

Pre-Operations Report

Operation Name: Top Cat
County: Lincoln
Management Basin: Burnt Woods Ridge

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Net Acres
	Modified Clearcut	76
Total		76

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This operation consists of one modified clearcut unit. The unit lies in the western hemlock vegetation zone. Average rainfall is 68 to 78 inches per year. Soils consist of the Valino type. The soil information is derived from a soil survey completed in 1980.

The landforms are gentle ridgeline and steeper side-slopes of the headwaters of Cougar Creek. There several bands of steep slope in the operation area, on both sides of the small northeast trending spur ridge that divides the operation. The underlying rocks are sedimentary origin of the Tyee Formation.

There is a major ridge running northeast/southwest through the unit. To the north of the ridge the aspect is west. To the south of the ridge the aspect is southeast.

II. CURRENT STAND CONDITION:

The operation area supports 86-91 year old Douglas-fir trees intermixed with red alder and big leaf maple, especially in the draws.

Snags and down wood are present although in limited numbers.

Brush species include vine maple, salal, hazel, sword fern, salmon berry, and Oregon grape.

The stand type is Understory (UDS) as determined by district information.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	RD	Acres ²
	Modified Clearcut	18864	Douglas-fir	86	20	162	75	36	30
	Modified Clearcut	18895	Douglas-fir	91	18	300	169	70	46

1 The source of stand inventory information is stand 99.

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

III. DESIRED STAND CONDITION:

According to the district's landscape design, the operation area is designated as desired future condition (DFC) General and is scheduled to become an UDS stand and not a more complex stand such as Layered (LYR) or Older Forest Structure (OFS).

Vision: When the next final harvest occurs in this operation area, the stand will be 70-80 years old and will be in the UDS condition. At that time, the stand will consist of an overstory of well stocked Douglas-fir with smaller amounts of western hemlock, western redcedar, bigleaf maple and red alder. Where there are gaps in the overstory, there will be an understory of hemlock, cedar, alder and brush (vinemaple, salmonberry, salal and Oregon grape). Legacy trees (about 4 per acre) left from the first regeneration harvest will be located in small clumps and also scattered across the area. These Douglas-fir trees will average about 40 inches DBH. Both large and small snags and large and small down wood will be located throughout the unit.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
	18864	UDS	REG	UDS	30
	18895	UDS	REG	UDS	46

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:

Anticipated Pathway: This harvest will be a modified clearcut prescription leaving behind about 8-10 green trees per acre, the majority of which will be greater than 20 inches DBH. Most 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 down wood will be retained. The area will be monitored for

natural snag and down wood recruitment. If sufficient amounts have not accrued naturally within 5 years after harvest, they will be artificially created from the reserve trees.

After harvest, a site prep herbicide treatment will be applied. Due to the extremely brushy condition of the understory, a spring broadcast burn will also be planned. Prior to planting, mountain beaver may need to be trapped from the area.

Following completion of site prep activities, the area will be replanted with approximately 70% Douglas-fir, 15% western hemlock and 15% western redcedar at a rate of 436 trees per acre. This planting mix will help leave the option open for changing the DFC to a more complex condition if so desired. 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. By age 15 years the stand will have moved from REG to closed single canopy (CSC).

When the planted trees reach age 12-15, it is likely that pre-commercial thinning (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 allowing up to 10% of the mix to be comprised of naturally occurring hardwood.

At approximately age 30 the unit will be commercially thinned to an RD of 30-35. This thinning will capture harvest volume, maintain stand vigor, 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 condition will be achieved.

In 10-15 years, the unit will again 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 another 10-15 years, tree growth rates will be evaluated and a decision will be made to either conduct a third thinning or to wait until final harvest at 70-80 years old.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	3,200	100	3,300
Stumpage Value (\$/MBF)	\$450	\$450	
Estimated Gross Value	\$1,440,000	\$45,000	\$1,485,000
		Project Costs:	\$158,000
		Estimated Net Value:	\$1,327,000

VI. TRANSPORTATION PLANNING AND HARVESTING:

Access to this sale is over Salmon Creek road and the east end of Baber Ridge road. The road passes through a small woodland owner's land at the bottom of Salmon Creek road from whom the STATE has secured a permanent easement. The rest of the roads are on State Lands and require no access agreements.

The sale will be harvested from the Baber Ridge road and from two newly constructed roads. The two new roads will be mostly ridge top with approximately 1150 feet of full bench endhaul construction and will be surfaced with an 8" lift of crushed rock. Using this location eliminates the need to haul west along the Baber Ridge road to the junction of Salmon Forks road where they would turnaround and travel back to the east. These newly constructed roads will be blocked with a permanent gate as requested by ODF&W.

A stream crossing pipe arch on the lower portion of Salmon Creek will possibly be replaced. This replacement is contingent upon cost sharing with a private land owner. Jason Kirtchner of ODF&W will work with the private land owner in applying for the matching funds using an OWEB grant. If cost sharing funds do not materialize then this crossing will not be replaced at this time.

Wet weather access is available for the entire sale.

There are six (6) stream crossing culverts along Wolf Creek Road, and an other small spur (BAB500) that have reached the end of their useful life. These are scheduled for replacement. Two crossings along Wolf Creek road are unknown for fish presence were the rest are nonfish crossings. All culverts are on tributaries to Salmon Creek or Wolf Creek.

Existing roads provide timber harvest access to 20% of the operation acreage while new construction will be needed to access the remaining portion of the area. There are no other feasible options to provide access to the operation area.

Harvesting timber in the operation area would require 100% cable yarding.

All road work is either new construction or maintenance. There is no road improvement.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct			0.4	
Improve				
Maintain		6.5	0.4	
Close/Block				
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

Water flowing from streams in the operation area is part of the Yaquina River System.

Cougar Creek, a type F stream, exists to the south of the operation area. The timber sale boundary will be posted about 100' horizontal distance from this stream and sufficient trees will be retained in the outer Riparian Management Area (RMA) zone to comply with current standards. No trees will be felled within the buffer. This stream will be analyzed with a fish biologist from the Oregon Department of Fish and Wildlife for the possibility of placing large wood as part of the operation to create better fish habitat.

There are streams within the operation area. Stream distribution surveys will be conducted to determine stream type. Due to the steep gradient of the stream beds it is most likely they are type N streams. Buffers averaging 50-75 feet horizontal distance will be posted on either side of these streams. No trees will be felled within the buffers except to facilitate cable yarding. In the remaining portion of the Riparian Management Area (RMA) zones sufficient trees will be retained to comply with current standards.

Vegetation along the streams consists of conifer and hardwood trees and brush species such as salmonberry, elderberry, vine maple, and sword fern.

There are no registered domestic water intakes in the vicinity of the operation area.

Activities that will take place in proximity to the streams, listed above, include timber felling and yarding. The following measures will be employed to minimize impacts to the stream: 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.

The operation area contains 14 acres of Focused Stewardship along the assumed Type N streams in the unit.

VIII. T&E SPECIES CONSIDERATIONS:

The operation area contains suitable habitat for northern spotted owls and marbled murrelets. Surveys for both species were conducted in 2006 with no detections. Surveys will continue in 2007.

The operation areas were checked against district knowledge for any listed plant locations. The operation areas were also checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations. No listed plant records were identified within the operation areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There are several bands of steep slopes within the operation area. The initial hazard and risk assessment from the geotechnical specialist is moderate. If these steep slopes are confirmed to be in the operation area as sale layout proceeds, the geotechnical specialist will be consulted to determine if a field visit is needed.

X. RECREATION RESOURCES:

Recreation in the vicinity of the operation area consists mainly of 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:

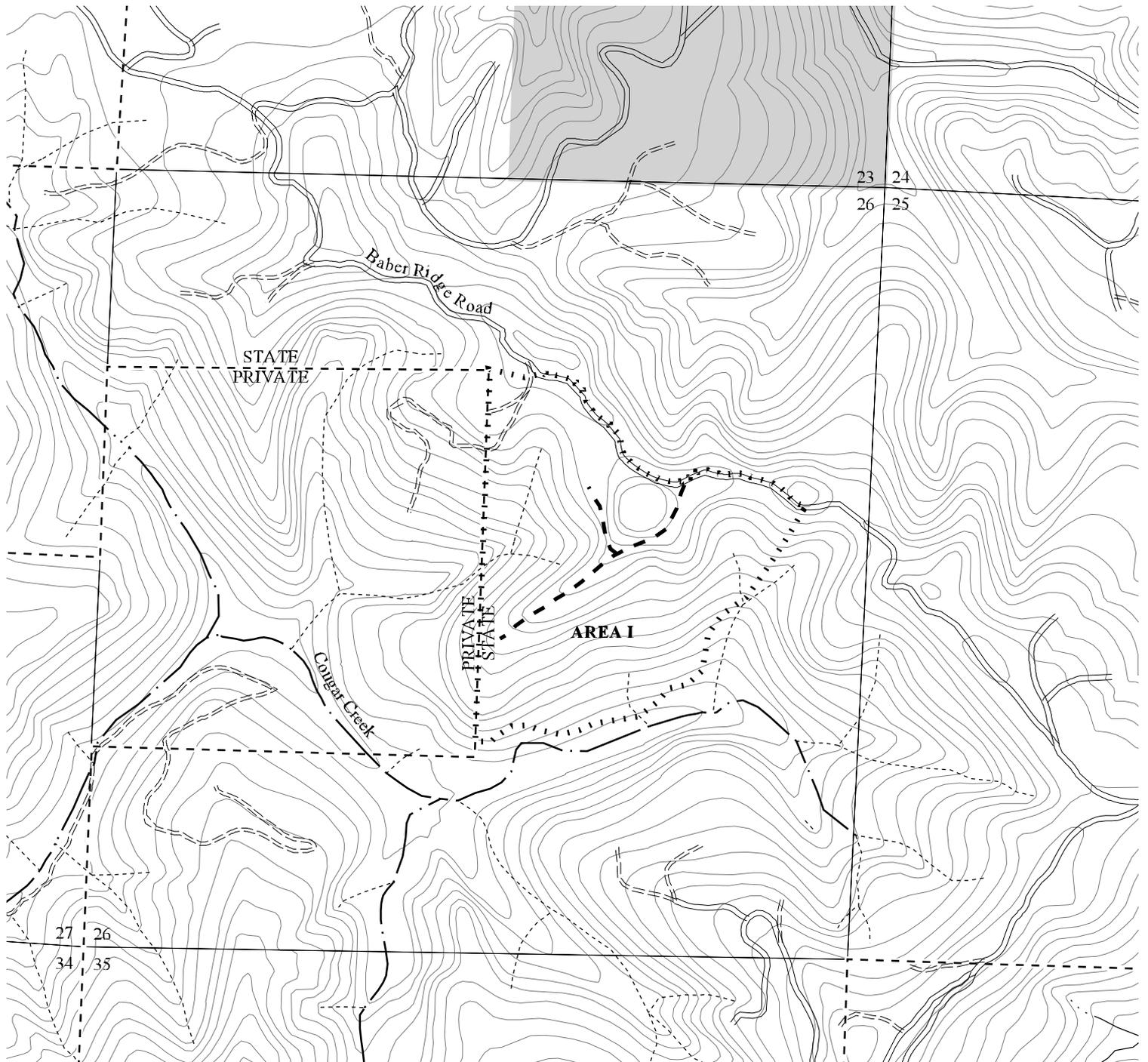
The operation area is not visible from any paved roads.

XIII. OTHER RESOURCE CONSIDERATIONS:

No other resource considerations have been identified.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The operation area contains 14 acres of Focused Stewardship along the assumed Type N streams in the unit. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.



TOP CAT

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**WEST OREGON DISTRICT
ATTACHMENT A : TOPOGRAPHY**

PORTIONS OF SECTION 26, T11S, R9W, W.M.
LINCOLN COUNTY, OREGON

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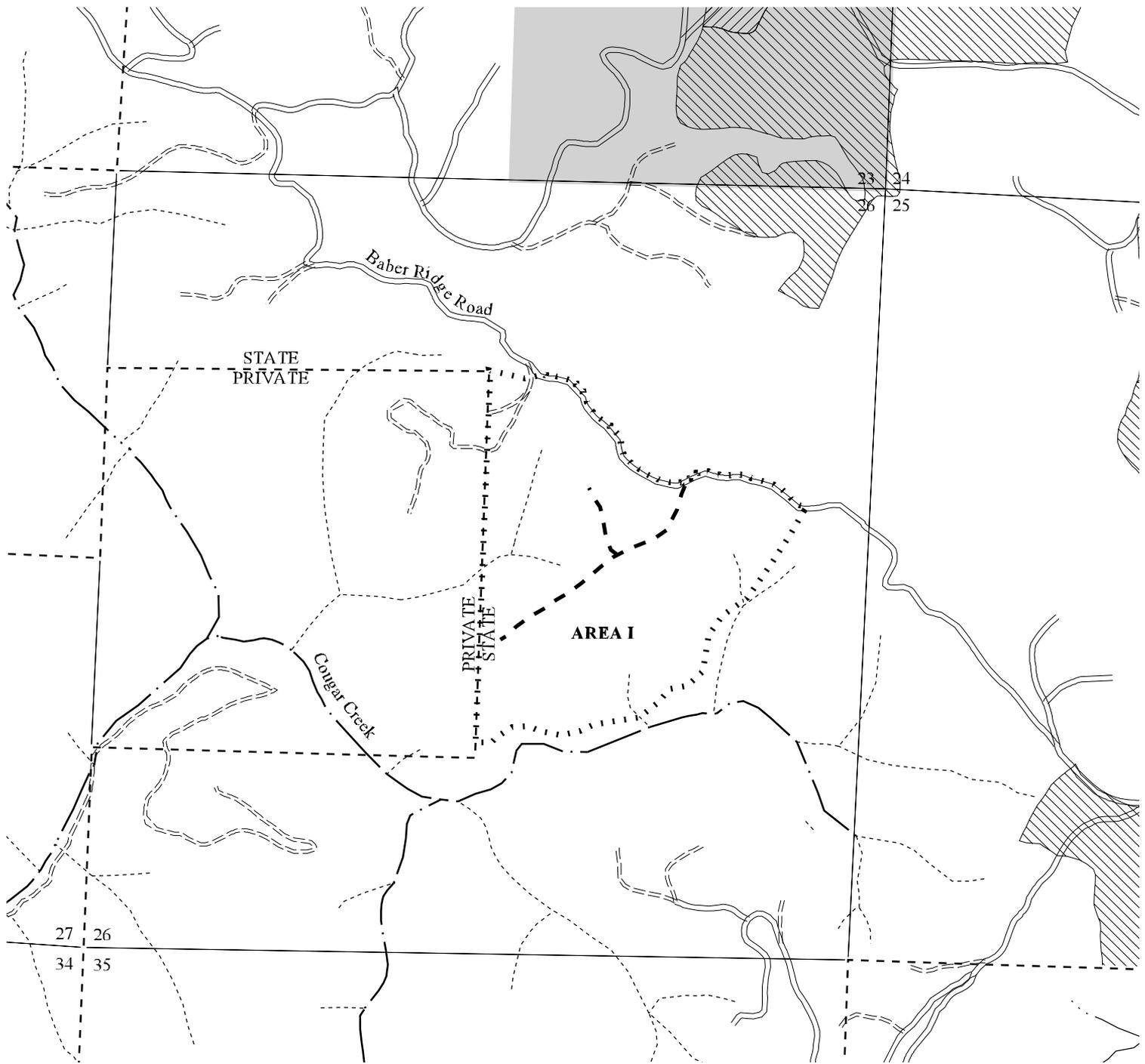
APPROXIMATE NET ACRES = 76

LEGEND

- Timber Sale Boundary
- Roads**
- ▭ County Road
- ══ Surfaced Road
- === Unsurfaced Road
- New Construction
- Streams**
- Fish
- Nonfish
- Unknown
- - - State Forest Property Boundary
- Forty Foot Contour Lines
- Common School Land

Scale
1 : 12,000
1 inch = 1000 feet





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WEST OREGON DISTRICT
ATTACHMENT B : DESIRED FUTURE CONDITION

PORTIONS OF SECTION 26, T11S, R9W, W.M.
 LINCOLN COUNTY, OREGON

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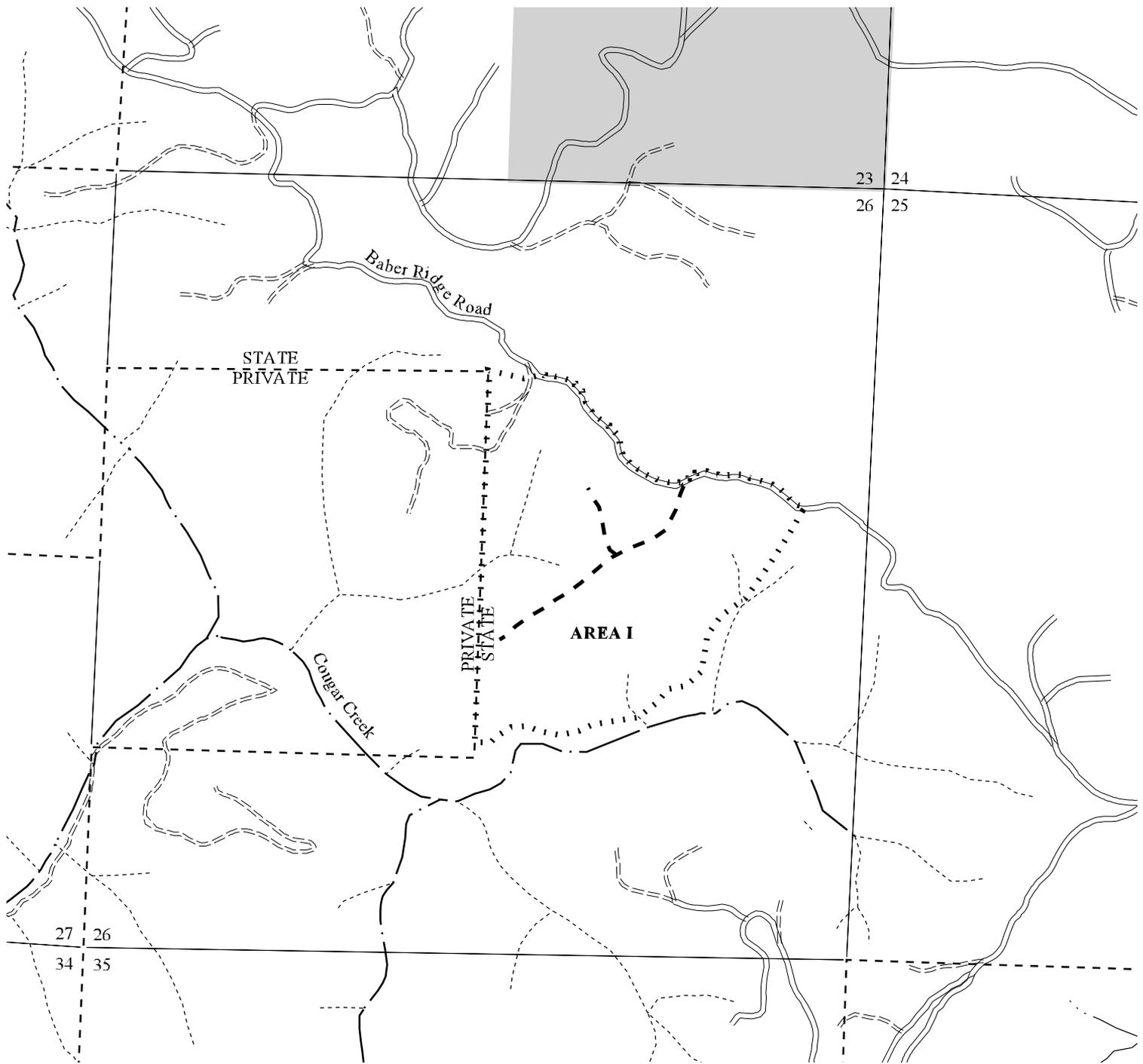
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- ⋯⋯⋯ Timber Sale Boundary
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- Streams**
- Fish
- Nonfish
- Unknown
- State Forest Property Boundary
- Desired Future Condition**
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- ▩ LYR
- Common School Land

Scale
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 1 inch = 1000 feet

1000 0 1000 Feet





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WEST OREGON DISTRICT

ATTACHMENT C : KEY RESOURCES

PORTIONS OF SECTION 26, T11S, R9W, W.M.
LINCOLN COUNTY, OREGON

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APPROXIMATE NET ACRES = 76

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