

Pre-Operations Report

Operation Name: Foster Home
County: Clatsop
Management Basin: Gnat

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	92	83
2	MC	75	68
3	MC	82	74
4	PC	22	20
Total	Modified Clearcut	249	225
Total	Partial Cut	22	20
Total		271	245

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are located within the southern portion of the Gnat Basin, about nine miles south of the town of Knappa, south of State Highway 30, and about ten miles from the Columbia River. The southern portion of the Gnat Basin is separated from the Gnat Creek drainage, and drains in a westerly direction towards Big Creek to the Columbia River. It is in the "hemlock zone" and is generally characterized by Douglas-fir and hemlock as the dominant tree species, with understory of salal, huckleberry, and ferns.

The dominant soil types in all Areas are the Tillamook (Ty) and Bradwood (Bq) series. Both soil types are deep, well-drained, and moderately fine textured, colluvial soils. The Tillamook type has an average site index of 140 (III+) for Douglas-fir and 110 (III-) for hemlock. The Bradwood type has an average site index of 130 (II-) for Douglas-fir and 110 (III-) for hemlock. These soil types have good roadability, and ample rock is available. Terrain is gentle to steep. Slopes range, on average, from 5 to 65 percent.

The landforms are gentle ridgelines and slopes on both north and south sides of Big Creek. The underlying rocks are sedimentary origin rocks of the informal Wickiup Mountain and Smuggler Cove Members of the Astoria Formation.

II. CURRENT STAND CONDITION:

Area 1 – The current stands are generally 49 to 55 years old, and are Douglas-fir stands with some hemlock and large patches of alder. The understory vegetation is minimal in the conifer stocked portions of the sale area, and is primarily composed of sword ferns and huckleberry. Salmonberry is the primary understory vegetation in the hardwood portions. Stand Level Inventory (SLI) indicates that there is deficiency in snags and downed wood, and that the current condition is “understory”.

Area 2 - The current stand is approximately 55 years old, and is composed of dense Douglas-fir dominated, mixed conifer stands, with moderate crown development. The understory vegetation is minimal, and is primarily sword ferns, huckleberry, and some vinemaple. SLI indicates that there is deficiency in snags and downed wood, and that the current condition is “understory”.

Area 3 - The current stands are approximately 56 years old, and are Douglas-fir stands with some hemlock and patches of alder. The understory vegetation is minimal in the conifer stocked portions of the sale area, and is mostly sword ferns and huckleberry. Salmonberry is the primary understory vegetation in the hardwood portions.

Area 4 – This area is composed of a Douglas-fir dominated mixed conifer stand, approximately 54 to 60 years old, with patches and stringers of alder. The hardwood component of the stand has matured and is shading out the smaller diameter Douglas-fir. The understory vegetation in these areas is being replaced with salmonberry.

OSCUR Stand 2002 indicates that Area 3 has a current condition of “Closed Single Canopy.” Field reconnaissance classifies these stands as “Understory.” Area 3 will be further evaluated (as defined by draft memo 3/23/2004 “*Planned Sale Inventory Requirements – Alternative to Full Stand Level Inventory*”).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	MC	23452	RA, DF	48	13	181	214	51	55
		23463	DF	54	15	267	210	69	28
		Target ³					8		83
2	MC	23463	DF	54	15	267	210	69	68
		Target ³							68
3	MC	25029*	DF	58	14	244	225	65	17
3	MC	25030*	DF	57	16	290	200	73	28
3	MC	25031*	RA, DF	57	14	249	228	88	29
		Target ³	DF, WH, WRC				8		74
4	PC	25001*	DF, RA	56	16	291	202	73	20
		Target ³			20	110	50	25	20

1 The source of stand inventory information is (*OSCUR Stand 2002 and SLI from and 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:

The desired future stand condition for Area 4 is Layered (LYR). Areas 1, 2, and 3 are not planned to have a complex desired future condition on the landscape.

Table 3.

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	23452	UDS	REG	General	55
1	23463	UDS	REG	General	28
2	23463	UDS	REG	General	68
3	25029	UDS	REG	General	17
3	25030	UDS	REG	General	28
3	25031	UDS	REG	General	29
4	25001	CSC	UDS	LYR	20

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:

Areas 1, 2, and 3 – are 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 the sale areas exposed to mineral soil.

Area 4 - This sale area will be a heavy partial cut, removing clumps of mature alder and partial cutting the conifer. Non-merchantable understory trees will be

retained. It is anticipated that this harvesting prescription will allow these stands to develop in diameter size and increase structural diversity. A future entry may be needed to obtain the Desired Future Condition of Layered. This sale area is adjacent to a previous partial cut operation (Foster Thinning) from 2001, which was harvested to a basal area of 150 square feet per acre. A heavier harvest prescription of approximately 100 to 120 square feet of basal area or some type of diameter limit selection will be implemented to provide for additional landscape diversity.

Snags: In all areas, all existing snags will be retained unless deemed to be safety hazards. In MC areas, 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 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: In MC Areas 1, 2, and 3, an average of seven to eight green trees per acre will be scattered and/or clumped 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 for cavity nesting birds. In all sale areas minor species such as red cedar may be reserved from cutting, and any existing larger remnant trees will be reserved from cutting.

Downed Wood: For all harvesting activities, all existing downed woody debris will be retained. In MC Areas 1, 2, and 3, 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. In partial cut areas, to increase down wood levels, operations will be required to top trees prior to yarding and to yard only merchantable log segments to roadsides.

Site Preparation treatments for Areas 1, 2, and 3 will be further evaluated with the reforestation forester during sale layout. Site preparation for Areas 1, 2, and 3 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, 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, cedar will receive tubes at initial planting. Aerial applied herbicides will be prescribed as a site preparation if competing vegetation poses a threat to stand establishment.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		1 st	

	Conifer	Hardwood	Total
Net Volume (MBF)	6,700	1,700	8,400
Stumpage Value (\$/MBF)	\$350	\$350	
Estimated Gross Value	\$2,345,000	\$595,000	\$2,940,000
		Project Costs:	\$505,000
		Estimated Net Value:	\$2,435,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

There are currently good quality forest roads accessing the general vicinity of the sale areas. Areas 1 and 2 can be accessed by extending road systems from the Shingle Mill Road network. These new roads were identified during transportation planning efforts in the 1990's. Access to Areas 3 and 4 requires an easement from an adjacent landowner, Agency Creek Management, for the use of an existing unnamed rocky road off of the Big Creek Mainline and the construction of approximately 400 feet of road on their ownership. This easement will allow construction of two ridge top roads, and the elimination of any stream crossings. The portion of the road into Area 3 is planned as a dirt road, which will be vacated upon completion of use. The short spur into Area 4 may be surfaced, to allow for repeated partial harvest entries and to provide access for young stand management into Area 4.

Approximately 7 miles of road improvement is needed on portions of Shingle Mill Road and Foster Mainline.

The road rock needed for road construction and improvement will be crushed at the Knob Point Quarry. Additional rock will be crushed and stockpiled at either the Big Noise or Hunt Creek Quarries and Stockpiles Sites for necessary road maintenance rock.

The project work for this sale is estimated to cost approximately \$505,000.

Approximately 70% 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	0.0	2.2	0.7
Improve	6.5	0.5	0.0	0.0
Maintain	7.0	5.0	3.0	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.7

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F Streams: Big Creek (medium, Type F stream) flows along the north boundary of Area 3.

An unnamed tributaries (small, Type F stream) of Big Creek flow along the eastern boundaries of Areas 3 and 4.

Cedar Creek (small, Type F stream) flows along the southeast boundary of Area 2.

There are no Type F streams within or adjacent to Area 1.

All of the streams flow in a westerly direction into the Big Creek drainage towards the Columbia River.

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.

Areas 2 and 3 are within proximity of streams in which listed fish are present.

Stream Enhancement Opportunities: Preliminary sale review by ODFW Fish Habitat Biologist indicated potential for stream enhancement projects in Areas 2 and 3 of this sale.

Further assessment and collaboration is currently underway with ODFW biologists and the Sunset Unit Forester for placement of large wood pieces in Big Creek during cable harvesting activities on Area 3. In addition, this work is being coordinated with the Nicolai/Wickiup Watershed Council.

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 was surveyed for Northern Spotted Owls in 2004, 2005, and 2006, with no responses, and is scheduled to be resurveyed in 2007.

The ODF Northwest Area Biologist determined the sale area did not contain suitable habitat for Marbled Murrelets, on March 4, 2004.

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:

The initial assessment from the geotechnical specialist for Areas 1, 2, and 4 is low. The initial assessment from the geotechnical specialist for Area 3 is moderate and the needs for a possible field visit will be assessed at the time of field work. Potential High Landslide Hazard Locations only appear on the topography as mapped in Area 3. If High Landslide Hazard Locations are located during field work the geotechnical consultant will be consulted.

A field review of Area 3 was conducted with NWOA geotechnical specialist. Within the sale area, there are two adjacent inactive landslide areas, each covering several acres. The landslides are deep seated, with the last large scale movement prior to original stand of trees (old stumps), over 500 years ago.

The failure surface is estimated 40-150 feet depth, probably related to a bedding plane or other discontinuity in the sedimentary rock. At least one of the original slides caused a dam that blocked Big Creek, it is now completely eroded. There are shallow landslides at toe of creek, and on steep scarp slopes within slide mass that occurred within the last 12 years. Because of the deep failure surface, there is no effect of roots on the large masses, though vegetation and water

changes may affect the shallower scarp slopes and toe slopes, and wind is more likely to blow down isolated trees on the scarp slopes.

Portions of Area 3 were delineated out of the sale during the field review, in places set-back from a typical RMA buffer. These places are mostly along a gaps in trees on a flat near a tension area, left in place most likely to get trees into channel should portion of either slide move. Given the dimensions of the slide, vegetation removal is likely to have no influence on root strength, and only a small influence on subsurface water levels.

X. RECREATION RESOURCES:

Portions of this timber sale include potential OHV trails currently being considered for development in FY 2006. Coordination between the Sunset Unit Forester and the District Recreation Coordinator will occur to ensure coordination and integration of recreational resources and plans.

XI. CULTURAL RESOURCES:

None.

XII. SCENIC RESOURCES:

The sale areas are not visible from any county or state highway. All forest roads accessing the sale areas are Level 3 classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

Property Lines and Corners.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The lands in this timber sale are all classified "general" management

FY2008
Foster Home
Portions of Sections 18, 19,
and 30, T7N, R6W, W.M.,
Clatsop County, Oregon.

Map A - Topography

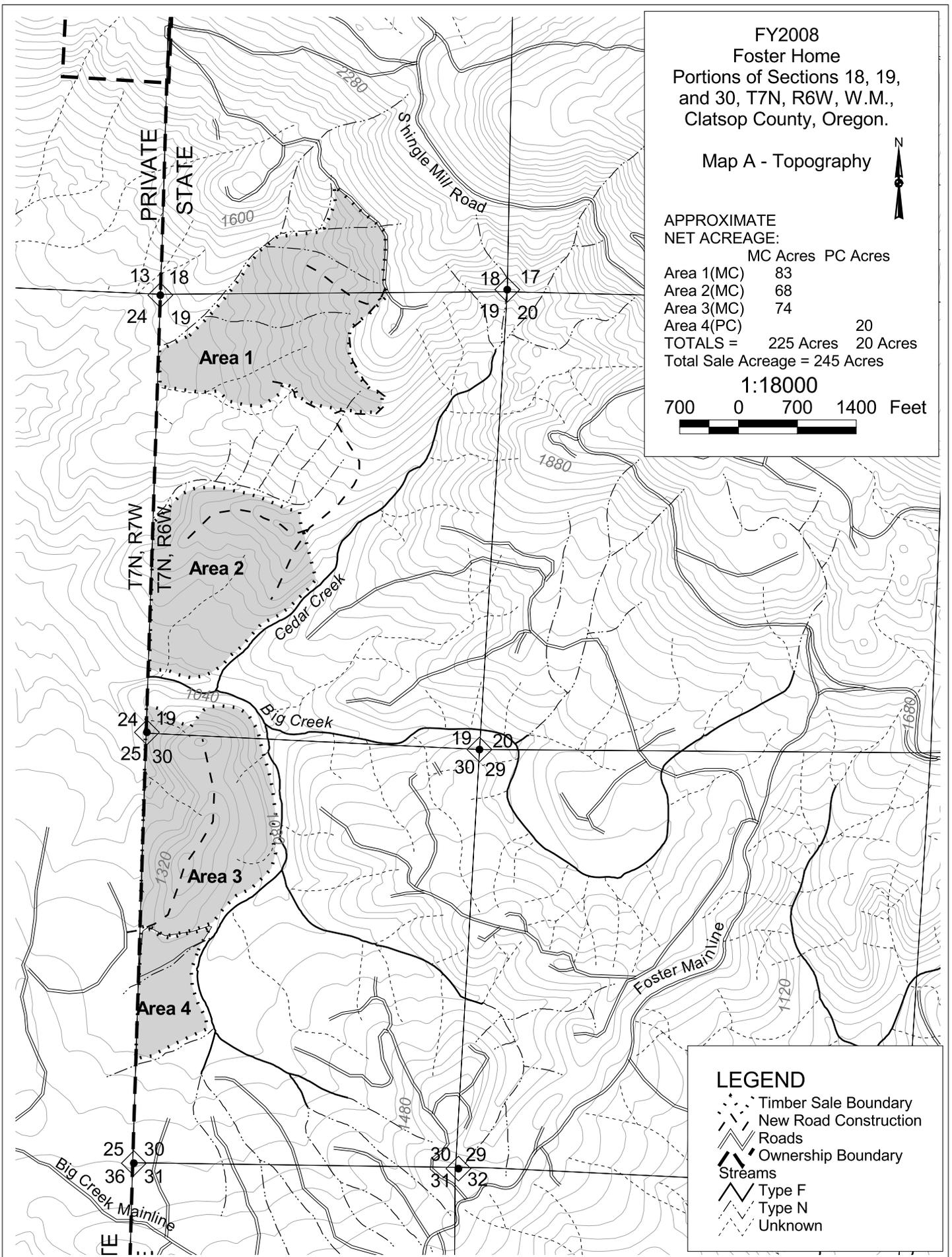


APPROXIMATE
NET ACREAGE:

	MC Acres	PC Acres
Area 1(MC)	83	
Area 2(MC)	68	
Area 3(MC)	74	
Area 4(PC)		20
TOTALS =	225 Acres	20 Acres
Total Sale Acreage = 245 Acres		

1:18000

700 0 700 1400 Feet



LEGEND

- Timber Sale Boundary
- New Road Construction
- Roads
- Ownership Boundary
- Streams
- Type F
- Type N
- Unknown

FY2008
Foster Home
Portions of Sections 18, 19,
and 30, T7N, R6W, W.M.,
Clatsop County, Oregon.

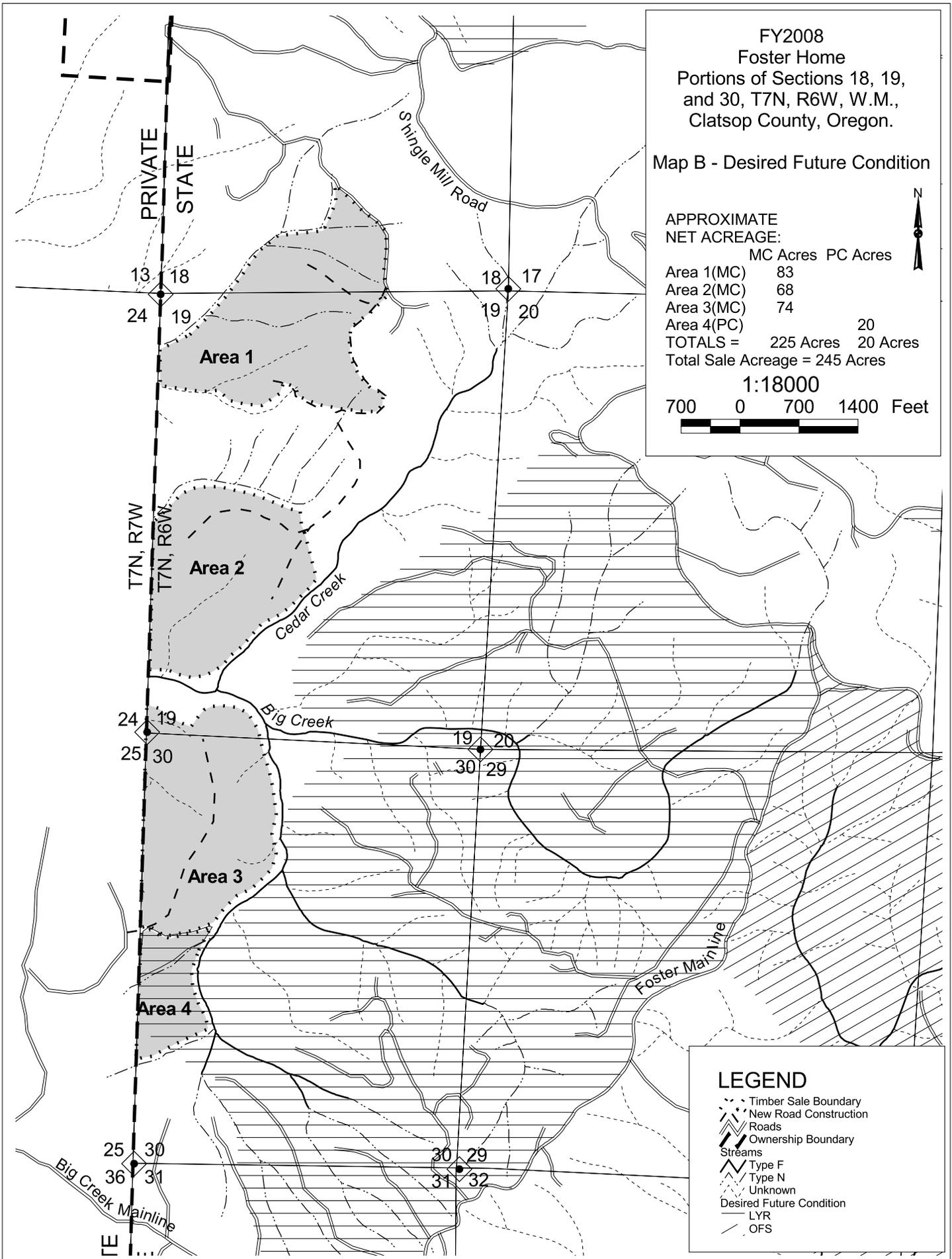
Map B - Desired Future Condition

APPROXIMATE
NET ACREAGE:

	MC Acres	PC Acres
Area 1(MC)	83	
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TOTALS =	225 Acres	20 Acres
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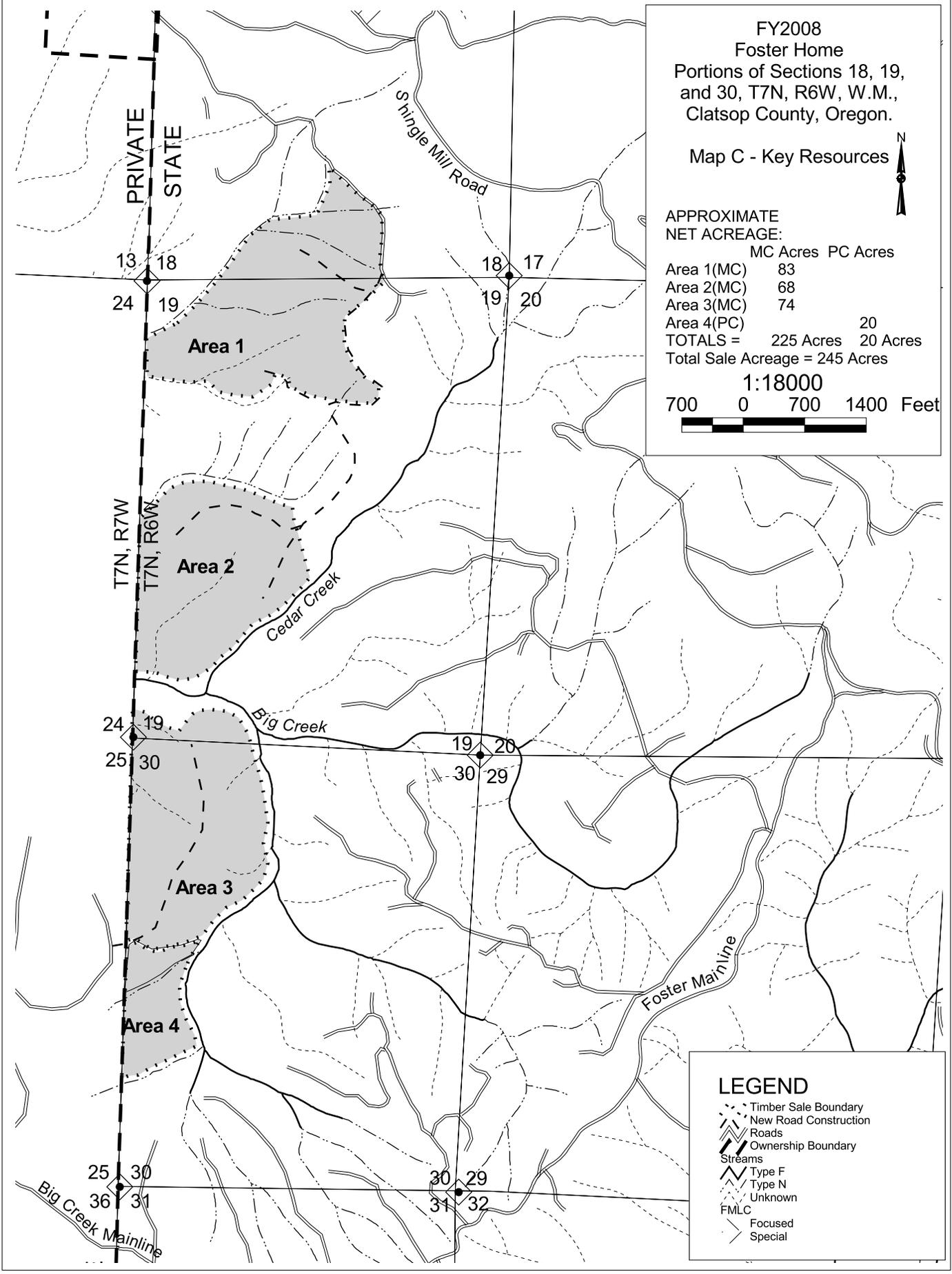
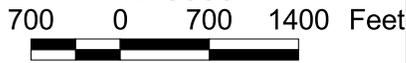
Map C - Key Resources



APPROXIMATE
NET ACREAGE:

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Area 4(PC)		20
TOTALS =	225 Acres	20 Acres
Total Sale Acreage = 245 Acres		

1:18000



LEGEND

- Timber Sale Boundary
- New Road Construction
- Roads
- Ownership Boundary
- Streams**
- Type F
- Type N
- Unknown
- FMLC**
- Focused
- Special