

# Pre-Operations Report

**Operation Name:** Wallhanger  
**County:** Clatsop  
**Management Basin:** Davis Basin

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

Area	Type of Operation	Gross Acres	Net Acres
1	PC-M	268	241
2	MC	47	42
Total	Modified Clearcut	47	42
Total	Partial Cut	268	241
Total		315	283

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

These sale areas are located in the Davis Basin, about 18 miles east of the City of Astoria, north of State Highway 30, and about 25 miles inland from the Pacific Ocean. The sale areas are in the “hemlock zone” and are characterized by hemlock dominated mixed conifer stands, combined with large patches of red alder with an understory of salmonberry, huckleberry, vinemaple, and ferns. Forest roads on State and private lands provide access to the tracts.

The sale is located north of Highway 30 and east of the Clifton Forest Road on the ridge that divides Kelly Creek from Wallhanger Creek, a tributary of Clifton Channel, on the moderate to steep slopes of the headwaters of that unnamed stream. There are bands of steep slopes through Area 1 and two smaller sets of steep slopes in the headwaters of the northern stream in Area 2. The sale is underlain by sedimentary origin rocks of the informal Gnat Creek Formation.

Soil types in the sale areas are Astoria and Price soil types, as identified in the Soil Survey of Northwest Oregon Area (1978). These soils are generally deep, well drained, and finely textured with a Site Index averaging 130-140 feet for Douglas-fir.

## **II. CURRENT STAND CONDITION:**

Area 1– These stands are composed of moderately dense, hemlock dominated, mixed conifer stands with some small stringers and clumps of hardwoods, and are approximately 31 to 56 years old. In addition, there are two small stands that developed from Douglas-fir plantations within the interior of the hemlock dominated stands. There is very little understory in the hemlock portions, with sword fern and vinemaple in the Douglas-fir portions.

Area 2 - The current stand is 56 years old, and is composed of hemlock and alder. Some blowdown patches have occurred over the last decade, which have resulted in the development of patches of dense hemlock reproduction and salmonberry thickets. SLI indicates that there is approximately one snag per acre 24 inches in DBH or greater and about 3,400 cubic feet per acre of down wood on site.

**Table 2. Stand Inventory Information.**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	PC-M	25257*	DF	31	12	243	292	68	14
1	PC-M	25258*	DF	31	13	202	224	55	25
1	PC-M	25299*	WH, DF	51	15	283	220	73	148
1	PC-M	25300*	WH, DF	53	13	267	279	73	54
1	PC-M	Target <sup>3</sup>	WH, DF		17	140	105	30-35	241
2	MC	23069	WH, RA	56	15	233	198	61	42
2	MC	Target <sup>3</sup>	WH, DF, WRC				5-7		42

1 The source of stand inventory information is from \*OSCUR Stand 2002 and SLI from 2003. Stand ages shown are as of 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/VISION:

The desired future stand condition for Area 1 is LYR. Area 2 is not planned to have a complex desired future condition on the landscape.

**Table 3. Desired Future Condition**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	25257	CSC	LYR	LYR	14
1	25258	CSC	LYR	LYR	25
1	25299	UDS	LYR	LYR	148
1	25300	CSC	LYR	LYR	54
2	23069	UDS	REG	General	42

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/VISION:

Area 1 – is a “first entry” thinning unit. The existing stocking levels and tree heights vary somewhat, at a patch level, across the sale area. The application of a general basal area thinning prescription to a stand density range of 30-35 should enhance this variability of stand densities. It is anticipated that this harvesting prescription will quickly move these young stands into a complex stand condition as another cohort of hemlock and alder regeneration is naturally established in the understory after harvesting.

Area 2 – is planned for modified clearcut and will be replanted with a mixture of conifer species, including Douglas-fir, western hemlock, and some western red cedar. It is anticipated that red alder will naturally seed in portions of exposed mineral soil. It is anticipated that the combination of the existing hemlock understory, replanted species, and the retention of five to seven larger trees per acre will accelerate the development of a complex stand in the future. Any clumps of naturally regenerated hemlock will have to be pre-commercially thinned to manage stand density.

*Snags:* In all areas, all existing snags will be retained unless deemed to be safety hazards. In Area 2, snag creation will be implemented to supplement landscape snag levels as defined by the Forest Management Plan. In PC areas, it is anticipated that additional snags will develop during yarding activities by leaving, topping, or girdling damaged rub trees, tail trees, lift trees, and/or intermediate support trees.

*Green Trees:* An average of five to seven green trees per acre will be retained using multiple wildlife tree strategies, including scattering and/or clumping green trees throughout the areas, and not solely located in riparian areas. In addition, individual and small clumps of non-merchantable alder may be left in operationally feasible areas to provide short term snag recruitment. Minor species such as red cedar and any existing larger remnant trees will be reserved from cutting.

*Downed Wood:* There are very high levels of down wood in decay classes 1 and 2, approximately 3,400 cubic feet, in Area 2. During sale layout activities, the condition of the down wood will be evaluated as to whether some portion can be salvaged, while still retaining 600 to 900 cubic feet per acre.

Site Preparation treatments for Area 2 will be evaluated with the reforestation forester during sale layout. Replanting will be with a mixture of western hemlock and Douglas-fir, with some pockets of cedar. Natural seeding will be factored into the target trees per acre. Harvesting will provide the majority of the site preparation on the steeper ground with excavator slash piling to be evaluate for concentrations of slash that are unplantable. Tree protection is anticipated due historical animal browse in the area.

## 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)	3,900	400	4,300
Stumpage Value (\$/MBF)	\$300	\$400	
Estimated Gross Value	\$1,170,000	\$160,000	\$1,330,000
		Project Costs:	\$229,000
		Estimated Net Value:	\$1,101,000

## VI. HARVESTING AND ACCESS CONSIDERATIONS:

Existing routes across State Forest and an adjacent landowner will be used, and an estimated three miles of new spur roads will be needed to fully access the sale areas for logging. Approximately 15% of the sale area is currently accessed from existing rocked roads. The sale area was originally logged from several different abandoned roads which cross the sale areas in various locations.

There are currently good quality forest roads accessing the general vicinity of the sale areas. The majority of the sale area can be accessed by extending road systems from the Clifton Ridge Road network. The proposed new roads are composed of secondary collector spurs and relatively short "working" spurs from existing rocked roads and are generally located along ridge tops.

A preliminary transportation plan was developed to access the southeast portion of Area 1. Access to this portion of the sale area can be accessed by either extending the private road system from the Clifton County Road or constructing two relatively short connecting roads to the upper portion of the private road system to State Forests roads. The lower portion of the private road system may require substantial road improvement prior to log hauling activities. During the sale layout process, a cost and risk analysis will be completed as to which access route provides the best access.

The west end of the Clifton Road will be evaluated for realignment around a historic slide area.

Approximately two miles of old road grades traverse the southwest portion of Area 1 near two unnamed tributaries to Wallhanger Creek. These road grades have several small to moderate sized fills located in headwalls, that will be evaluated for removal during sale layout.

The anticipated rock sources for new road construction are the Hunt Creek or Big Noise Stockpile Sites.

The project work for this sale is estimated to cost approximately \$229,000.

Approximately 75% of the sale area will be cable logged, as the slopes are moderate to steep. Ground based harvesting systems will be utilized on the more gentle slopes. Cable yarding can be done with medium size yarders. 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	1.0	2.0	0.0
Improve	0.0	2.5	0.5	0.0
Maintain	3.0	5.0	3.0	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	2.0	0.0

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

*Type F Streams:* Wallhanger Creek (medium, Type F stream) flows through a small portion of the eastern part of Area 1, which drains into the Clifton Channel of the Columbia River.

There are no Type F streams within or adjacent to Area 2.

*Type N Streams:* There are small perennial Type N streams in all sale areas. 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.

The sale areas are not within proximity of streams in which listed fish are present.

Streams associated with the sale have a LMCS Aquatic and Riparian classification of focused.

*Stream Enhancement Opportunities:* There are no known opportunities for stream enhancement on the streams within the sale area. 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 area were surveyed for Northern Spotted Owls in 2006, with no responses, and are scheduled to be resurveyed in 2007.

The ODF Northwest Area Biologist determined that Area 1 did not contain suitable habitat for Marbled Murrelets, on February 28, 2006. Area 2 was surveyed for Marbled Murrelets in 2006, with no detections, and is scheduled to be resurveyed in 2007.

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:**

Most of the steepest slopes in the sale area are associated with the immediate side-slopes of the headwater streams of the unnamed tributary that runs through Area 1. The initial risk assessment by the geotechnical specialist for the sale is moderate. If these steep sloped areas remain within the sale area as the sale layout proceeds, the geotechnical specialist will be consulted to determine if a field visit is needed.

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

This area receives little use, most likely hunting and dispersed camping. The Clatsop State Forest Recreation Plan does not list any specific activities for this portion of the basin.

**XI. CULTURAL RESOURCES:**

None.

**XII. SCENIC RESOURCES:**

None.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

Property Lines and Corners.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

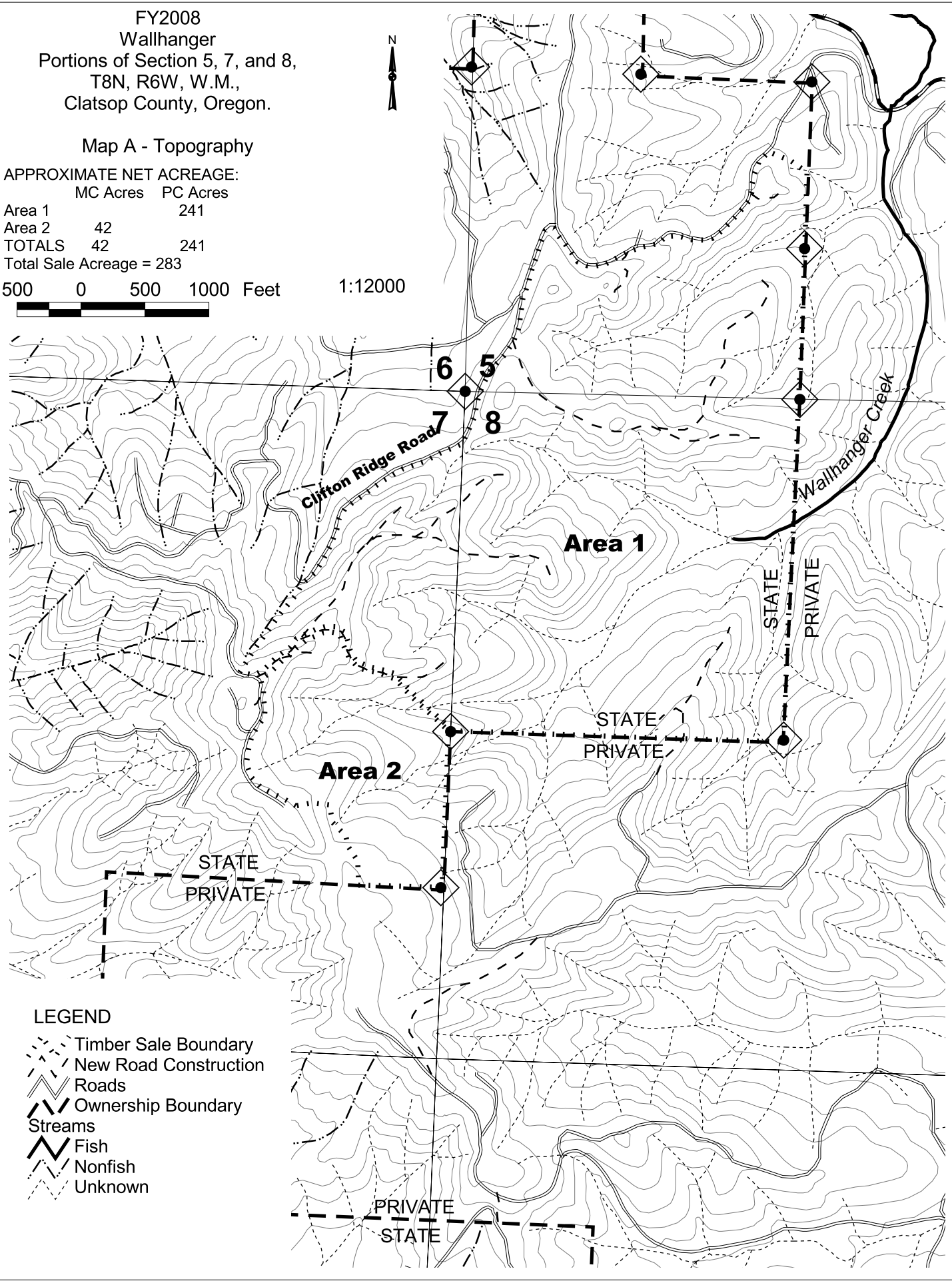
All lands in this timber sale are all classified "general" management.

FY2008  
 Wallhanger  
 Portions of Section 5, 7, and 8,  
 T8N, R6W, W.M.,  
 Clatsop County, Oregon.

Map A - Topography

APPROXIMATE NET ACREAGE:

	MC Acres	PC Acres
Area 1		241
Area 2	42	
TOTALS	42	241
Total Sale Acreage = 283		



LEGEND

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

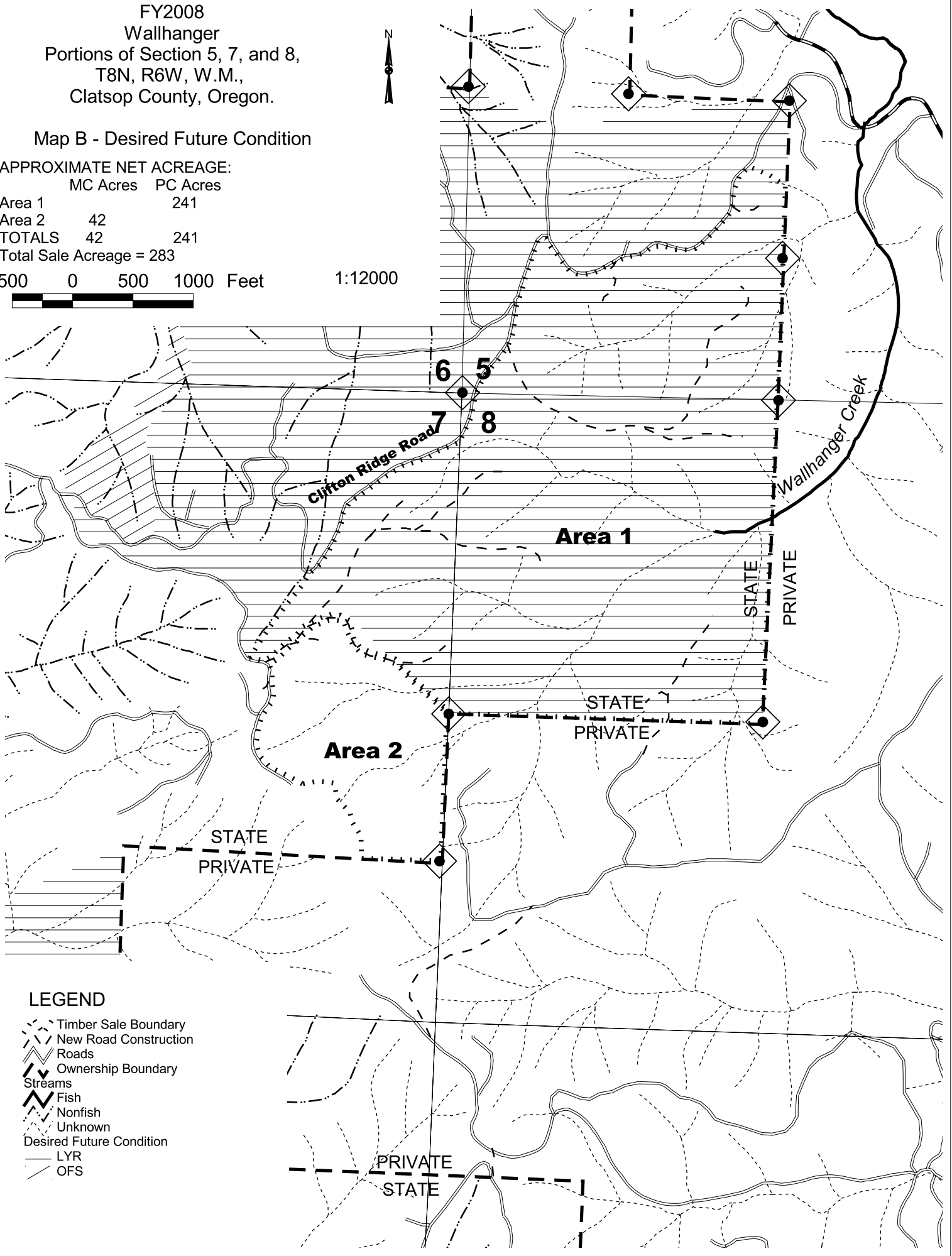
FY2008  
 Wallhanger  
 Portions of Section 5, 7, and 8,  
 T8N, R6W, W.M.,  
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Map B - Desired Future Condition

APPROXIMATE NET ACREAGE:

	MC Acres	PC Acres
Area 1		241
Area 2	42	
<b>TOTALS</b>	<b>42</b>	<b>241</b>
Total Sale Acreage = 283		

500 0 500 1000 Feet 1:12000



LEGEND

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

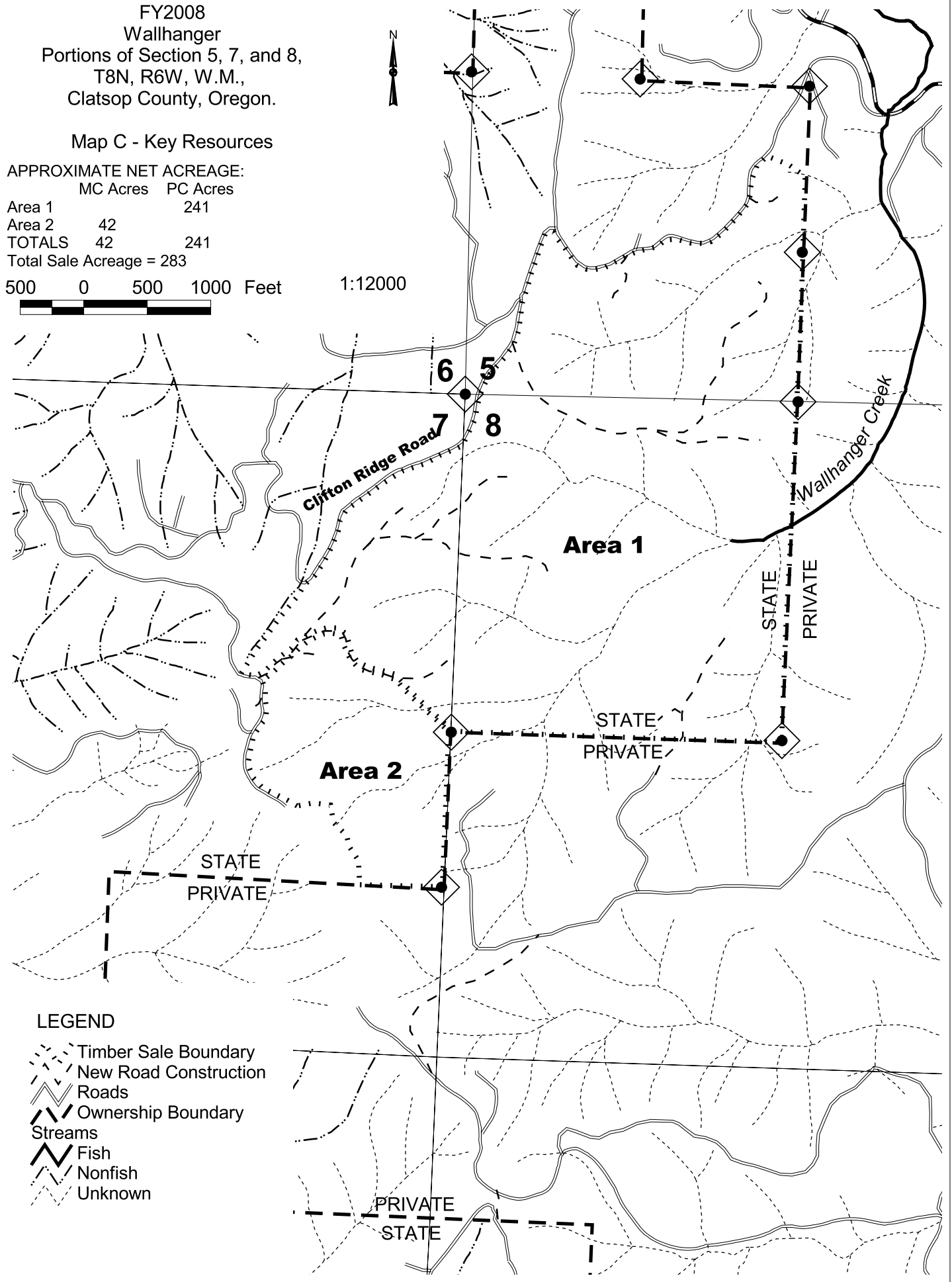
FY2008  
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Map C - Key Resources

APPROXIMATE NET ACREAGE:

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Area 1		241
Area 2	42	
TOTALS	42	241
Total Sale Acreage = 283		

500 0 500 1000 Feet 1:12000



LEGEND

- Timber Sale Boundary
- New Road Construction
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- Ownership Boundary
- Streams
- Fish
- Nonfish
- Unknown