Pre-Operations Report

Operation Name: Fosters 40
County: Clatsop
Management Basin: Northrup

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	67	61
2	PC-M	159	134
3	MC	81	69
4	PC-M	64	55
Total	Modified Clearcut	148	130
Total	Partial Cut	223	189

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are located in the Northrup Basin. They are characterized by Douglas-fir stands, with some western hemlock, western redcedar, and red alder. The soil series are Tillamook and Bradwood on most slopes. Average site Indices are 140 feet (I-) for Douglas-fir on the Tillamook Soil Series and 130 feet (II+) for Douglas-fir on the Bradwood Soil Series. Areas 1-3 drain into Northrup Creek. Timber is generally wind-firm on all acres. Slopes in the operation area range from moderate slopes (20-40%) to steep slopes (40-65%), with primarily eastern and southern aspects. Elevations range from 1,200 to 1,600 feet.

II. CURRENT STAND CONDITION:

Areas 1 and 3 - The current stands are approximately 60 years old, and are composed primarily of moderate sized Douglas-fir (approximately 18 inches in DBH) with hardwoods mixed throughout the stand. The stands are categorized as primarily an Understory Development structure (UDS) with a stand density index of 60.

Areas 2 and 4 - The current stands are primarily composed of 60 year old, moderate sized, Douglas-fir. The stands are categorized as UDS with a stand density index of 60.

Understory development for all sale areas consists primarily of sword fern, vine maple, huckleberry, and salmonberry.

Areas 1 and 4 have approximately 7 snags per acre over 12 inches in DBH and 3 snags per acre over 24 inches in DBH. Areas 2 and 3 have approximately 7 snags per acre over 12 inches in DBH, and 1 snag per acre over 24 inches in DBH.

Areas 1, 2, and 3 have approximately 5,300 cubic feet per acre of down wood in all decay classes, and approximately 162 cubic feet per acre of down wood in decay classes 1 and 2. Area 4 has approximately 4,500 cubic feet per acre of down wood in all decay classes, and approximately 230 cubic feet per acre of down wood in decay classes 1 and 2.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Acres [2]
1	MC	23482	RA, DF	68	14	194	182	52	3
	MC	23492	DF, WH	56	17	231	140	57	58
		Target [3]							61
2	PC-M	23492	DF, WH	56	17	231	140	57	134
		Target [3]	DF, WH						134
3	MC	23492	DF, WH	56	17	231	140	57	69
		Target [3]							69
4	PC-M	23555	DF, WH	58	17	233	148	58	48
	PC-M	23557	DF, RA	60	18	165	89	39	3
	PC-M	23492	DF, WH	56	17	231	140	57	4
		Target [3]	DF, WH						55

1 The source of stand inventory information is SLI and imputed SLI date. Age shown is as of 2008.
2 The acres are based on GIS 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 FUTURE CONDITION/VISION:

Areas 1 and 3 are not planned to have a complex desired future condition on the landscape. Five to seven conifer trees per acre will be left to provide a source for natural regeneration and future downed wood and snags. A precommercial thinning is anticipated at 12-17 years when crowns close followed by a commercial thinning at 30-40 years of age to ensure continued growth. At age 50-60 the stand will be evaluated for either additional thinning or regeneration harvest.

Areas 2 and 4 are not planned to have a complex desired future condition on the landscape. These areas will be thinned to promote some layering and capture the natural mortality within the stand while leaving future options open to either regeneration harvest this stand or thin again and have this stand serve as a complex replacement stand in the future. These stands are located on a less dominant finger ridge off of Nicolai Mountain and are expected to be less susceptible to windthrow.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Acres
1	23492	UDS	REGEN	GEN	3
	23842	CSC	REGEN	GEN	58
2	23492	UDS	LYR	GEN	134
3	23492	UDS	REGEN	GEN	69
4	23555	UDS	LYR	GEN	48
	23557	UDS	LYR	GEN	3
	23492	UDS	LYR	GEN	4

[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 1 and 3 - These areas are planned for a modified clearcut that will be replanted with a mixture of conifer species. A combination of methods will be implemented to achieve the green tree retention requirements such as green tree retention areas, stream buffers, and trees scattered across the sale areas (FMP, page 4-53, Paragraph 2). Minor species found will be reserved from cutting.

Areas 2 and 4 – These areas are designed to be commercially thin from below to a stand density index (SDI) of 30 to 35. An effort will be made to retain minor tree species. Trees less than 8 inches in DBH will be reserved. Merchantable hardwoods will be thinned through, leaving the biggest and best trees regardless of species.

Snags: In all areas, all existing snags will be retained unless deemed to be safety hazards. In both MC areas stand inventory information indicates that we currently have more than two snags/acre. If sale cruise information indicates less than two snags/acre actually exist in the units, then supplemental snag creation will be planned with the operation. In PC Areas 2 and 4, 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. This will add to the existing amount of snags/acre and which is anticipated to exceed the landscape level goal.

Green Trees: In MC Areas 1 and 3, an average of five to seven trees per acre will be scattered and/or clumped throughout the areas. A combination of methods will be implemented to achieve the green tree retention requirements such as clumping and scattering them in the uplands and placing some within stream buffers and outer RMA areas. In addition, individual and small clumps of non-merchantable trees will be left in operationally feasible areas. In all sale areas minor species such as red cedar will 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 and 3, additional conifer trees and/or conifer logs will be retained to meet the 600 cubic foot/acre landscape target 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 existing downed wood levels in decay class 1 and 2. To increase down wood levels in the partial cut area, operations will be required to top trees prior to yarding and to yard only merchantable log segments to roadsides, in addition to bucking out defect prior to yarding.

In Areas 1 and 3 some slash manipulation is anticipated for site prep, but will be evaluated at the time the sale is prepared. The planned planting prescription is 300 trees per acre at the following mixtures: 75% Douglas-fir, 20% western hemlock, and 5% western red cedar. Tree protection will be provided to all species except western hemlock. Prescription of herbicide will be determined at the time the sale is prepared.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	□	X
Planned Quarter		Alternate	

	Conifer	Hardwood	Total
Net Volume (MBF)	6,800	900	7,700
Stumpage Value ($/MBF)	$190	$250	
Estimated Gross Value	$1,292,000	$225,000	$1,517,000
		Project Costs	$137,960
		Estimated Net Total	$1,379,040

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to the harvest site will be Highway 202 to Northrup Creek Road to Foster Mainline Road.

Road improvements will be done on Foster Mainline Road from the Shingle Mill Road junction to the Nicolai Mainline junction (1.5 miles) and Foster Mainline from the Walker Creek junction to the Big Creek junction (3.5 miles). It is expected that a lift of surfacing rock will be needed on this section of road. Additional improvement lifts will also be needed on the existing rocked spur off Foster Mainline to Area 1 (0.5 mile). New road construction in Areas 1 and 2 will be rocked roads. New road construction in Area 3 will be unsurfaced dirt spur roads which will be closed and/or vacated at the completion of the sale.

The majority of Areas 1 and 2 will be cable yarded while Area 3 will be mostly harvested with ground based equipment. Methodology of logging these areas is determined from analysis of the terrain and landing locations. Existing roads will be utilized as much as possible for logging the sale areas.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0.0	0.0	1.0	0.7
Improvement	5.0	0.0	0.5	0.0
Maintenance	8.0	0.0	1.5	0.0
Close/Block	0.0	0.0	0.0	0.3
Vacating	0.0	0.0	0.0	0.4

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Northrup Creek, a Type F stream, is located adjacent to the eastern boundaries of Areas 2, 3, and 4. This stream contains Coho a federally listed fish species. A Type F tributary of Northrup Creek runs through Areas 2, 3, and 4.

There are no known domestic water systems associated with this sale.

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. No stream crossings are anticipated during road construction. In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and seasonal restrictions on logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and Aug. 31. Operations outside of this period will be reviewed with ODFW. If any additional in-stream work is done with this sale, it will all be conducted during in-stream work periods established by ODFW. Riparian management areas result in leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat.

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

Inner zone of Type F streams: Harvesting in the inner zone of a Type F stream may occur in Areas 2 and 4. The goal for harvesting within 100 feet (inner zone)

of Type F streams is to achieve mature forest condition in a timely manner. Management in the inner zone will result in larger diameter trees in a shorter time frame than if no harvesting were to take place and will maintain all snags and downed wood. Once mature forest condition is achieved there will be no management in the inner zone of Type F streams.

In addition, all streams will be examined to determine stream type and classification during sale layout, and then the specific riparian management area strategies required in the FMP will be implemented. Stream type and classification will be done using the most recently completed stream survey information and newly adopted FPA rules where appropriate. The FMP riparian management area strategies that will be implemented are found in the FMP, Appendix J, "Management Standards for Aquatic and Riparian Areas", pages J-1 through J-16.

There may be an opportunity to perform stream enhancement work in Northrup Creek. Further assessment and collaboration will be done with ODFW biologists and the Jewell Unit Forester. If any in-stream work is done with this sale, then it will be conducted during in-stream periods established by ODFW.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

All sale areas were surveyed to protocol for northern spotted owls in 2007 and 2008 with no responses.

The ODF Northwest Area Biologist determined that none of the sale areas contained suitable habitat for Marbled Murrelets.

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

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based off of USGS 1:24,000 topographic maps and available geologic maps. There are no high landslide hazard locations in Area 1 and there are high landslide hazard locations scattered throughout Areas 2 and 3. The entire sale area drains to Northrup Creek. The risk of landslides delivering directly to Northrup Creek from Areas 1 and is low and from Areas 2 and 3 is moderate. Area 1 appears to be located on a large, deep-seated landslide landform. There may be deep-seated landslides located in the headwalls of draws in Area 2. The geotechnical specialist will be consulted during sale layout.

X. RECREATION RESOURCES:

This area receives dispersed recreation, which includes hunting, camping, target shooting, and driving forest roads. This sale is located in the motorized recreation portion of the Clatsop State Forest. Inventories of existing motorized trails found desirable trails in the sale. At this time it is not known if the trails will become part of a developed motorized trail network on the Clatsop State Forest. Coordination between the unit forester and the district recreation coordinator will be important when laying out the timber sale to protect any potential trials and minimize user conflicts.

XI. CULTURAL RESOURCES:

There are no known cultural resources within or adjacent to the operation.

XII. SCENIC RESOURCES:

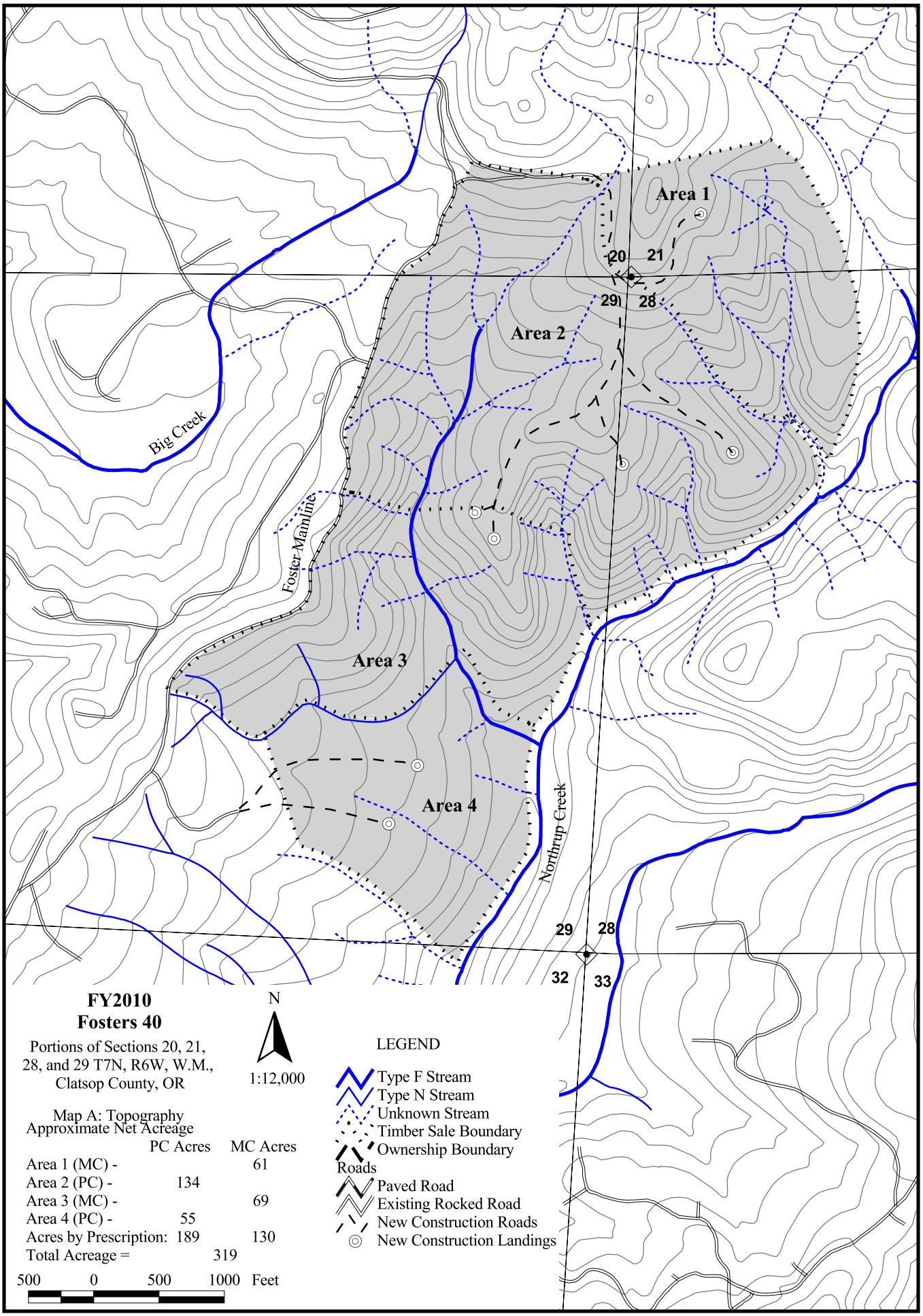
The sale area is in a landscape of low visual sensitivity (Level 3).

XIII. OTHER RESOURCE CONSIDERATIONS:

No survey work is required. There is a section corner located in Area 1 that will need protection.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

All acres in Areas 1-4 are classified as “general management.”



FY2010
Fosters 40

Portions of Sections 20, 21, 28, and 29 T7N, R6W, W.M., Clatsop County, OR

Map A: Topography

N

1:12,000

Approximate Net Acreage

	PC Acres	MC Acres
Area 1 (MC) -		61
Area 2 (PC) -	134	
Area 3 (MC) -		69
Area 4 (PC) -	55	
Acres by Prescription:	189	130
Total Acreage =	319	

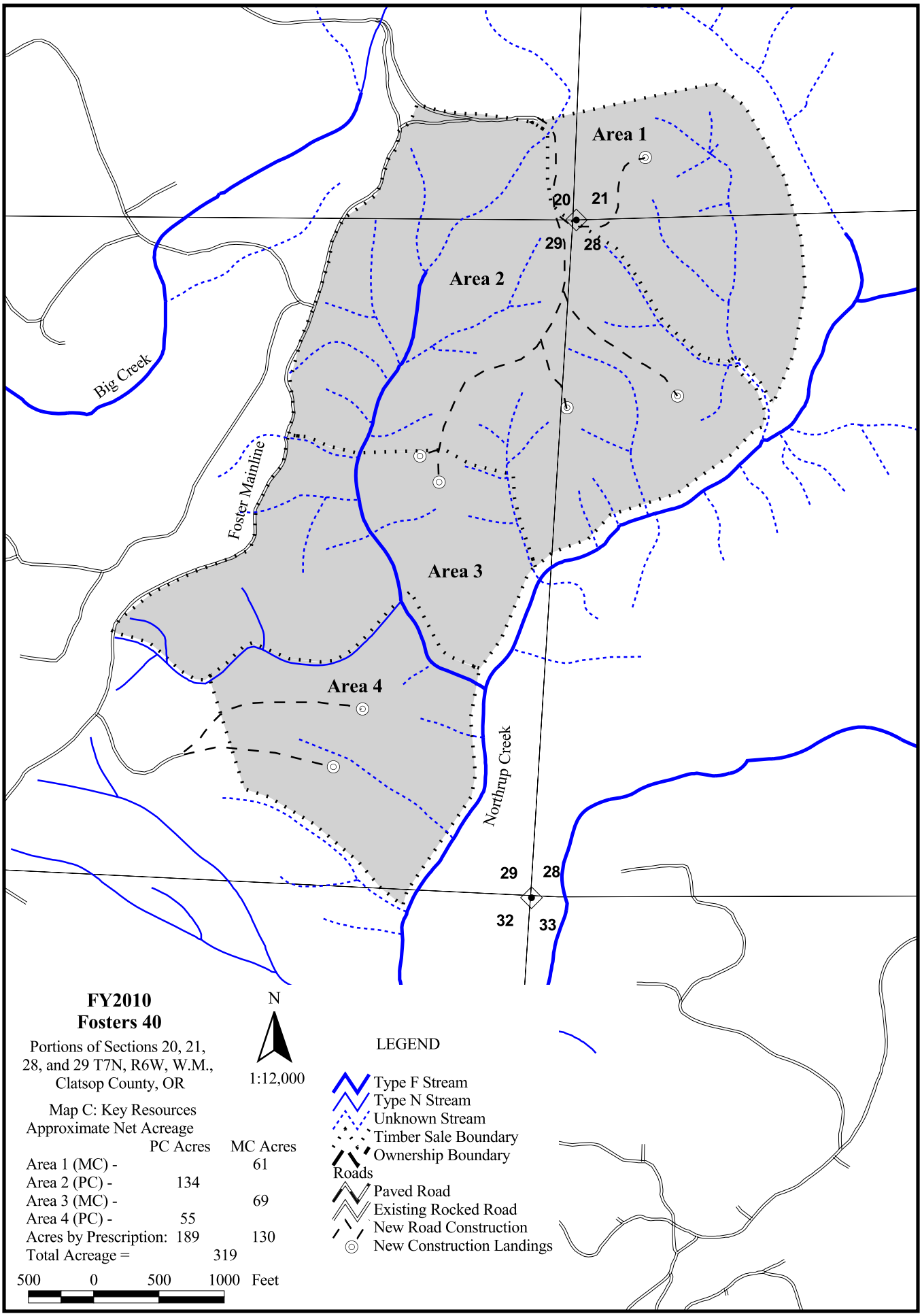
500 0 500 1000 Feet

LEGEND

- Type F Stream
- Type N Stream
- Unknown Stream
- Timber Sale Boundary
- Ownership Boundary

Roads

- Paved Road
- Existing Rocked Road
- New Construction Roads
- New Construction Landings



FY2010
Fosters 40

Portions of Sections 20, 21, 28, and 29 T7N, R6W, W.M., Clatsop County, OR

Map C: Key Resources

Approximate Net Acreage

	PC Acres	MC Acres
Area 1 (MC) -		61
Area 2 (PC) -	134	
Area 3 (MC) -		69
Area 4 (PC) -	55	
Acres by Prescription:	189	130
Total Acreage =	319	

N

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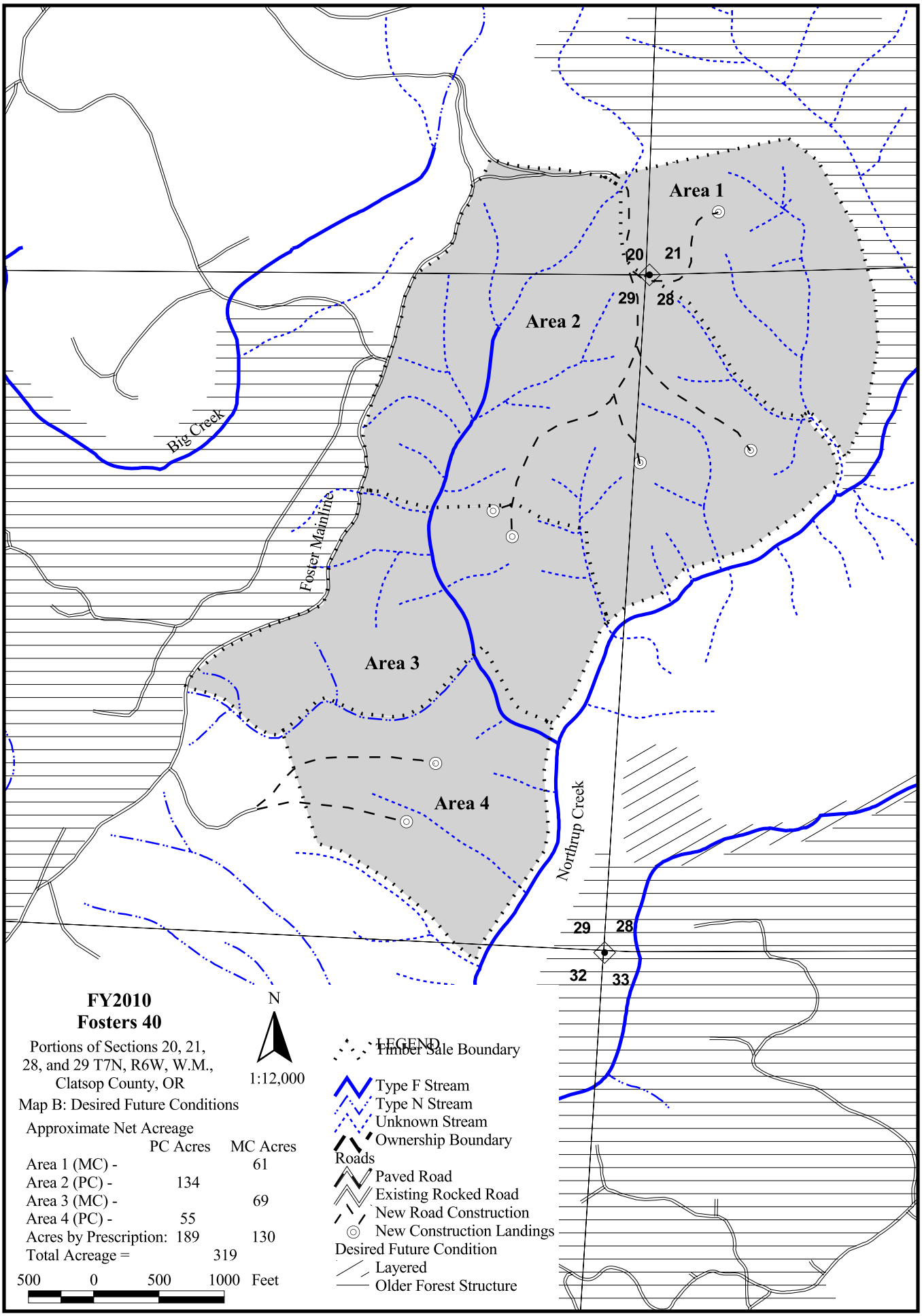
500 0 500 1000 Feet

LEGEND

- Type F Stream
- Type N Stream
- Unknown Stream
- Timber Sale Boundary
- Ownership Boundary

Roads

- Paved Road
- Existing Rocked Road
- New Road Construction
- New Construction Landings



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Portions of Sections 20, 21, 28, and 29 T7N, R6W, W.M., Clatsop County, OR

Map B: Desired Future Conditions

Approximate Net Acreage

	PC Acres	MC Acres
Area 1 (MC) -		61
Area 2 (PC) -	134	
Area 3 (MC) -		69
Area 4 (PC) -	55	
Acres by Prescription:	189	130
Total Acreage =	319	