

# 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:**

This sale is located in the southeastern area of the Lousignot Basin, between Lousignont Creek and the Nehalem River. 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 (II+) in the Tillamook Soils to 140 (I-) in the Bradwood Soils. The sale is underlain by sedimentary rocks of the informal Sager Creek formation.

### **CURRENT STAND CONDITION:**

Area 1 - The current stands are generally 67 to 70 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 67 to 71 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 58 to 73 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 <sup>1</sup>	Species	AGE	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	MC	23754	DF	67	17	303	187	74	45
		Target <sup>3</sup>	DF,WH,C				5		45
2	PC-M	23754	DF	67	17	303	187	74	52
		Target <sup>3</sup>			25	110-140	40	25-35	52
3	MC	23754	DF	67	17	303	187	74	78
		Target <sup>3</sup>	DF,WH,C				5		78

1 The source of stand inventory information is SLI. Age shown as of 2007.

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.

## **II. 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 <sup>1</sup>	Desired Future	Acres
1	23754	UDS	REG	General	45
2	23754	UDS	LYR	LYR	52
3	23754	UDS	REG	General	78

<sup>1</sup> The stand is expected to develop into this condition in the five to ten years after this operation is completed.

**III. 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.

The southern portion of Area 1 has a “Focused Visual” land management classification with a Level 2 requirement. In this portion of the unit measures will be taken to moderate the amount of residual slash and stumps within 50 feet of Old 77 Vesper Road may be flush cut. Efforts will be made to concentrate wildlife trees in this portion of the unit to create a visual buffer between Old 77 Vesper Road and the harvest Unit.

Area 2 - will be automark thinned to an SDI of 25 to 35. Saw log 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.

Clatsop County Public Works staff has indicated that there are some hazard trees within the southern most portion of Area 2 and adjacent to Old 77 Vesper Road that they would like removed in conjunction with this operation. ODF will coordinate with Clatsop County Public Works staff during sale layout to ensure that these trees are marked for removal.

*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.

**IV. ESTIMATED TIMBER AND REVENUE OUTPUTS:**

**Table 4. Timber and Revenue**

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

	Conifer	Hardwood	Total
Net Volume (MBF)	5,300	700	6,000
Stumpage Value (\$/MBF)	\$325	\$400	
Estimated Gross Value	\$1,722,500	\$280,000	\$2,002,500
		Project Costs:	\$85,600
		Estimated Net Value:	\$1,916,900

**V. 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.

Test drilling at Northrup Quarry will be done as a project within this sale.

**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	2.0	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

**VI. 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.

**VII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:**

All sale areas were surveyed to protocol for northern spotted owls in 2005, 2006 & 2007 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.

**VIII. 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.

**IX. RECREATION RESOURCES:**

This area receives dispersed recreation, which includes hunting, camping, target shooting, and driving forest roads.

**X. CULTURAL RESOURCES:**

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

**XI. 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).

## **XII. 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  $\frac{1}{4}$  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  $\frac{1}{4}$  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  $\frac{1}{4}$  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  $\frac{1}{4}$  corner to Section 14. This corner was established in 1982 and should be found and evaluated for re-witnessing needs. The  $\frac{1}{4}$  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  $\frac{1}{2}$  mile of TB&P.

## **XIII. 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	

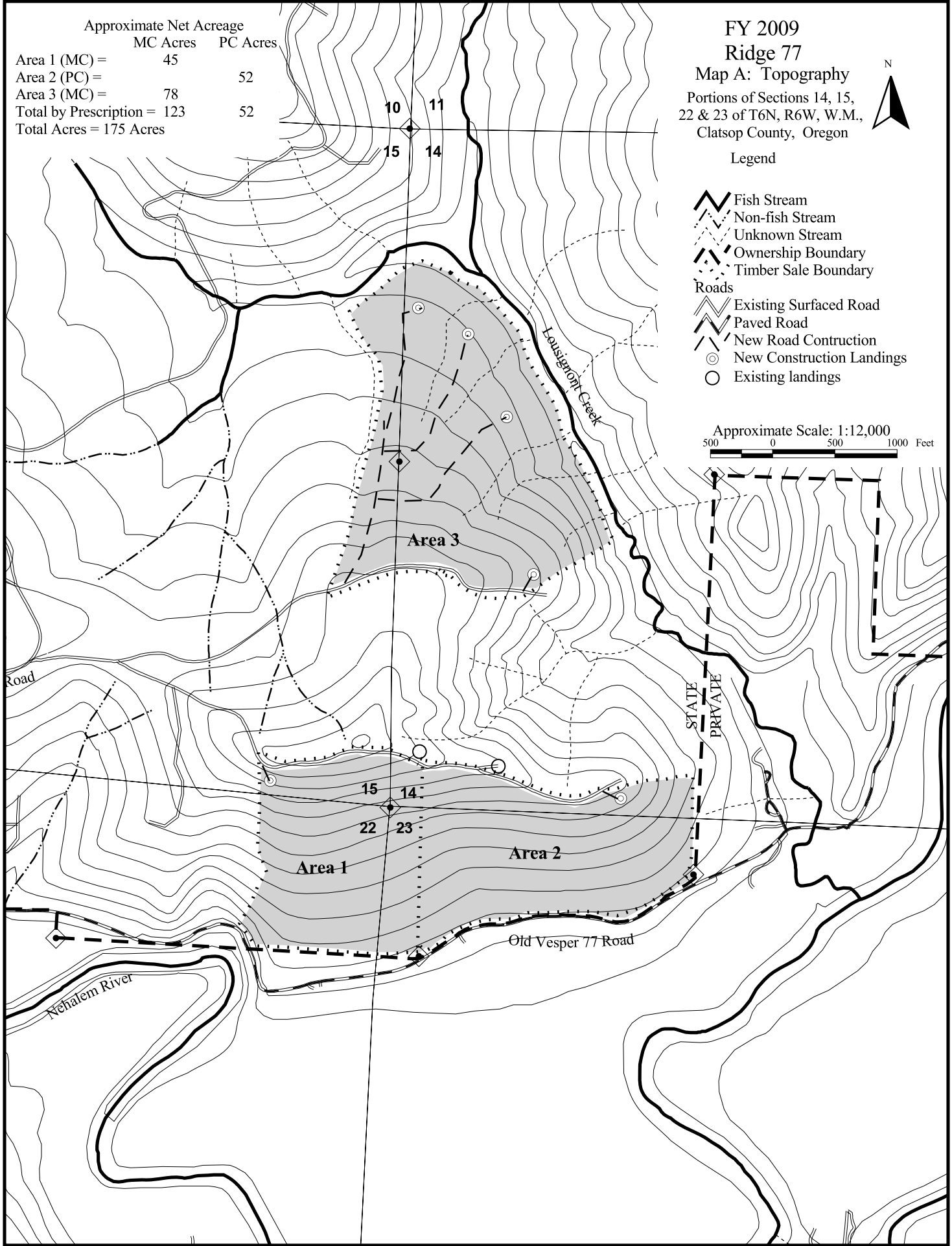
FY 2009  
 Ridge 77  
 Map A: Topography  
 Portions of Sections 14, 15,  
 22 & 23 of T6N, R6W, W.M.,  
 Clatsop County, Oregon



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

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



FY 2009  
Ridge 77

Map B: Desired Future Condition

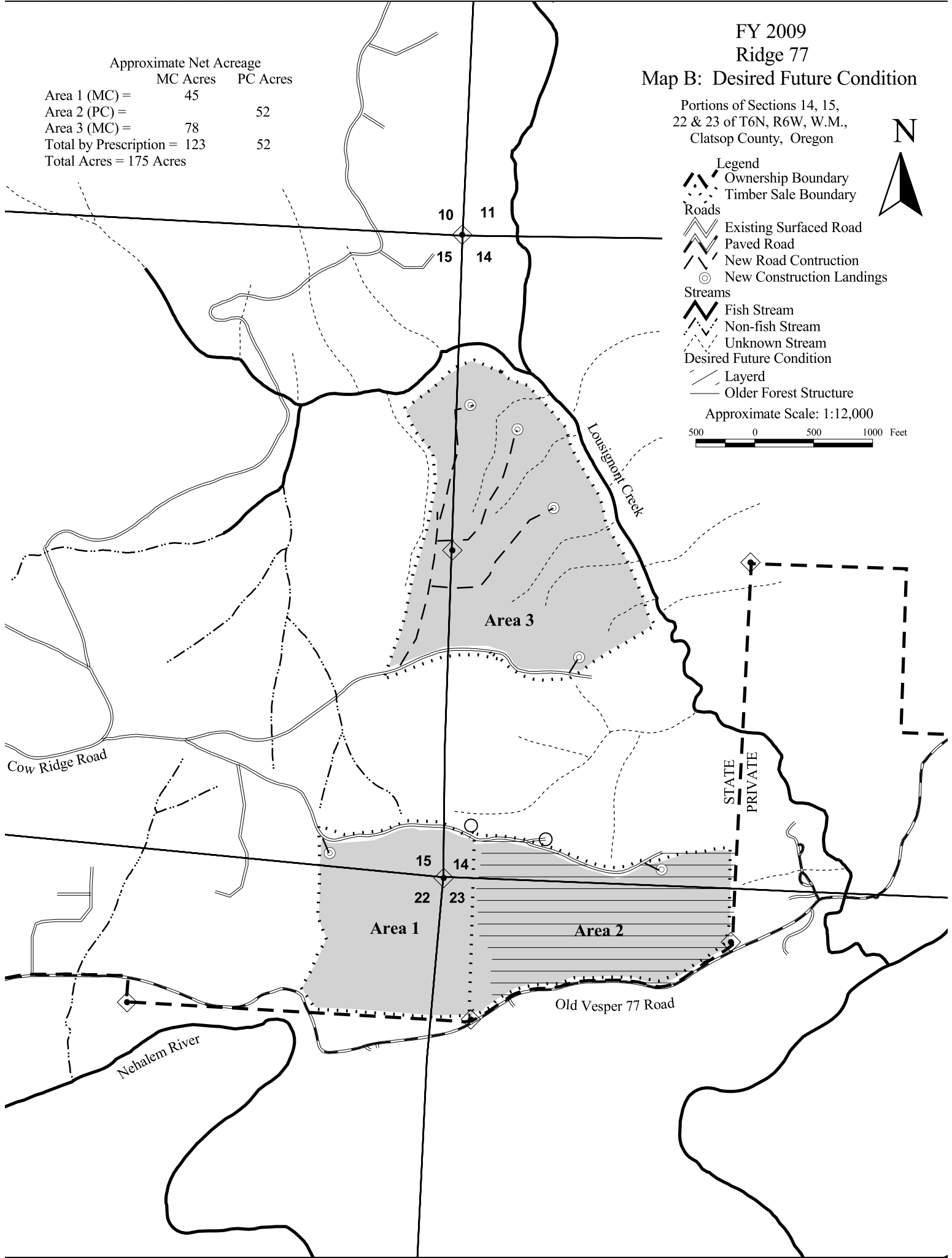
Portions of Sections 14, 15,  
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- Legend
- Ownership Boundary
  - Timber Sale Boundary
- Roads
- Existing Surfaced Road
  - Paved Road
  - New Road Construction
  - New Construction Landings
- Streams
- Fish Stream
  - Non-fish Stream
  - Unknown Stream
- Desired Future Condition
- Layerd
  - Older Forest Structure

Approximate Scale: 1:12,000



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Area 3 (MC) =	78	
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FY 2009  
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

