

# Pre-Operations Report

**Operation Name:** Outland  
**County:** Clatsop  
**Management Basin:** Gnat

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

Area	Type of Operation	Gross Acres	Net Acres
1	MC	5	5
2	MC	11	10
3	MC	100	92
Total	Modified Clearcut	116	107
Total		116	107

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

The sale areas are located within an isolated portion of the western edge of the Gnat Basin. All the sale areas are located near the town of Knappa in Clatsop County, approximately ½ to three miles south of the Hwy 30. Areas 1 and 2 of the sale are located south of Highway 30 and East of Knappa Junction on the broad divide between Dogwater Creek and Supply Creek on moderate slopes including an unnamed tributary to Supply Creek in Area 2. Area 3 is located on and just below the divide of Big Creek to the West and Rock Creek to the East. The sale is underlain by igneous origin rocks of the Frenchmen Springs Member of the Columbia River Basalt Group.

The soils in Areas 1 and 2 are mostly Astoria series, which is a deep, well-drained, fine textured residual soil, with site index averaging between 130 and 140 feet for Douglas-fir, and averaging 110 feet for hemlock. The elevation for Areas 1 and 2 ranges from 350 to 500 feet. Area 3 is mostly the Gnat series, which consists of moderately deep, well drained and fine-textured colluvial soils, with a site index around 120 for Douglas-fir and 110 for western hemlock. Elevations in Area 3 range from about 1,000 to 1,850 feet.

The ground in Areas 1 and 2 is a very gentle rolling landform sloping northerly toward the Columbia River. Area 3 is a prominent ridge and point with moderate slopes on the north and east and a very steep, southerly face on the southwest.

The sale areas are composed of hemlock dominated, mixed conifer stands. The understory vegetation consists of huckleberry and ferns, with some salmonberry in the hardwood pockets. Access will need to be secured through Agency Creek (Hampton Tree Farms) for all three areas.

## II. CURRENT STAND CONDITION:

Areas 1 and 2 – The current stands are approximately 52 to 60 years old, and are western hemlock stands with alder as a secondary component. The understory vegetation is variable, and is composed of sword ferns and huckleberry. Salmonberry is the primary understory vegetation in the hardwood portions.

Area 3 – The current stands are approximately 65 to 75 years old, and are dominated by hemlock, with some Douglas-fir and true fir. These stands are dense and are fairly uniform, with an SDI range of 60 to 68. The understory vegetation is minimal, and is composed primarily composed of sword ferns, huckleberry, and some vine maple. Some windthrow is evident on the southern boundary, along the cutting line of an adjacent clearcut on private property.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	MC	23196	WH, RA	58	14	249	235	58	5
1	MC	Target <sup>3</sup>	WH, DF				5		5
2	MC	23207	WH, RA	53	14	264	260	64	10
2	MC	Target <sup>3</sup>	WH, DF				5		10
3	MC	23330	WH, DF, NF	68	17	315	200	67	72
3	MC	23331	WH, DF, NF	51	10	206	356	45	10
3	MC	23329	WH, DF, RA	62	11	245	364	49	10
3	MC	Target <sup>3</sup>	DF, WH				5		92

1 The source of stand inventory information is SLI from 2006.

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

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

## III. DESIRED STAND CONDITION:

None of the sale areas have a Desired Future Condition of complex.

**Table 3.**

Area	Stand ID <sup>1</sup>	Current	Post Harvest <sup>2</sup>	Desired Future	Acres
1	23196	CSC	REG	General	5
2	23207	CSC	REG	General	10
3	23330	CSC	REG	General	72
3	23331	CSC	REG	General	10
3	23329	UDS	REG	General	10

1 The source of stand inventory information is SLI from 2006.

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

#### **IV. PROPOSED MANAGEMENT PRESCRIPTION/VISION:**

Areas 1, 2, and 3 – are planned for regeneration harvest (modified clearcut) and will be replanted with a mixture of conifer species.

*Snags:* In all areas, all existing snags will be retained unless deemed to be safety hazards. If pre-sale activities determine that fewer than two hard snags per acre exist, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels as defined by the Forest Management Plan. In Area 3, there are some larger remnant snags. Wildlife trees will be clumped around these snags, where feasible.

*Green Trees:* An average of five to seven green trees per acre will be scattered and/or clumped throughout the areas, and not solely located in riparian areas. Non-merchantable understory trees will be retained. In addition, non-merchantable alder may be left in operationally feasible areas to provide short term snag recruitment for cavity nesting birds. Minor species such as red cedar will be reserved from cutting, and any existing larger remnant trees will also be reserved from cutting.

*Downed Wood:* For all harvesting activities, all existing downed woody debris will be retained, and additional conifer trees and/or conifer logs will be retained to meet the landscape targets for down wood as prescribed in the FMP and Implementation Plan. Obvious defect in conifer logs will be bucked out in the unit to enhance downed wood levels.

Site Preparation treatments for Areas 1, 2, and 3 will be further evaluated with the reforestation forester during sale layout. Site preparation for these Areas will be accomplished through cable yarding operations, ground based harvesting, and mechanical manipulation of slash concentrations. These sale areas will be replanted with Douglas-fir, western hemlock, true fir, and western red cedar. Animal damage through big game browse is anticipated to be high. Mountain beaver trapping will focus on draw areas and sword fern and alder type within the stand. Tree protection will be prescribed for newly planted conifer species, Douglas-fir will receive paper bud caps, and cedar will receive tubes at initial planting.

## V. ESTIMATED TIMBER AND REVENUE INFORMATION:

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	<input type="checkbox"/>	4
Planned Quarter:		Alternate	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,200	300	5,500
Stumpage Value (\$/MBF)	\$250	\$300	
Estimated Gross Value	\$1,300,000	\$90,000	\$1,390,000
		Project Costs:	\$83,000
		Estimated Net Value:	\$1,307,000

## VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are located within an isolated portion of the western edge of the Gnat Basin, with Areas 1 and 2 completely surrounded by private ownership. Area 3 has private ownership along three sides. Currently, there are no access easements. Access will have to be negotiated and secured with Hampton Tree Farms. Areas 1 and 2 have good rocked roads to within 150 feet of the property and sale areas. The haul route will be approximately ½ mile over private roads. These two areas are suitable for summer logging and dirt spur access may be sufficient to allow harvesting by ground systems in these areas. An old partially rocked road runs along the north side of Area 1 and could be reopened.

Area 3 will can be accessed via existing rocked roads on private ownership from the north or the south. The haul route to the north is a shorter, and provides the most direct access to Highway 30. Another alternative is to extend an existing working spur on the ODF Big Noise road system across Hampton ownership and tie into the existing road system to the south of the sale area.

The new roads will be designed to reach ridge-tops to facilitate cable yarding and adjacent ground logging. These road plans will be further explored and evaluated during the field layout process.

The road rock needed for road construction and improvement will be obtained from either the Hunt Creek or Big Noise Stockpile Sites.

The project work for this sale is estimated to cost approximately \$130,000.

Approximately 48% of the sale area will be cable logged, as the slopes are moderate to steep. Approximately 52% will be ground based harvesting systems and will be utilized on the more gentle slopes. Cable yarding can be done with medium size yarders if mid slope tail trees can be located along the west side of Area 3. Tractor logging can be done with shovel loggers, track or wheel skidders.

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

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	1.75	0.25
Improve	0.0	0.0	0.5	0.0
Maintain	0.0	6.0	4.0	0.0
Close/Block	0.0	0.0	0.0	0.25
Vacate	0.0	0.0	0.0	0.0

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

*Type F Streams:* There are no Type F streams within or adjacent to Area 1. Supply Creek (medium, Type F stream) is off to the east of Area 2 and will not affect the timber sale.

The East Fork of Rock Creek (medium, Type F stream) changes to a Type N stream just north of Area 3, and it will not impact the harvesting of the timber sale.

*Type N Streams:* There are small perennial Type N streams in Areas 2 and 3. NW Oregon Forest Plan stream riparian strategies will be employed along these streams. The current riparian vegetation is composed of a patchwork of conifer and hardwood overstories. The understory in the conifer dominated reaches is similar to the headlands, with mostly ferns, salal, and some wild rose. The understory within the alder reaches is mostly salmonberry.

All streams will be examined during sale layout to determine stream type and classification. Then, the specific RMA strategies required in the FMP will be implemented. These strategies are found in Appendix J, pages J-1 through J-16.

None of the sale areas are within proximity of streams in which listed fish are present.

*Stream Enhancement Opportunities:* There are no known opportunities to do any stream enhancement. Further assessment and collaboration will be done with ODFW biologists and the Sunset Unit Forester.

*Aquatic Resource Protection:* For all areas, full log suspension is required when cable yarding over streams. No ground-based logging equipment operation is allowed within the stream bank zone. Adequate RMA buffers will be left where required on all streams per the FMP standards. To protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods range from use of hay bales in road ditches, to “ditch-outs” away from streams, to complete shutdown of logging and hauling operations during times of heavy rainfall. There are no known high risk sites within the sale area. Any high-risk sites found will require at least one-end log suspension and cable logging. If any in-stream work is required with the sale, then the in-stream work will be conducted during in-stream periods established by ODFW.

#### **VIII. T&E SPECIES CONSIDERATIONS:**

The sale areas were surveyed for Northern Spotted Owls (NSO) in 2006, with no responses, and are scheduled to be surveyed again in 2007.

Areas 1, 2, and 3 were determined by the Area Wildlife Biologist, on February 27, 2006, not to have any suitable habitat for marbled murrelets.

The sale area was checked against the Oregon Natural Heritage Program database of known listed plant locations. The sale area was also checked against district knowledge for any listed plant location. No listed plant records were identified within the sale area.

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

There are no steep slopes shown on the topographic map in Areas 1 and 2. The initial risk assessment by the geotechnical specialist for Areas 1 and 2 of the sale is low. A field visit by the geotechnical specialist is not expected to be needed, but the geotechnical specialist will be consulted during sale layout if slope stability concerns are encountered. Area 3 has one small band of steep slopes near the ridgeline on the Big Creek side and except for those slopes the initial assessment is low. If these steep slopes remain in the sale after sale layout the geotechnical specialist will be consulted to determine if a field visit is needed.

#### **X. RECREATION RESOURCES:**

There are no significant recreation activities in these areas other than dispersed camping and hunting. This sale has not had vehicular access from State Lands in the recent past.

#### **XI. CULTURAL RESOURCES:**

None.

#### **XII. SCENIC RESOURCES:**

Sale Areas 1 and 2 are not visible from any county or state highway. Area 3 is partially visible from Highway 30, approximately 3½ miles to the north.

#### **XIII. OTHER RESOURCE CONSIDERATIONS:**

None.

#### **XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

There are no special land classifications for any of these three areas. They are all classified "general" management.

FY2008  
 Outland  
 Portions of Section 2, T7N, R7W,  
 and portions of Section 21, T8N, R7W,  
 W.M., Clatsop County, Oregon.

Map A - Topography

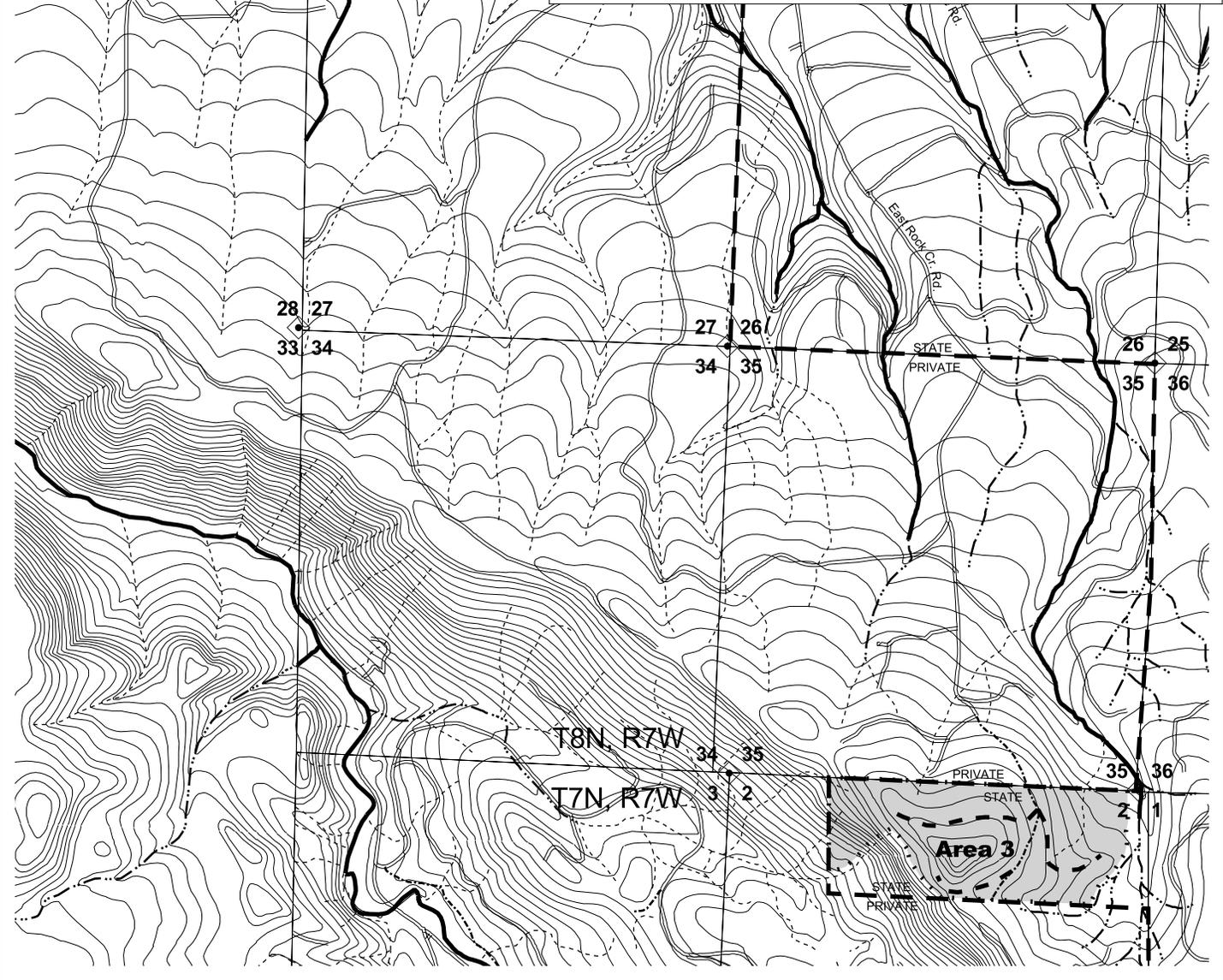
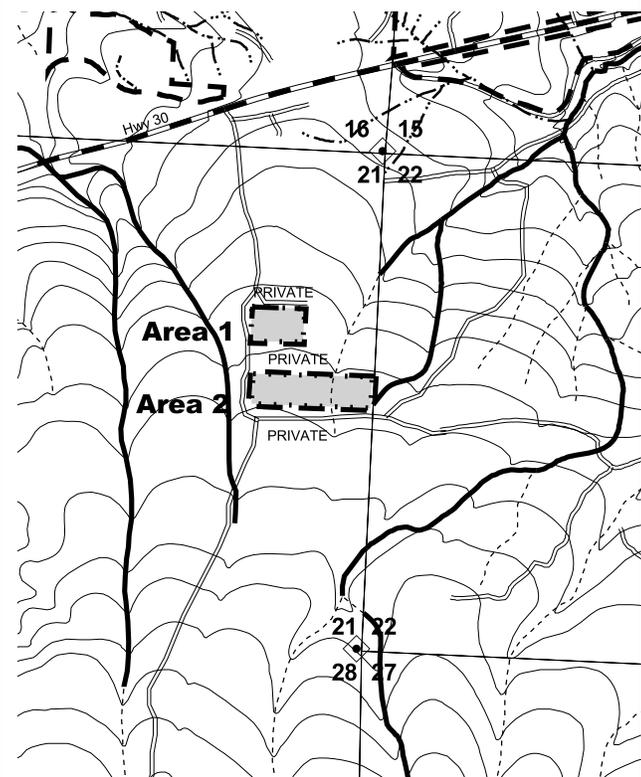
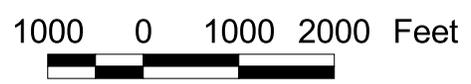
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APPROXIMATE ACREAGE  
 MC Acres

Area 1	5
Area 2	10
Area 3	92
Total	107

- LEGEND**
- Timber Sale Boundary
  - Ownership Boundary
  - Roads**
  - Dirt
  - Gravel
  - New Road Construction
  - Streams**
  - Fish
  - Nonfish
  - Unknown



FY2008  
 Outland  
 Portions of Section 2, T7N, R7W,  
 and portions of Section 21, T8N, R7W,  
 W.M., Clatsop County, Oregon.

Map B - Desired Future Condition

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APPROXIMATE ACREAGE

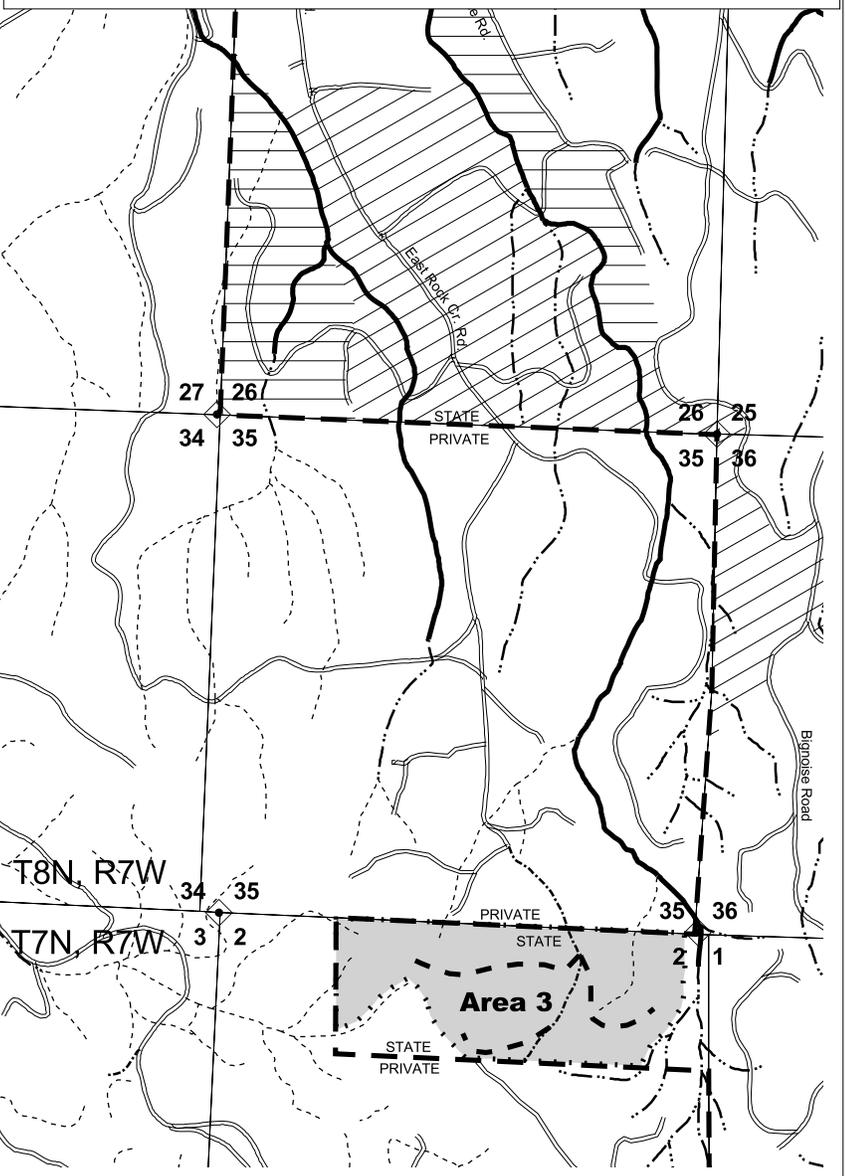
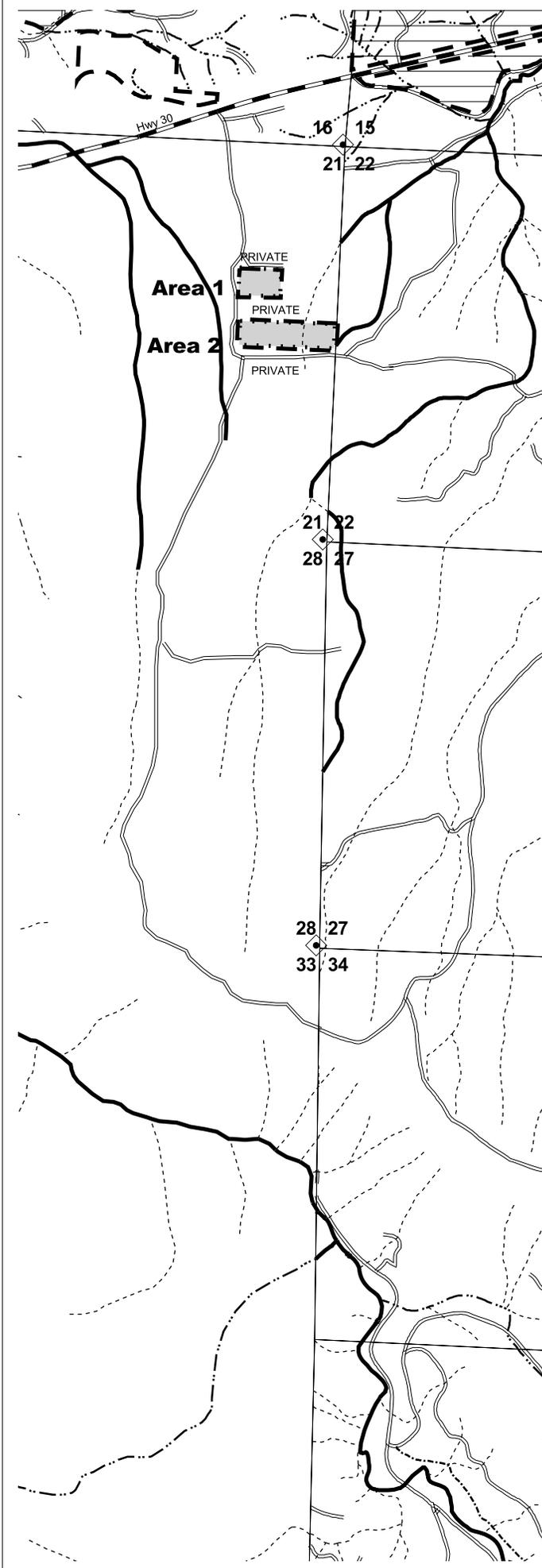
MC Acres

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<b>Total</b>	<b>107</b>

LEGEND

- Timber Sale Boundary
- Ownership Boundary
- Roads**
- Dirt
- Gravel
- New Road Construction
- Streams**
- Fish
- Nonfish
- Unknown
- Desired Future Condition**
- LYR
- OFS

1000 0 1000 2000 Feet



FY2008  
Outland  
Portions of Section 2, T7N, R7W,  
and portions of Section 21, T8N, R7W,  
W.M., Clatsop County, Oregon.

Map C - Key Resources

1:24000



APPROXIMATE ACREAGE  
MC Acres

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Area 2	10
Area 3	92
Total	107

LEGEND

- Timber Sale Boundary
- Ownership Boundary
- Roads**
- Dirt
- Gravel
- New Road Construction
- Streams**
- Fish
- Nonfish
- Unknown

1000 0 1000 2000 Feet

