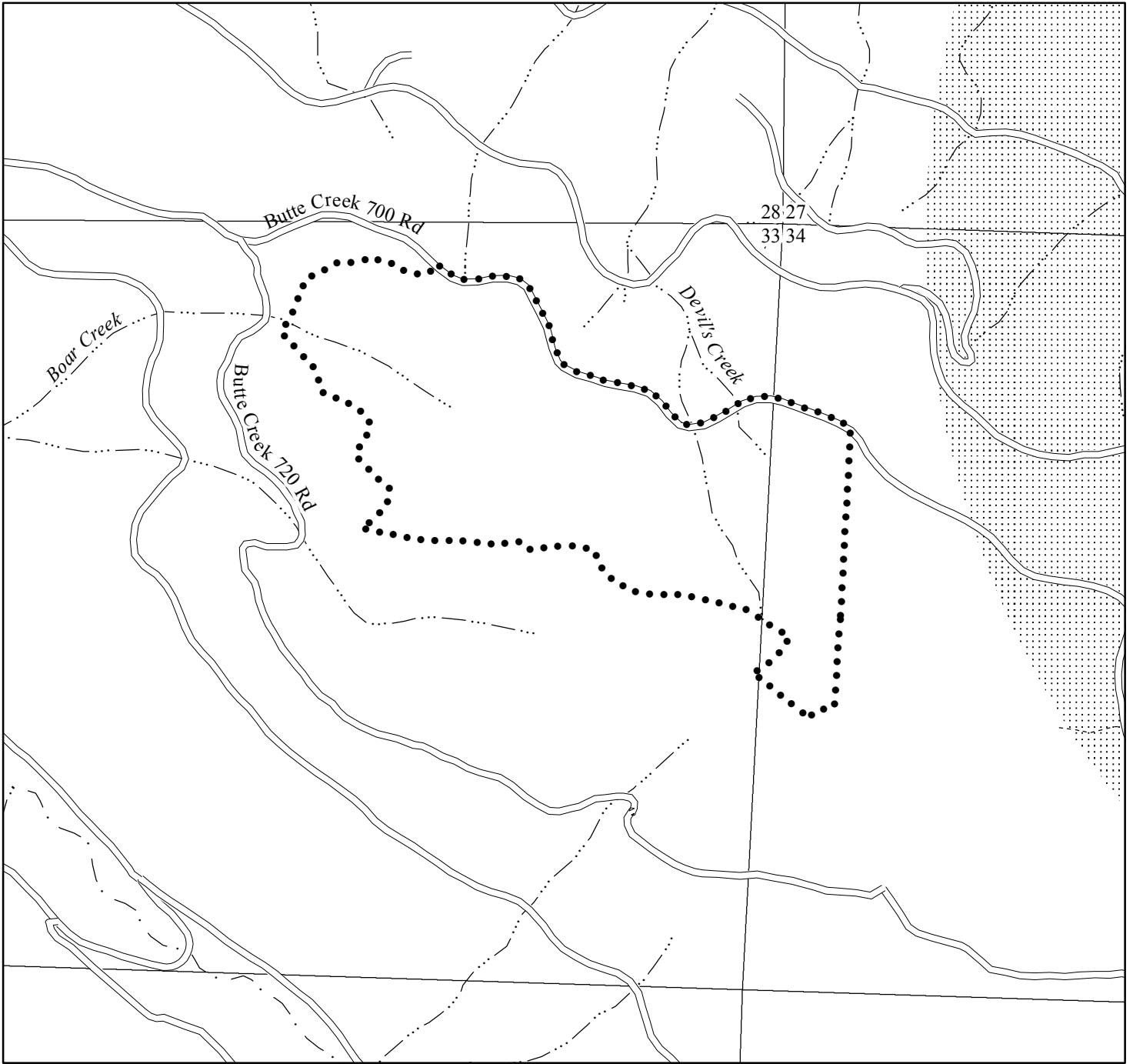
- Sale Boundaries
- New Road Construction
- ==== Surfaced Road
- - - - Unsurfaced Road
- · · · Type F Stream
- · · · Type N Stream
- · · · Unknown Stream
- //// LYR
- \\\\ OFS
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**Legend**

- Sale Boundaries
- ==== Surfaced Road
- == == Unsurfaced Road
- • — New Road Construction
- — Type F Stream
- Type N Stream
- Unknown Stream
- ⋮⋮⋮ 1.2 Mile NSO Circle
- - - State Forest Property Boundary

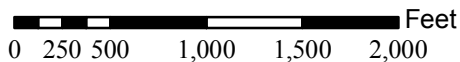
**SOUTH GAWLEY**

FY 09 AOP  
 NORTH CASCADE DISTRICT  
 ATTACHMENT C : KEY RESOURCES  
 PORTIONS OF SECTION 33 & 34  
 T7S, R3E, W.M.  
 CLACKAMAS COUNTY, OR



APPROXIMATE NET ACRES: 114 (MC)

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