

Pre-Operations Report

Operation Name: Steep In-Cline
County: Lincoln
Management Basin: Burnt Woods Ridge

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Net Acres
I	Modified Clearcut	32
II	Modified Clearcut	28
Total		60

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The operation consists of two modified clearcut units. The units lie in the western hemlock vegetation zone. Average rainfall is 78 to 100 inches per year.

About 97% of the sale area is made up of Valino soils with Ork making up the rest. The soil information is derived from a soil survey completed in 1980.

Aspect for Area I is north and aspect for Area II is west.

II. CURRENT STAND CONDITION:

Area I supports an intermixed natural stand of 65 year old Douglas-fir and red alder.

Trees in Area II are predominately 60 year old Douglas-fir. This stand was commercially thinned about 10 years ago.

In both operation areas, big leaf maple and Port Orford cedar are present.

Brush species consist of salmonberry, huckleberry, vine maple, sword fern, salal, and elderberry are present in the understory.

There are a few snags and some down wood in the operation areas.

Both operations areas are classified by Stand Level Inventory (SLI) as Understory (UDS) stand type.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	RD	Acres ²
I	Modified Clearcut	18095	Douglas-fir	69	17	300	190	73	9
		18097	Red Alder	60	15	204	166	52	5
		18428	DF, RA	64	15	176	143	45	7
		18429	DF, RA	64	12	207	263	59	11
II	Modified Clearcut	18760	Douglas-fir	60	20	209	96	47	28

1 The source of stand inventory information is SLI.

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

III. DESIRED STAND CONDITION:

According to the district's landscape design, the operation areas are designated as desired future condition (DFC) General and are not scheduled to become more complex stand types but will be designed to become UDS stands.

Areas I and II Vision: When the next final harvest occurs in these operation areas, the stands will be 60-70 years old and will be in the UDS condition. The areas will consist of Douglas-fir with lesser amounts of western hemlock, western redcedar and red alder. A few bigleaf maple will also be present. Where there are gaps in the overstory, there will be an understory of hemlock, cedar, alder and brush (elderberry, vinemaple, salmonberry, huckleberry). Legacy trees (about 4-6 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 34 inches DBH in Area I and 38 inches DBH in Area II. Both large and small snags and large and small down wood will be located throughout the units.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
I	18095	UDS	REG	UDS	9
	18097	UDS	REG	UDS	5
	18428	UDS	REG	UDS	7
	18429	UDS	REG	UDS	11
II	18760	UDS	REG	UDS	28

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:

Areas I and II Anticipated Pathway: This harvest will be a modified clearcut prescription leaving behind about 8-10 green trees per acre that will be greater than 22 inches DBH. The majority of these reserve trees will be Douglas-fir, but some Port-Orford-cedar, 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 areas 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.

Site preparation activities will include slash piling (where slopes are less than 35%), pile burning, an herbicide application and mountain beaver trapping.

Following completion of site prep activities, the areas 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 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 areas 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 stands will have moved from REG to 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 258. The biggest and best trees will be selected to leave, also keeping roughly the same percent species mix as was planted, but allowing up to 10% of the mix to be comprised of naturally occurring hardwood.

At approximately age 30 both units will be commercially thinned to an RD of 30-35. Thinning will capture harvest volume, maintain stand vigor, and will also move the stands on the pathway from CSC to UDS by opening them enough to allow vegetation to grow in the understory. Approximately 5-10 years following commercial thinning, the UDS condition will be achieved.

In 10-15 years, the units will again be thinned to RD 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 60-70 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: ALT			

	Conifer	Hardwood	Total
Net Volume (MBF)	1,500	100	1,600
Stumpage Value (\$/MBF)	\$450	\$450	
Estimated Gross Value	\$675,000	\$45,000	\$720,000
		Project Costs:	\$102,000
		Estimated Net Value:	\$618,000

VI. **TRANSPORTATION PLANNING AND HARVESTING:**

Access to Area I will consist of using the lower portion of the Hwy 20 Cutoff Road and Cline Summit Road. The Hwy 20 Cutoff road is in good shape and is adequate for wet weather haul. The Cline Summit Road is in good shape but not adequate for wet weather haul. A maintenance lift of rock will be added to this road. A portion of an unsurfaced BPA access road on State Lands, which accesses the east portion of Area I, will be re-opened. A short, surfaced spur will be constructed to access a portion of the sale area along the southern boundary.

Access to Area II will also utilize a spur off the Hwy 20 Cutoff Road. The spur is surfaced and will receive a maintenance lift of rock to return the road to the original design standard.

All roads are on State Lands so no access permits are required.

Investigate the possibility of building a new road which will replace the steep section along the Hwy 20 Cutoff road.

Approximately 0.3 miles of improvement will be needed. This will consist of re-opening 2 existing roads and surfacing one.

Existing roads provide timber harvest access to the 90% of the operation acreage. Because existing road already access the majority of the sale area, no other transportation alternatives were considered. Wet weather access is planned for the entire sale.

Harvesting timber in the operation areas will require a combination of 85% cable yarding and 15% ground skidding.

All unsurfaced roads will be waterbarred and blocked to vehicular traffic after harvesting operations are completed and/or at the beginning of the wet weather season.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct			0.1	
Improve			0.1	0.2
Maintain		0.3	1.9	
Close/Block				
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

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

There are no type F streams in either of the operation areas.

In Area I there is a type N stream and an unknown stream. For the type N stream, a buffer averaging 50-75 feet horizontal distance will be posted on either side of this stream. No trees will be felled within the buffer 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. Fish presence surveys will be conducted for the unknown stream to determine if fish are present. If the stream is determined to be type F, a 100' horizontal distance buffer will be posted on either side of the stream. Sufficient trees will be retained in the outer RMA zone to comply with current standards. No trees will be felled within the buffer. If the stream is type N, it will be treated the same as the existing type N stream described, above.

There is a water intake on the unknown stream just to the south of Area I. This is an unregistered water intake. The homeowner living to the north of Area I will be contacted to try to determine current use. The water intake site is outside the boundary of Area I but measures will be taken to identify and protect it. If the water source is still being used the water user will be asked to register the site with the State Water Board.

There are no streams in Area II.

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

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 unit.

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

VIII. T&E SPECIES CONSIDERATIONS:

The area wildlife biologist determined that there is suitable habitat for northern spotted owls and marbled murrelets. Surveys for owls and murrelets were conducted in 2007 with no detections and will be continued in 2008.

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:

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

There are no high landslide hazard locations in Area I and isolated high landslide hazard locations in Area II. Area I drains to Elk Creek. Area II drains to Cline Creek. The risk of landslides delivering directly to Elk Creek or Cline Creek from the sale is low.

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

X. RECREATION RESOURCES:

The only known recreation taking place in the operation area is hunting and ATV use.

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:

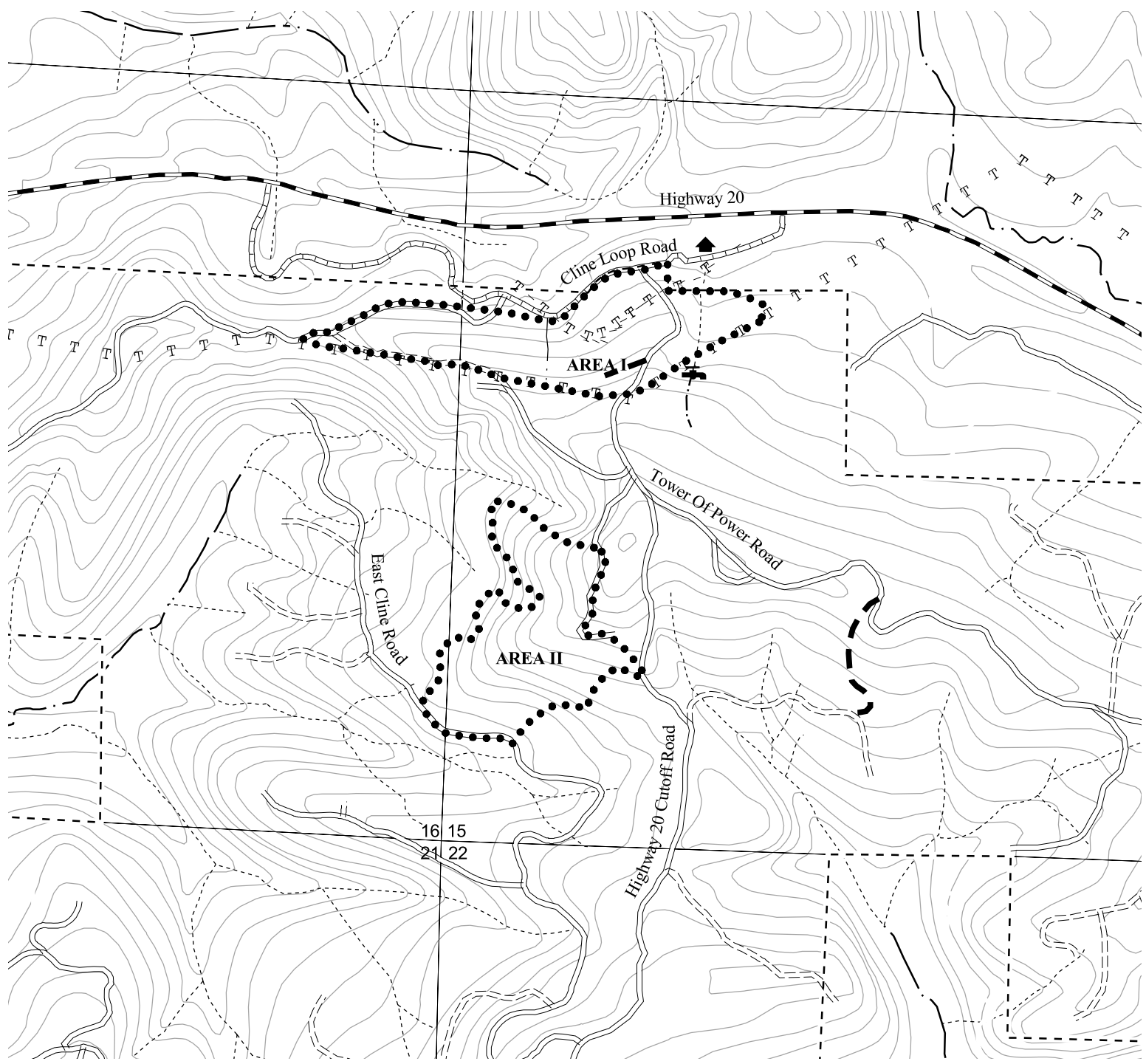
The north portion of Area I is over 400 feet away from Highway 20. Some of this unit is visible from the highway but no harvesting restrictions will be imposed due to it's distance from the road. This is a level 2, moderate sensitivity visual classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

The southern boundary of Area I is formed by Bonneville Power Administration (BPA) transmission line right-of-way. Consumers Power also has underground lines with some above-ground metal junction boxes in Area I.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

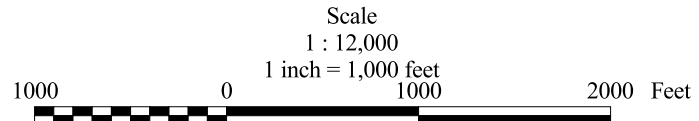
Area I has 30 acres of Focused Stewardship, Visual. Most of the unit is visible from Highway 20. Area I also has 11 acres Focused Stewardship and one acre Special Stewardship, Transmission. The southern boundary of Area I is formed by BPA transmission lines. The operation area contains 4 acres Focused Stewardship, Aquatic and Riparian Habitat along the Type N stream riparian areas. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.



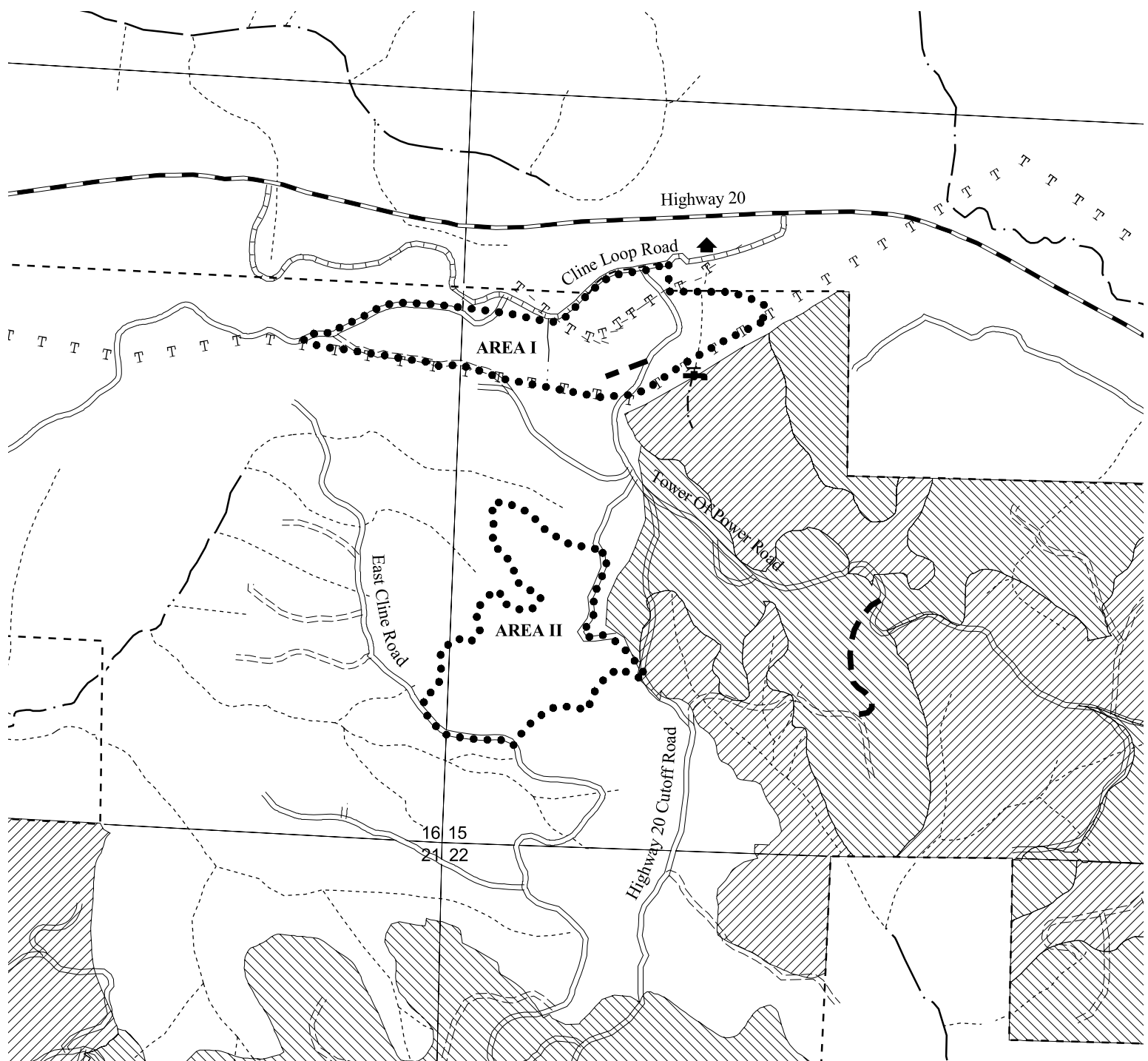
- Legend**
- Sale Area
 - Roads**
 - State Highway
 - County Road
 - Surfaced Road
 - - - Unsurfaced Road
 - ■ New Construction
 - Streams**
 - · · Domestic
 - — Fish
 - · · Nonfish
 - · · Unknown
 - - - State Forest Property Boundary
 - T T BPA Transmission Line
 - T - T Underground Transmission Line
 - ▲ Structure
 - Domestic Intake
 - Forty Foot Contour Lines

STEEP IN CLINE
 FY 09 AOP
 WEST OREGON DISTRICT
 ATTACHMENT A : TOPOGRAPHY
 PORTIONS OF SECTIONS 15, 16, & 22,
 T11S, R8W, W.M.
 LINCOLN COUNTY, OREGON

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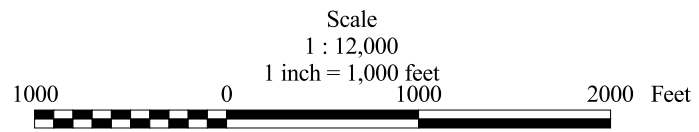
APPROXIMATE NET ACRES		
AREA I	32	ACRES (MC)
AREA II	28	ACRES (MC)
TOTAL	60	ACRES (MC)



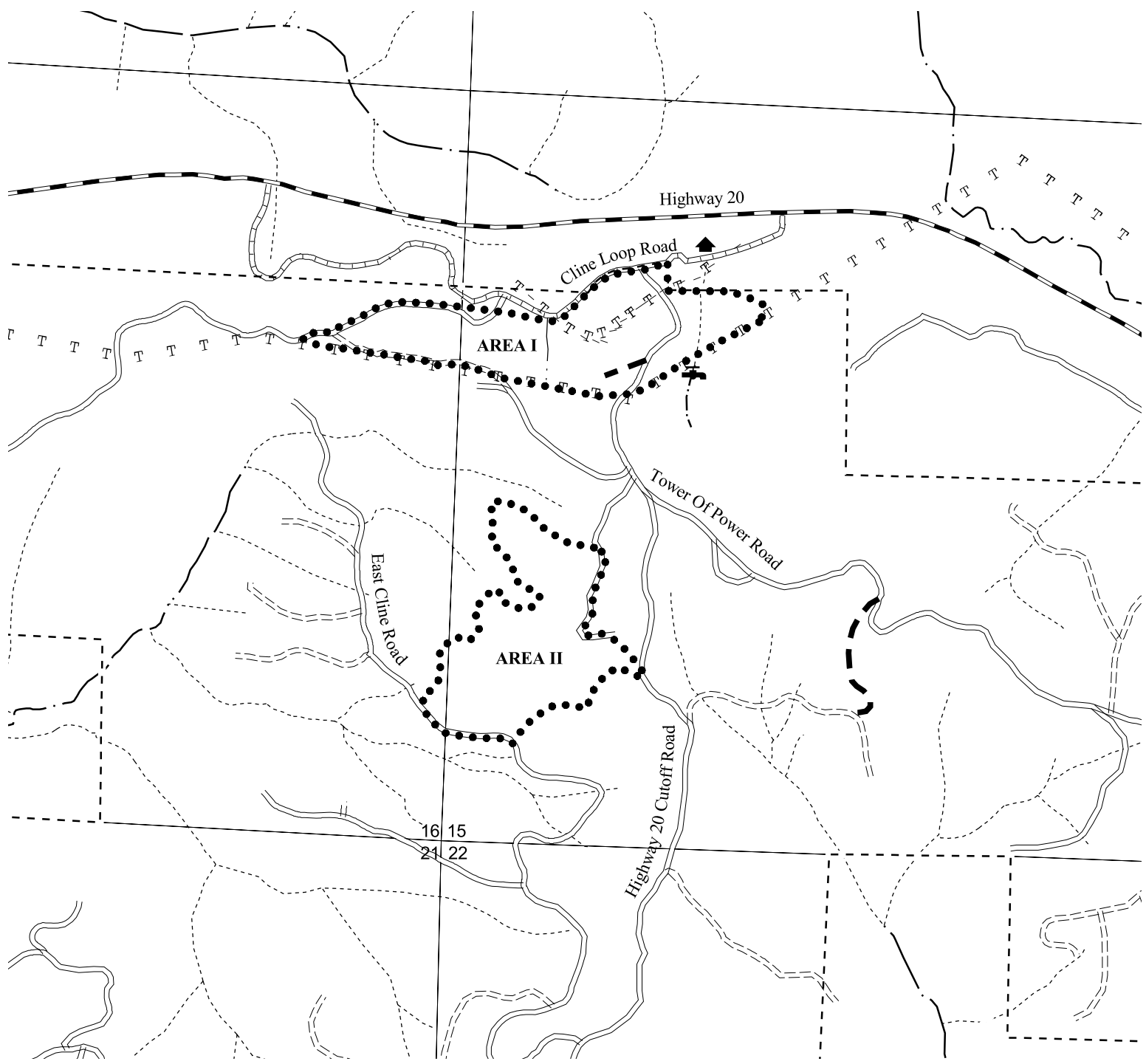
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 - Desired Future Condition**
 - ▨ LYR
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STEEP IN CLINE
 FY 09 AOP
 WEST OREGON DISTRICT
 ATTACHMENT B : DESIRED FUTURE CONDITION
 PORTIONS OF SECTIONS 15, 16, & 22,
 T11S, R8W, W.M.
 LINCOLN COUNTY, OREGON

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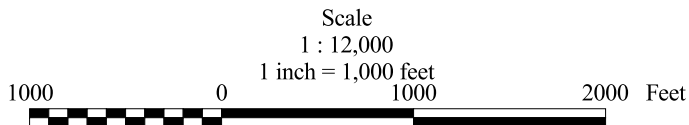
Legend

- Sale Area
- Roads
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- T - T Underground Transmission Line
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- ⊕ Domestic Intake

STEEP IN CLINE

FY 09 AOP
 WEST OREGON DISTRICT
 ATTACHMENT C : KEY RESOURCES
 PORTIONS OF SECTIONS 15, 16, & 22,
 T11S, R8W, W.M.
 LINCOLN COUNTY, OREGON

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