

Pre-Operations Report

Operation Name: Ridge 77
County: Clatsop
Management Basin: Lousignot

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	45	45
2	PC-M	54	52
3	MC	84	78
Total	Partial Cut	54	52
Total	Modified Clearcut	129	123
Total		183	175

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are all located in the Lousignot Basin. This area is dominated by Douglas-fir, with significant patches of bigleaf maple and red alder. Western hemlock and noble fir are also present throughout the stands. The soil types present are primarily (Tillamook) Ty, with some (Bradwood) Bq in all areas except Area 3. Tillamook soils are deep, well drained, fine textured rock derived from siltstones. Bradwood soils are deep, well drained colluvial soils. Site index ranges from 130 to 140 with an average of 138 for the Douglas-fir, and 110 for the western hemlock.

The sale is located along the gentle ridges that divide Louisgnont Creek and the flood plane of the Nehalem River just east of the Northrop Creek junction. The sale is underlain by sedimentary rocks of the informal Sager Creek formation.

II. CURRENT STAND CONDITION:

Area 1 - The current stands are generally 62 to 66 years old, and are composed of moderate sized Douglas-fir, red alder and maple. The stands are categorized as 53% Closed Single Canopy (CSC), and 47% understory development (UDS). The stand density is between 42% and 77%.

Area 2 - The current stands are composed of 66 year old moderate sized Douglas-fir, red alder and maple. The stands are categorized as 94% UDS and 6% CSC. The stand density is between 42% and 77%.

Area 3 - The current stands are generally 55 to 66 years old and are composed of moderate sized Douglas-fir. The understory consists primarily of vinemaple,

sword fern, red huckleberry, with hemlock present. The stand is categorized as 50% CSC and 50% UDS, and the stand density is between 45% and 66%.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	AGE	DBH	BA	TPA	SDI	Acres ²
1	MC	1333	DF	66	17	303	187	74	4
	MC	1346	DF	69	19	178	90	42	21
	MC	1362	DF	66	17	315	192	77	20
		Target ³	DF,WH,C				5		45
2	PC-M	1346	DF	69	19	178	90	42	9
	PC-M	1353	DF	70	24	262	83	56	40
	PC-M	1362	DF	66	17	315	192	77	3
		Target ³			25	110-140	40	25-35	52
3	MC	1184	RA,BM	58	16	198	142	50	4
	MC	1263	DF	66	19	245	124	58	10
	MC	1277	DF	67	20	195	87	45	36
	MC	1281	DF	70	20	285	133	66	10
	MC	1293	BM	56	17	114	73	28	3
	MC	1297	DF	69	20	286	132	66	12
	MC	1311	DF	72	19	288	150	68	3
		Target ³	DF,WH,C				5		78

1 The source of stand inventory information is OSCUR from 2002. Age shown as of 2006.

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 STAND CONDITION/VISION:

Areas 1 and 3 - do not have a designated complex desired future condition. The desired conditions of these stands are healthy vigorous stands of mixed conifer and hardwoods.

Areas 1 and 3 - will be regeneration harvested. Five to seven of the largest conifer trees per acre will be left to provide a source for natural regeneration and future downed wood as well as promote snag creation for the future. The stands will be planted with a mixture of conifer species. It is anticipated that some natural regeneration of western hemlock and red alder will also occur. A precommercial thinning is anticipated 12 to 17 years when crowns close followed by a commercial thinning at 30 to 40 years of age to ensure continued growth. At age 45 to 50 the stand will be evaluated for either additional thinning or regeneration harvest.

Area 2 – is planned for a desired future condition of Layered (LYR). Performing a moderate partial cut will open up the overstory canopy and enable light to reach the forest floor, thus allowing the release of the already existing mid-level canopy. Merchantable alder and maple will be harvested providing gaps in the canopy to allow enough light to reach the forest floor for natural regeneration.

Non-merchantable trees will be reserved. This prescription will promote accelerated growth the existing overstory trees. At the next entry, in 10 to 15 years, the stand will be a predominately Douglas-fir overstory with some western red cedar, hemlock, and red alder in the understory. There is an abundance of ground vegetation developing in the open areas. When the stand reaches a LYR condition in approximately 20 to 30 years, Douglas-fir will still be the dominate species in the overstory. The understory layers will be composed of western hemlock and western redcedar. Red alder, bigleaf maple, and vinemaple will also be present throughout the stand.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	1333	CSC	REG	General	4
	1346	UDS	REG	General	21
	1362	CSC	REG	General	20
2	1346	UDS	LYR	LYR	9
	1353	UDS	LYR	LYR	40
	1362	CSC	UDS	General	3
3	1184	CSC	REG	General	4
	1263	CSC	REG	General	10
	1277	UDS	REG	General	36
	1281	CSC	REG	General	10
	1293	UDS	REG	General	3
	1297	CSC	REG	General	12
	1311	CSC	REG	General	3

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 - are modified clearcuts that will be replanted with a mixture of conifer species. Minor species, such as western redcedar, will be reserved from cutting. Larger remnant trees, if present, will be reserved from cutting. Individual and small clumps of non-merchantable alder will be left in operationally feasible areas to provide short term snag recruitment. Site preparation will be provided by cable harvesting activities with some slash piling occurring on the gentler slopes where slash has accumulated. Planting will be at 300 trees per acre with a mix of Douglas-fir, western hemlock and western red cedar. Tree protection will be prescribed to the newly planted conifer species; tubes for the western redcedar and paper bud caps for the Douglas-fir. Prescription of herbicide will be determined at the time the sale is prepared.

Area 2 - will be automark thinned to an SDI of 25 to 35. Sawlog alder will be harvested. Minor species will be reserved. Openings larger than an acre in size may be planted with a shade tolerant species. The result will be increased growth

to individual trees and development or maintenance of conifer and deciduous understory species, as the more open tree canopy allows light to reach the forest floor.

Snags: For all harvesting activities, all existing snags will be retained unless deemed to be safety hazards. It is anticipated that additional snags will develop during harvesting activities by leaving, topping or girdling damaged rub trees, tail lift trees, and/or intermediate support trees (FMP, "Landscape Management Strategy 3c. Snags", pages 4-53 and 4-54).

Green Trees: In MC Areas 1 and 3, an average of five to seven of the largest conifer trees per acre will be left to provide a source for natural regeneration and future downed wood as well as promote snag creation for the future. A combination of methods will be implemented to achieve the green tree retention requirements such as clumping and scattering in the uplands and placing some within stream buffers and outer RMA areas. 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.

Down Wood: Efforts will be made to leave as much downed wood that is created from the harvest activities within the unit. This will be accomplished through topping trees and bucking out cull sections within the unit. During all harvesting activities, all existing down woody debris will be retained.

It is also anticipated that natural snag and down wood recruitment will occur post harvest over time due to natural occurrences.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		Alt.	
	Conifer	Hardwood	Total
Net Volume (MBF)	5,300	700	6,000
Stumpage Value (\$/MBF)	\$350	\$300	
Estimated Gross Value	\$1,855,000	\$210,000	\$2,065,000
		Project Costs:	\$49,000
		Estimated Net Value:	\$2,016,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

For sale access, approximately one mile of new road construction, and two miles of road improvement along the haul route and within the basin will be completed to maintain the road. New roads are minor spurs that do not cross perennial streams. Most of the new road construction is in Area 3, and is planned to be dirt roads which will be vacated upon completion of logging. They are needed to reduce skidding distance and to access sale areas separated by incised draws. Since this area has an established road network, utilizing the existing infrastructure and constructing a few minor spurs was determined the most sound access/harvest system.

A combination of cable yarding and ground yarding will be planned for harvesting. Cable systems will be used on Areas 1 and 2 for a combination of steeper slopes and to avoid Old Vesper 77 Road which is managed by Clatsop County. Ground yarding will generally be limited to slopes under 30%. A majority of Area 3 is tractor ground, while the southeast corner of Area 3 will be cable logged.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.2	0.8
Improve	0.0	0.0	1.7	0.0
Maintain	1.3	0.0	2.7	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.8

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Area 3 - Louisgnont Creek, a large Type F stream runs along the eastern boundary of Area 3 for approximately 2,500 feet to the northern boundary. From here, Louisgnont Creek forks. The left fork which parallels the northern boundary of Area 3 for approximately 1,000 feet is a medium Type F stream. Both streams will be buffered to the Northwest Forest Management Plan standards. No domestic use streams are associated with the harvest activities. Areas 1 and 2 - No Type F streams are associated with the harvest activities.

Type N Streams: There are perennial Type N streams in Area 3 only. There are no streams in Areas 1 and 2.

Aquatic Resource Protection: Full log suspension is required when cable yarding over streams. No ground-based logging equipment operation is allowed within

the stream bank zone or within 25 feet of any stream. No stream crossings are anticipated during road construction. 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. There are no known high hazard sites or debris-track Type N streams within the sale area.

All streams were surveyed to determine stream type and classification in April 2006. There was no fish use on any of the interior streams within the sale areas. The specific riparian management area strategies required in the FMP will be implemented. 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.

ODFW Biologists recommended placement of large wood in Lousignont Creek during harvest of Area 3. This will be accomplished during cable logging if cable lines pass over Lousignont Creek and with a log loader where tractor logging will be done.

VIII. T&E SPECIES CONSIDERATIONS:

All sale areas were surveyed to protocol for northern spotted owls in 2005 and in 2006 with no detections.

The ODF Northwest Area Biologist determined on February 4, 2005 that none of the sale areas contained suitable habitat for Marbled Murrelets.

The sale area was checked against district knowledge for any listed plant locations. 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:

There are no high landslide hazard locations predicted in the timber sale. There is an old scarp approximately 8 to 10 acres in size adjacent to the west boundary of Area 1. The initial hazard and risk assessment from the geotechnical specialist is low. The geotechnical specialist will be consulted during sale layout if concerns arise.

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, however inventories of existing trails did not find any located near this sale area.

XI. CULTURAL RESOURCES:

No known cultural resources are within or adjacent to the operation.

XII. SCENIC RESOURCES:

Areas 1 and 2 are in a Forest Land Management Class of Visual, which runs along Old Vesper 77 County Road. These acres are in focused stewardship for Level 2 visual management. Steps will be taken to insure the visual areas are managed consistent with FMP visual management objectives. (FMP, "Scenic Resources", pages 4-105 to 4-107).

XIII. OTHER RESOURCE CONSIDERATIONS:

Some areas within the sale area will require some property surveys or survey monument protection measures. The requirements are as follows:

Area 1 - the section corner common to Sections 14, 15, 22 and 23 lies within the sale area. This corner was re-witnessed in 1994 and will need to be protected. The property line corner in Section 23 that lies east of the N 1/16 corner between Sections 22 and 23 is along the SE boundary of sale area. This corner was established in 1982 and needs to be found and protected. It may need to be re-witnessed based upon field findings. The N 1/16 corner between Sections 22 and 23 is along the south boundary of the sale area. This corner was established in 1964 and needs to be found and protected. It may need to be re-witnessed based upon field findings. The south boundary of Area 1 was surveyed in 1986 but survey records do not show this line as trued, blazed and posted (TB&P). Blazes need to be field verified. It may need TB&P if blazes cannot be found.

Area 2 - the south boundary of Area 2 is the Old Vesper 77 county road. Survey records show the east boundary of Area 2 was TB&P in 1982. Blazes need to be found and painted. It appears that this line has been cut up against by an adjacent private landowner. The ¼ corner to Sections 14 and 23 is on the east boundary of the sale area. This corner was restored in 1992 and will need to be protected. The property line corner in Section 23, which lies south of the ¼ corner to Sections 14 and 23, is along the east boundary of the sale area. This corner was established in 1982 and will need to be found and protected. It may need to be re-witnessed based upon field findings.

Area 3 - the ¼ corner between Section 14 and 15 lies on the area boundary of Area 3. This corner was re-witnessed in 1994 and will need to be protected.

Additional needs outside the sale boundary include a center ¼ corner to Section 14. This corner was established in 1982 and should be found and evaluated for re-witnessing needs. The ¼ corner to Sections 15 and 22 was reestablished in

1964. This corner should be found and re-witnessed. If the property line that forms the south boundary of Area 1 is found to need TB&P, it should continue to be TB&P to the center 1/16 of Section 22. This would be approximately ½ mile of TB&P.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

All of Areas 1 and 2 are designated as focused stewardship for visual management. See Section XII, Scenic Resources, for the management guidelines to be utilized. All other acres in Areas 1 through 3 are classified as “general management.”

Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process. (This portion only to be included if LMCS classifications are actually depicted on Exhibit C.)

Approximate Net Acreage		
	MC Acres	PC Acres
Area 1 (MC) =	45	
Area 2 (PC) =		52
Area 3 (MC) =	78	
Total by Prescription =	123	52
Total Acres =	175 Acres	

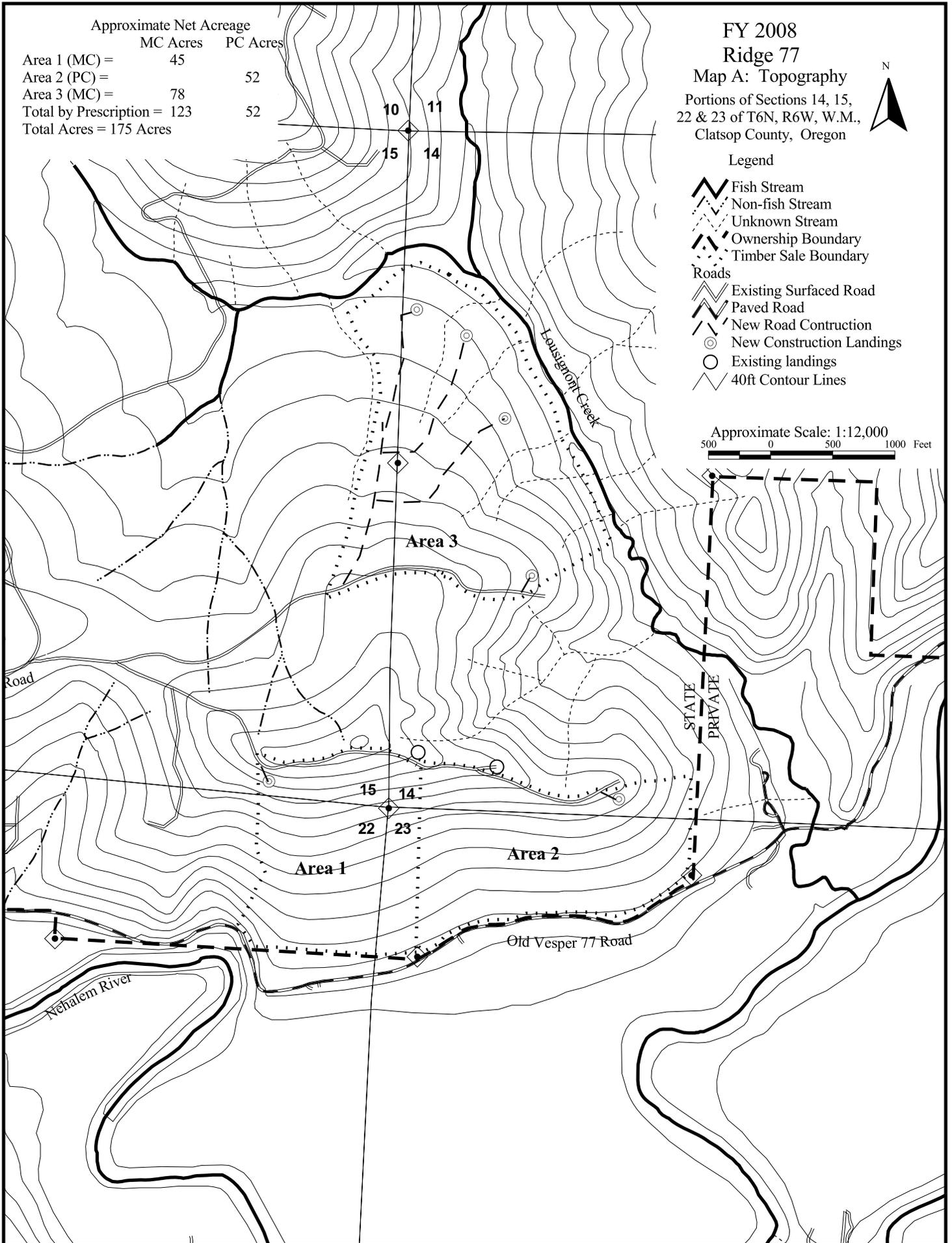
FY 2008
 Ridge 77
 Map A: Topography
 Portions of Sections 14, 15,
 22 & 23 of T6N, R6W, W.M.,
 Clatsop County, Oregon



Legend

- Fish Stream
- Non-fish Stream
- Unknown Stream
- Ownership Boundary
- Timber Sale Boundary
- Roads
 - Existing Surfaced Road
 - Paved Road
 - New Road Construction
- New Construction Landings
- Existing landings
- 40ft Contour Lines

Approximate Scale: 1:12,000
 500 0 500 1000 Feet



Approximate Net Acreage		
	MC Acres	PC Acres
Area 1 (MC) =	45	
Area 2 (PC) =		52
Area 3 (MC) =	78	
Total by prescription =	123	52
Total Acres =	175	

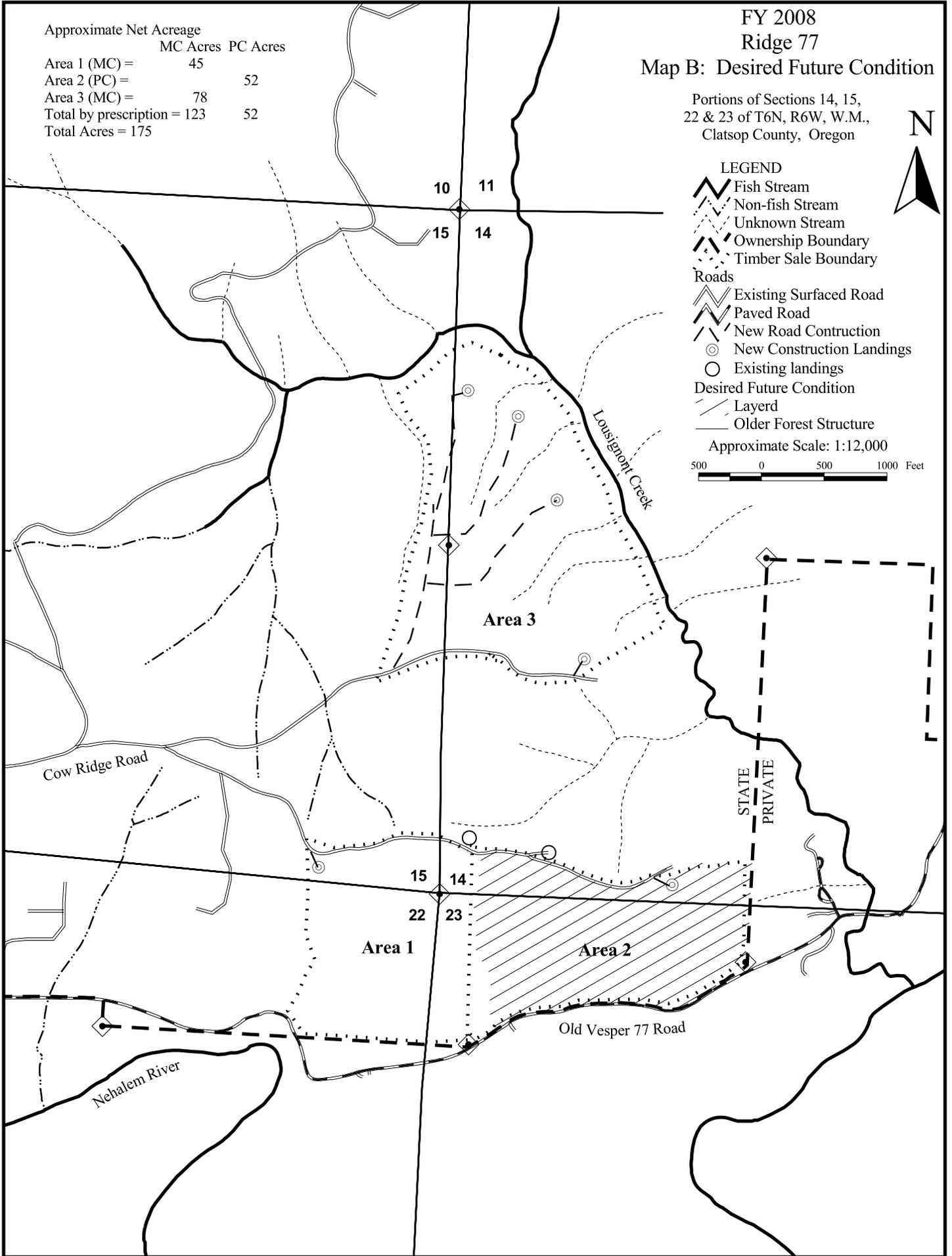
FY 2008
Ridge 77
Map B: Desired Future Condition

Portions of Sections 14, 15,
22 & 23 of T6N, R6W, W.M.,
Clatsop County, Oregon



- LEGEND**
- Fish Stream
 - Non-fish Stream
 - Unknown Stream
 - Ownership Boundary
 - Timber Sale Boundary
 - Roads**
 - Existing Surfaced Road
 - Paved Road
 - New Road Construction
 - New Construction Landings
 - Existing landings
 - Desired Future Condition**
 - Layer
 - Older Forest Structure

Approximate Scale: 1:12,000
500 0 500 1000 Feet



Approximate Net Acreage	
	MC Acres PC Acres
Area 1 (MC) =	45
Area 2 (PC) =	52
Area 3 (MC) =	78
Total by prescription =	123
Total Acres =	175

FY 2008
Ridge 77
Map C: Key Resources

Portions of Sections 14, 15,
22 & 23 of T6N, R6W, W.M.,
Clatsop County, Oregon



- Legend
- Fish Stream
 - Non-fish Stream
 - Unknown Stream
 - Ownership Boundary
 - Timber Sale Boundary
 - Roads
 - Existing Surfaced Road
 - Paved Road
 - New Road Construction
 - New Construction Landings
 - Existing landings
 - Focused Management (Visual)

Approximate Scale: 1:12,000
500 0 500 1000 Feet

