

Pre-Operations Report

Operation Name: Shellburg Southeast
County: Marion
Management Basin: Scattered

Table 1. Operation Areas, Types and Acres

Area	Harvest Type	Gross Acres	Net Acres
1	Heavy Partial Cut	94	88

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The proposed 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 & Dryness, 1973). The elevation ranges from 1320 to 1660 feet. Slopes are gentle to steep and vary from 0 and 70 percent.

The Pechuck soil series are found on a majority of the sale area. Pechuck soils are deep, well-drained, moderately fine-textured colluvial soil that developed from Miocene age andesite. In general, they are gravelly loams to gravelly clay loams with varying amounts of rock from 10 percent in the A horizon to 80 percent in the C Horizon. A small area of Nasty soils is found in the southeast corner of the proposed sale area. They are moderately deep, well-drained, moderately fine-textured skeletal soils. These soils are granular very gravelly loams to extremely gravelly clay loams.

II. CURRENT STAND CONDITION:

The proposed sale area is currently classified as Understory (UDS). Douglas-fir dominates the overstory with small amounts of bigleaf maple, grand fir, and western hemlock. The main components of the understory are vine maple and western hemlock. Other understory species include huckleberry, salal, bigleaf maple, pacific yew, and grand fir. The gentle slopes located in the central and northeast portions of the sale area were previously thinned in the 1980's.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	PC	12350 ³	DF	85	20	250	115	58	94
		Target			24	120	37	25	

¹The source of stand inventory information is field reconnaissance during 2008.

²The acres are based on GIS and include roads, streams buffers, reserve areas, etc.

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

III. DESIRED FUTURE CONDITION/VISION:

This operation is located in the Scattered Basin. This basin is a diverse mixture of ownership, stand ages, species mixtures, and site quality. As indicated by its name, the Scattered Basin is a conglomeration of scattered ODF ownership parcels that range in size from 40 acres to 1000 acres. The operation is located within a parcel which is approximately 960 acres in size.

The DFC for the Timber Sale Area is Older Forest Structure (OFS). (*Cascade District Implementation Plan, 2003*) In addition to the DFC of OFS, the stand is within a highly visible recreation area. The thinning is designed to maintain the structure within the stand as well as provide for educational opportunities in the future. Protection of the other species will be important during this operation to maintain the existing diversity in the stand. The heavy thinning will open the overstory and let light in for the remainder of the stand. Additional entries may be needed to keep the stand on the pathway to OFS.

The **Anticipated Pathway for the Timber Sale Area** begins with thinning the Douglas-fir overstory that currently supports about 90 trees per acre (TPA)

- This will be a heavy commercial thinning in a 85 year old stand
- Openings in the stand are expected to occur due to root disease and harvesting logistics
- Following this operation, the stand will be monitored to insure that it is progressing towards the desired future condition.
- Possible future treatments may include culturing the understory by regulating density and species mixture, and managing competing vegetation.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	12350	UDS	UDS	OFS	94

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

IV. PROPOSED MANAGEMENT PRESCRIPTION:

The Shellburg SE sale will be completed in one season and in dry weather only. Shellburg Road will not be used. Access will be from the east through private. Roads in the sale area will not be rocked. The portion of the recreation trail that is not on an old road will be avoided where possible - cross perpendicular when necessary. A no cut buffer will be left along Shellburg Road and all trees will be felled away from Shellburg Road. No logging equipment will be allowed on Shellburg Road. Access roads through private will be blocked when sale is complete.

The **proposed management prescription for the Timber Sale Area**, type 12350, is:

- All Douglas-fir trees greater than 8 inches DBH thin to: basal area of 120; 37 TPA; ave DBH 24 inches; and SDI 25%.
- Reserve all “old growth” from cutting.
- Reserved trees do not count toward BA targets. Unless portions of the operation exceed 240 square feet of basal area per acre after implementation of the Rx. The Sale Administrator may authorize the purchaser to remove additional Douglas-fir trees and/or other conifers in order to lower the residual basal area to 240 square feet of basal area per acre.
- To the extent possible protect the understory vegetation.
- Reserve all snags and down wood as safety permits.
- Down wood will be evaluated at sale layout. If additional down wood is needed to meet landscape targets, it will be added.
- Harvest approximately 18 MBF per acre.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%			X
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	1,500		1,500
Stumpage Value (\$/MBF)	\$260		
Estimated Gross Value	\$390,000		\$390,000
		Project Costs:	\$19,240
		Estimated Net Value:	\$370,760

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale is accessed from the east side of the unit. The access from the sale is via 1.1 miles of natural surfaced spur on Longview Timber Lands, then .66 miles along ODF’s Ayers Creek forest road, a mainline gravel road to the Wagner county road. The easterly access will keep log haul out of the Shellburg recreation core area while still providing a direct route from the sale area to pavement. Three new spur roads (totaling 5800 ft) will be constructed to facilitate cable and ground yarding for the area. The slopes range from flat to 55+% throughout the sale. No High landslide hazard locations have been found in the timber sale area. Approximately 45% of the sale can be ground

yarded and the remaining 55% will be cable logged. The new roads will be natural surfaced and will be vacated at completion of logging.

Project work details:

New construction - 5800 ft of road (1.1 miles) @\$280/sta = \$16,240
 Road closure - 5800 ft \$ 1,000
 Move in \$ 2,000

Total cost \$19,240

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0		1.1
Improve	0	0	0	0
Maintain	0	.66	0	2.2
Close/Block	0	0	1.1	0
Vacate	0	0	0	0

VII. AQUATIC RESOURCES AND WATER QUALITY:

A small nonfish bearing stream is located within the proposed operation. Additional small nonfish streams were identified during sale reconnaissance and will be mapped during sale layout. The overstory vegetation within the riparian area is mainly Douglas-fir with smaller amounts of bigleaf maple, red alder, and western hemlock. Understory species include vine maple, salmonberry, and western hemlock.

See Pages 6 and 7 of the AOP Summary (under Timber Harvest Operations) for riparian area management guidelines to be utilized.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

This operation was surveyed for Northern Spotted Owls during the 2007 and 2008 survey seasons with no detections. It will be surveyed again during the 2009 survey season.

The operation area was checked against District knowledge for any listed plant location. The operation area was also checked against the Oregon Natural Heritage Program's

database of known listed plant locations. No listed plant records were identified within the operation area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based on analysis of USGS 1:24,000 topographic maps and available geologic maps. There are high landslide hazard locations in the sale area. The northern portion of the sale area drains into Shellburg Creek. The southern portion of the sale area drains into Stout Creek. The risk of landslides delivering to Shellburg Creek from the sale area is low. The risk of landslides delivering to Stout Creek from the sale area is low to moderate.

X. RECREATION RESOURCES:

The Shellburg Falls Recreation Area is a popular location for hikers, cyclists, campers and horse back riders. This area is also an important site for forest education and interpretation with regularly held field trips and guided nature hikes. During these programs it is common for school buses and 30-60 children to be present in this area. Currently within the Shellburg Falls Recreation Area there are 4.5 miles of non-motorized trail, 7 campsites with amenities including restrooms and drinking water, a large interpretive shelter, and day-use parking at major trailheads. Visitor use is moderate during weekdays with an average of 20-50 visitors per day. Use is often high during weekends with an average of 200 visitors per day during the summer months.

The thinning will take place in the southeast area of the designated recreation area, primarily in the zone classified as focused stewardship. A small area will be thinned inside the zone designated as special stewardship east of Shellburg Road. In order to limit impacts to recreational and scenic resources and to ensure public safety the following measures will be implemented:

Signage

Several months prior to the thinning operation, signs describing the upcoming activities will be posted at trailheads, staging areas and at the campground. These signs will remain posted throughout the duration of the thinning operation. During the operation warning signs will be posted along roads and at trailheads to ensure visitors are aware of the activities taking place.

Campground and Roads

The Shellburg Campground is a popular site in which camp facilities are located on each side of the SB 200 Rd. Educational programs are also staged and conducted here.

The Shellburg Road is the main road which travels through the Shellburg Falls Recreation Area. This road travels over ODF land and into private lands where it then

junctions with Fern Ridge Road. The Shellburg Road is gated where it travels over private land. Visitors may drive in from the north during the summer months and walk in year round from the south. The staging point for walk-in access is the parking area at the Fern Ridge Road/Shellburg Road junction. Visitors park here and then bike or hike to Shellburg Falls. There is a trailhead and picnic area along the way.

There will be no logging equipment traffic on the SB 200 Rd or Shellburg Road. In addition no skid roads or landings will be developed on these roads. Access to the timber sale will be from Wagner Road to the east. Thinning will take place to the east of Shellburg Road. A no cut buffer will be left along the edge of Shellburg Road. All trees will be felled away from the road. These measures will ensure visitor safety and preserve recreational and scenic resources.

Trails

There is approximately 1 mile of trail within the thinning boundary. This is the popular August Mountain Trail. During the thinning operation the trail will be closed. One of the factors considered during the planning process of the thinning operation was to limit impacts to recreational resources in the area. The following are measures that will be taken to minimize impacts. It should be noted that this is a thinning operation. The crowns will be opened creating an increase in growth in large trees and especially among the understory plants and young trees.

During the operation the majority of the trail will be protected. However in places, logs will be skidded across the trail. Steps will be taken to limit the number of locations where the trail is crossed. A section of August Mount Trail is currently on an old road bed. A portion of this road will be used as an access point for hauling out logs. After operations are complete the trail will be rehabilitated. Heavily used skid roads in the operations boundary will be covered with woody material. All sections of the August Mountain Trail will be reestablished.

XI. CULTURAL RESOURCES:

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:

See Section X, Recreation Resources, for more information.

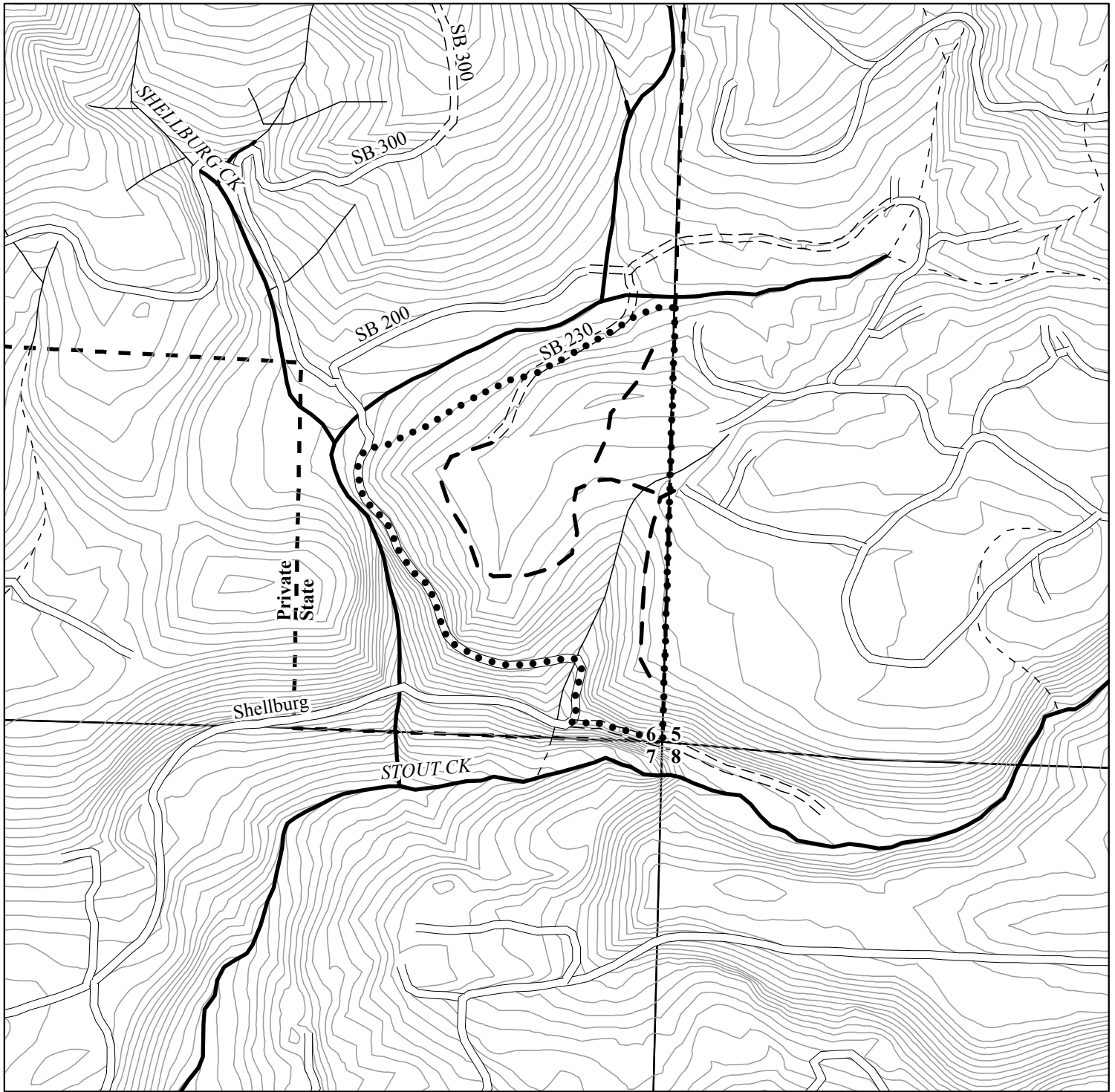
XIII. OTHER RESOURCE CONSIDERATIONS:

Survey needs include ½ mile property line to run (east ½ of property).

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The entire operation is within Focused Stewardship for Visual because of visibility from the Shellburg Road, a high use road accessing a recreational area. Twenty three acres are within the Shellburg Falls Recreation Area and are classified Special Stewardship for Recreation. Seventy one acres are adjacent to Shellburg Falls, contain dispersed trails, and are classified Focused Stewardship for Recreation. See Section X, Recreation Resources, for more information.

The operation contains Focused and Special Stewardship, Aquatic and Riparian Habitat for small nonfish bearing streams. See Section VII, Aquatic Resources and Water Quality, for more information.



Legend

- Sale Boundary
- — Road Construction
- ==== Surfaced Road
- Unsurfaced
- Type F Stream
- Type N Stream
- Unknown Stream
- Santiam State Forest
- 20 Foot Contour Lines

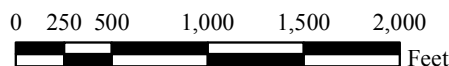
SHELLBURG SOUTHEAST

FY 2010 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT A : TOPOGRAPHY

PORTIONS OF SECTION 6
 T9S, R2E, W.M.
 MARION COUNTY, OR

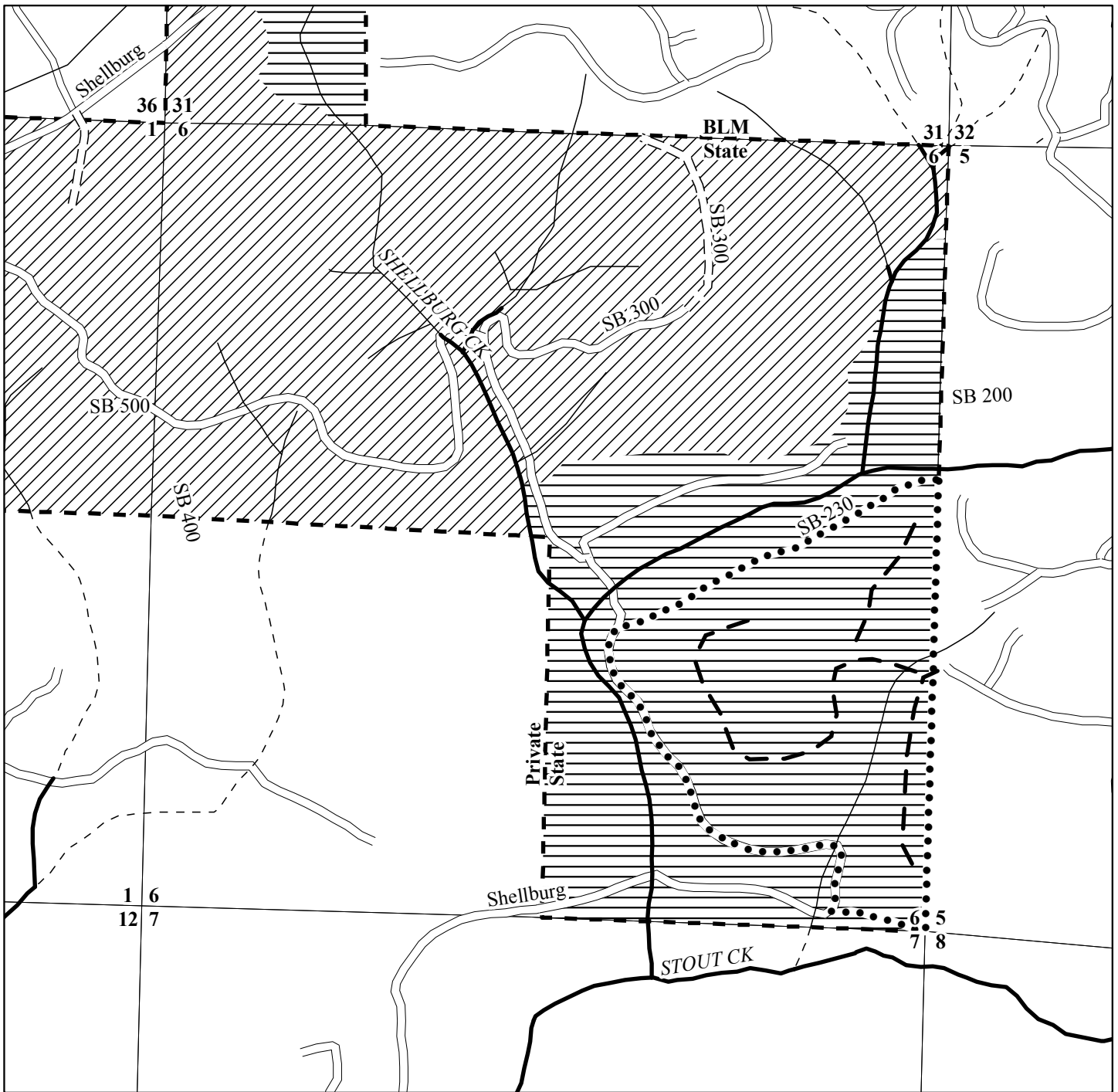
Scale
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1 inch equals 1,000 feet



APPROXIMATE NET ACRES: 88 (PC)

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

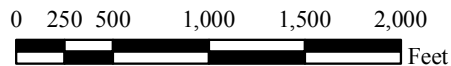


SHELLBURG SOUTHEAST

FY 2010 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT B : DESIRED FUTURE CONDITION

PORTIONS OF SECTION 6
 T9S, R2E, W.M.
 MARION COUNTY, OR

Scale
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 1 inch equals 1,000 feet

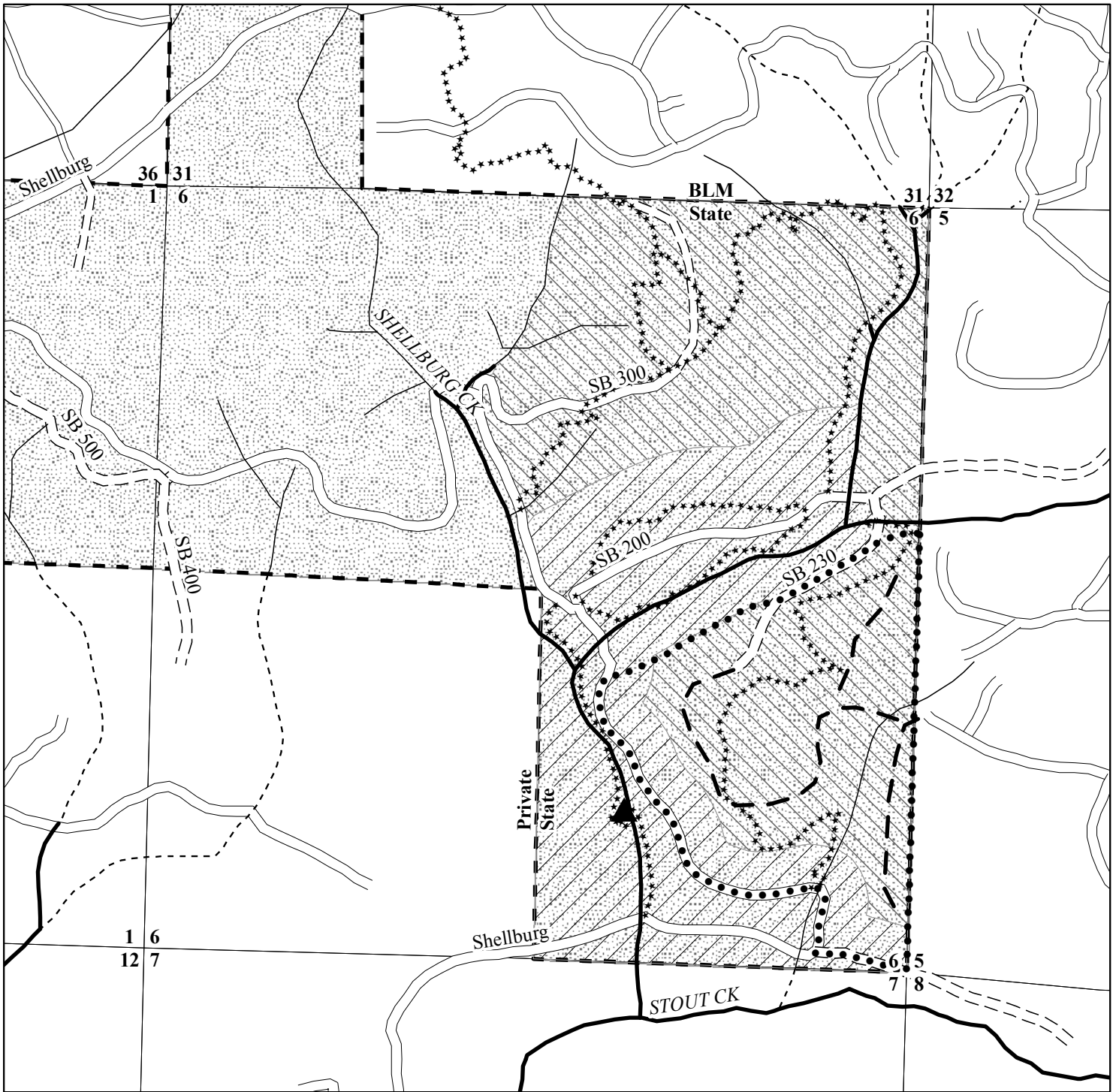


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Legend

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- — — Road Construction
- ==== Surfaced Road
- ==== Unsurfaced
- Type F Stream
- Type N Stream
- Unknown Stream
- ////// LYR
- ===== OFS
- - - - - Santiam State Forest



Legend

- Sale Boundary
- — — Road Construction
- — — Surfaced Road
- Type F Stream
- Type N Stream
- - - - - Unknown Stream
- ■ ■ Santiam State Forest
- ▨▨▨ Focused Recreation
- ▧▧▧ Special Recreation
- ▩▩▩ Focused Visual
- ▲ Shellburg Falls
- ***** Trails

SHELLBURG SOUTHEAST

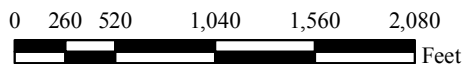
FY 2010 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT C : KEY RESOURCES

PORTIONS OF SECTION 6
 T9S, R2E, W.M.
 MARION COUNTY, OR



Scale
 1:12,000

1 inch equals 1,000 feet



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