

Pre-Operations Report

Operation Name: Last Shot (Alternate)
County: Lincoln
Management Basin: Blodgett

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Net Acres
	Modified Clearcut	102

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The operation consists of one modified clearcut unit. The unit lies in the western hemlock vegetation zone. Average rainfall is 78 to 100 inches per year.

Soils are predominantly Ork, covering about 59 percent of the operation area. Valino makes up the remaining 41 percent. Ork soils are deep, well drained, fine textured, rock-free residuum derived from Tye sandstone. Valino soils are composed of deep, well-drained, moderately coarse-textured soils that developed from Tye sandstone. The soil information is derived from a soil survey completed in 1980.

Aspect for the operation area is predominantly west with some southwest.

II. CURRENT STAND CONDITION:

Approximately 80 acres consists of a 60 year old natural Douglas-fir stand that was commercially thinned in 2005. The remaining 22 acres support a natural 80 year old unthinned Douglas-fir stand that includes an older Douglas-fir cohort.

The reason for proposing this operation as an alternate sale is that it is located on land that is in the process of exchange with Starker Forests, Inc. (SFI) and the appraisal of land, timber, and plantations shows ODF resources are valued about \$1,555,000 greater than SFI resources. So, this sale serves as an ODF timber reserve to balance values in the land exchange.

In the 60 year old stand, snags and downed wood were created after the thinning in 2005. SLI information shows about 115 cu. ft. of down wood per acre in decay classes I and II but no snags that are 15" and larger at DBH. There is no

inventory information for the 80 year old stand but some snags and a small amount of down wood exists.

There are scattered red alder and big leaf maple present in both stands.

Brush species consist of salal, vine maple, sword fern, salmonberry, red huckleberry, snowberry, elderberry and hazel.

The stand type is Understory (UDS) for the 60 year old stand, as determined by Stand Level Inventory (SLI). The 80 year old stand is also a UDS stand as determined by on-the-ground inspection and professional judgement.

Table 2. Stand Inventory Information

Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	RD	Acres ²
Modified Clearcut	18513	Douglas-fir	60	21	163	70	36	80
Modified Clearcut	18180	Douglas-fir	80	18	180	101	42	22
	Target ³			23	23	8	5	

¹ The source of stand inventory information is SLI from 2007 for the 60 year old stand and Stand 99 information grown forward for the 80 year old stand.

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

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

III. DESIRED STAND CONDITION:

According to the district's landscape design, this stand is designated as Desired Future Condition (DFC) General and is targeted to reach a (UDS) structure.

The Vision, below, is based upon current ODF ownership status. When SFI becomes the landowner the Vision will change.

Vision: When the next final harvest occurs in this operation area, the stand will be 60-70 years old and will be in the UDS structure. At that time, this stand will consist of an overstory of well stocked Douglas-fir with smaller amounts of western hemlock, western redcedar and red alder. Where there are gaps in the overstory, there will be an understory of hemlock, cedar, alder and brush (vinemaple, hazel, red huckleberry, snowbrush). Legacy trees (about 4 per acre) left from the first regeneration harvest will be located in small clumps scattered across the area. These Douglas-fir trees will average about 36 inches DBH. Both large and small snags and down wood will be located throughout the area.

Table 3. Stand Structure Information

Stand ID	Current	Post Harvest ¹	Desired Future	Acres
18513	UDS	REG	UDS	80
18180	UDS	REG	UDS	22

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 Anticipated Pathway, below, is based upon current ODF ownership status. When SFI becomes the landowner the Anticipated Pathway will change.

Anticipated Pathway: This harvest will be a modified clearcut prescription leaving behind approximately 8 green trees per acre that will be greater than 21 inches DBH. The majority of these reserve trees will be Douglas-fir, but some alder and bigleaf maple may also be left. Existing snags that do not pose a safety hazard and all existing down wood will be retained. One snag per acre will be created and one tree per acre will be felled for down wood.

After harvest, slash will be piled and the piles will be burned. A site prep herbicide treatment will also be applied. Prior to planting, mountain beaver will be trapped from the area.

Following completion of site prep activities, the unit will be replanted with approximately 70% Douglas-fir, 15% western hemlock and 15% western redcedar at a rate of 360 trees per acre. All cedar will be tubed to deter elk and deer browse. Once planting is complete, the operation area will fit the REG classification.

It is likely that at least one herbicide application will be needed within the first 3 years after planting in order to release planted conifer from competing brush. It is also likely that mountain beaver will be trapped again the first year after planting. Alder is expected to seed-in naturally into the stand. By age 12 years the stand will have moved from REG to closed single canopy (CSC). When the stand reaches age 12-15, it is likely that PCT will be used to reduce total trees per acre to around 222. The biggest and best trees will be selected to leave, also keeping roughly the same percent species mix as was planted, and also allowing up to 10% of the mix to be comprised of hardwood.

At around age 30 the stand will be commercially thinned to an RD of 30-35. This thinning will capture harvest volume and will also move the stand on the pathway from CSC to UDS by opening the stand enough to allow vegetation to grow in the understory. Approximately 5-10 years following this thinning, the UDS structure will be achieved.

A second commercial thinning in this stand will be conducted in 10 to 15 years, when the stand's RD has reached about 50. Trees will be thinned to an RD of

30-35. This thinning will capture harvest volume and maintain stand vigor. The amount and condition of down wood and snags will be evaluated and more will be created at this time if needed.

In 10-15 years following the second thinning, tree growth rates will be evaluated and a decision will be made to either conduct a third thinning or to wait and final harvest at 60-70 years old.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	3,900		3,900
Stumpage Value (\$/MBF)	\$394		
Estimated Gross Value	\$1,537,000		\$1,537,000
		Project Costs:	\$24,000
		Estimated Net Value:	\$1,513,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

This unit is accessed from the Shot Pouch County Road, and Shot Bark road. All of the existing roads accessing this unit are surfaced, all weather roads in good condition. Only routine maintenance grading will be needed.

Two unsurfaced spurs will need to be constructed on gentle terrain.

There are no stream crossings within this unit.

Logging operations consist of 30% cable and 70% ground based.

Because existing road system accesses approximately 80% of the unit. No other alternatives were considered.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				0.4
Improve				
Maintain		1.8	0.5	
Close/Block				0.4
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are two streams in the operation area of unknown classification. They are most likely type N streams but the ODFW fish biologist will be consulted to determine if the streams are type F or N.

If it is determined that a type F stream exists, a posted buffer will be established about 100' horizontal distance on either side of the stream. Sufficient trees will be retained in the outer Riparian Management Area Zone to comply with current standards. If it is determined that a type N stream is present, a posted buffer will be established at least 50-75' horizontal distance on either side of the stream. Sufficient trees will be retained in the inner and outer Riparian Management Area Zones to comply with current standards

There is one registered domestic water intake that is located just outside the operation area. The timber sale boundary will be posted at least 100' horizontal distance from this type D stream.

For type F, D, or N streams, no harvesting will be allowed within the buffer except to facilitate cable yarding.

Vegetation along the streams consists of Douglas-fir and red alder trees and brush species such as salmonberry, sword fern, and vine maple.

The following mitigation measures will be employed to minimize impacts to streams from timber felling and yarding activities: 1) no timber will be felled within the buffer except to facilitate cable yarding, 2) timber above the buffer will be felled away from or parallel to the stream, 3) timber will be yarded away from the stream, where possible, 4) if it is necessary to yard logs across the stream, logs will be fully suspended above the buffer vegetation, and 5) single-end suspension of logs will be required elsewhere in the units.

Other requirements designed to minimize impacts to streams include seasonal restrictions for road construction and log hauling.

VIII. T&E SPECIES CONSIDERATIONS:

According to the area wildlife biologist, the operation area contains suitable habitat for northern spotted owls and marbled murrelets. Surveys for both species will be conducted in 2009. Surveys will continue in 2010.

The operation area was checked against district knowledge for any listed plant locations. The operation area was also checked against the Oregon Natural Heritage Program (ONHP) 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 off of USGS 1:24,000 topographic maps and available geologic maps. There may be a few high landslide hazard locations in the operation area. The eastern portion of the operation area drains to Bark Creek. The majority of the operation drains to Shotpouch Creek. The risk of landslides delivering to these streams from the operation area is low. The operation area appears to be located on an old, 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 operation area supports dispersed recreation opportunities such as hunting.

XI. CULTURAL RESOURCES:

The operation area was checked for cultural resources with the district's GIS inventory. No cultural resources are located in the vicinity of the operation area.

XII. SCENIC RESOURCES:

The operation area is not visible from a paved road.

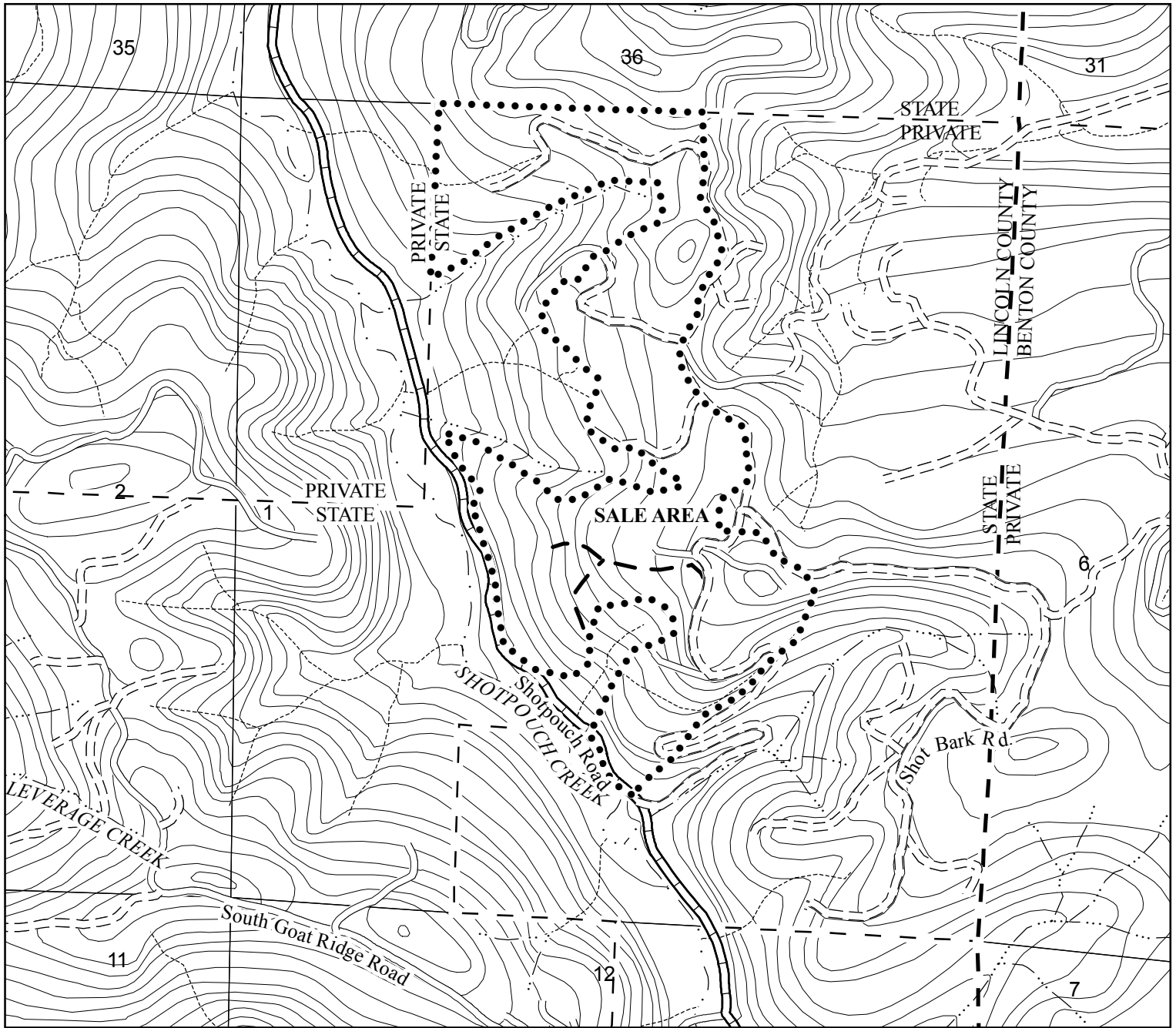
XIII. OTHER RESOURCE CONSIDERATIONS:

Parent Trees: Approximately three Burnt Woods Tree Improvement Co-op Parent Trees are located within the operation boundary. These trees are marked with painted yellow bands and an identification number. They will be required to be left as reserve trees, preferably with a buffer of trees around them.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The operation area contains 4 acres of Focused Stewardship, Aquatic and Riparian Habitat along the Type N (assumed) stream riparian area. The

operation area contains 2 acres of Focused Stewardship, Domestic Water Use. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.



LAST SHOT

FY 2010 AOP
 WEST OREGON DISTRICT
 ATTACHMENT A : TOPOGRAPHY
 PORTIONS OF SECTION 1, T12S, R8W, W.M.
 LINCOLN COUNTY, OREGON

Topography Legend

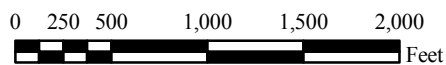
- Timber Sale Boundary
- ▬▬▬ Highway
- ▬▬▬ County Road
- ▬▬▬ Surfaced Road
- ▬▬▬ Unsurfaced Road
- ▬▬▬ New Construction
- ▬▬▬ Domestic Use Stream
- ▬▬▬ Type F Stream
- ▬▬▬ Type N Stream
- ▬▬▬ Unknown Stream
- ▬▬▬ County Line
- ▬▬▬ State Forest Property Boundary
- ▬▬▬ 40 Foot Contour

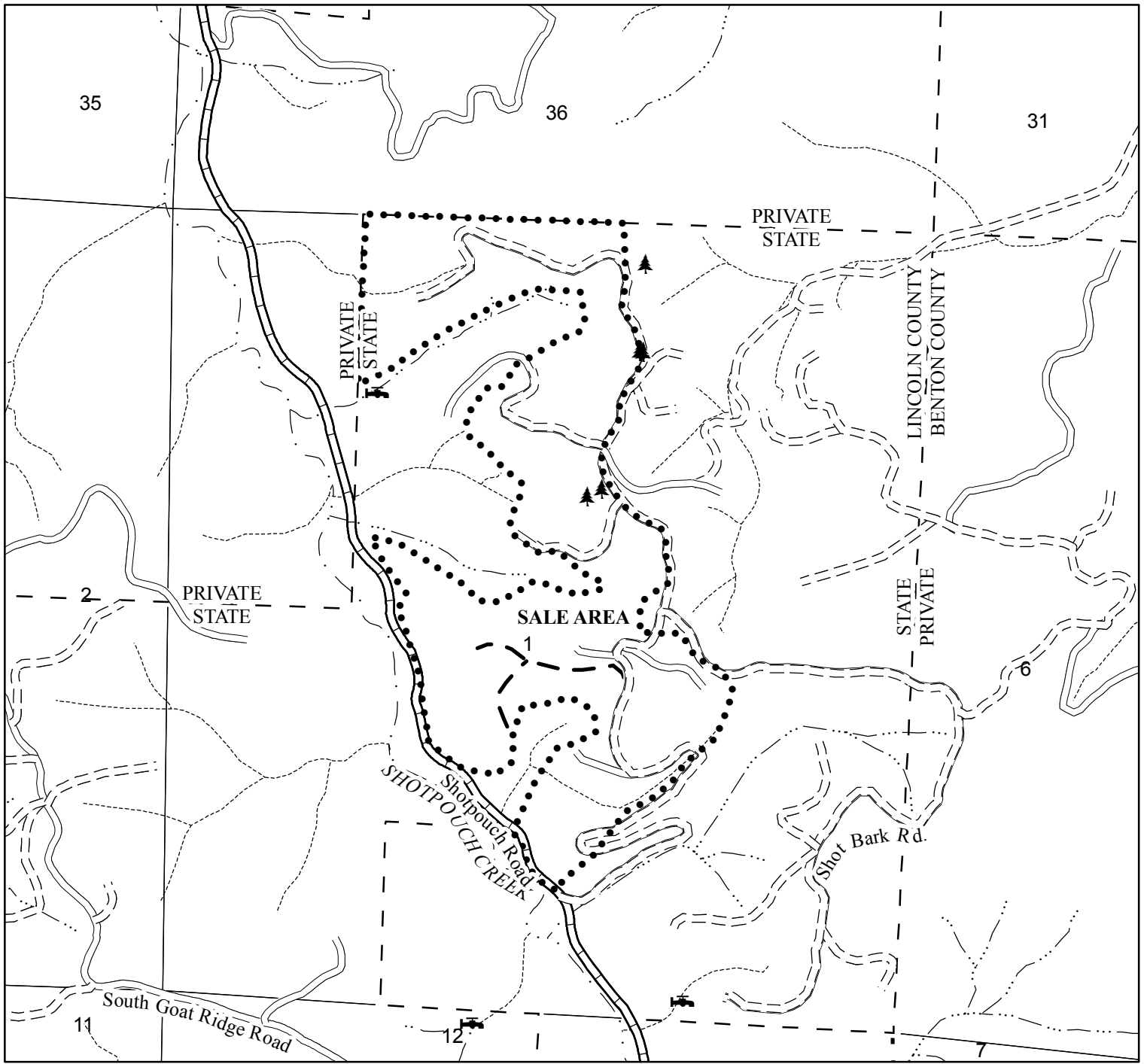
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APPROXIMATE NET ACRES
 102 ACRES (MC)

1 inch equals 1,000 feet





Key Resources Legend

- Timber Sale Boundary
- ☒ Water System Intake
- ▲ Parent Trees
- ▬ Highway
- ▬▬ County Road
- ▬▬▬ Surfaced Road
- ▬▬▬▬ Unsurfaced Road
- ▬▬▬▬▬ New Construction
- ▬▬▬▬▬▬ Domestic Use Stream
- ▬▬▬▬▬▬▬ Type F Stream
- ▬▬▬▬▬▬▬▬ Type N Stream
- ▬▬▬▬▬▬▬▬▬ Unknown Stream
- ▬▬▬▬▬▬▬▬▬▬ State Forest Property Boundary
- ▬▬▬▬▬▬▬▬▬▬▬ County Line

LAST SHOT

FY 2010 AOP
 WEST OREGON DISTRICT
 ATTACHMENT C : KEY RESOURCES
 PORTIONS OF SECTION 1, T12S, R8W, W.M.
 LINCOLN COUNTY, OREGON



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APPROXIMATE NET ACRES
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