Pre-Operations Report

Operation Name: Rising Tide
County: Clatsop
Management Basin: Hamilton

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	70	65
2	MC	48	45
3	MC	47	42
4	MC	80	70
Total	Modified Clearcut	245	222

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The sale is located northeast of Fishhawk Falls off of Highway 202. Areas 1 and 2 of the sale are located along a gentle divide between Hamilton Creek and an unnamed tributary of Fishhawk Creek. Areas 3 and 4 of the sale are located along the gentle divide between two forks of Hamilton Creek. The sale is underlain by sedimentary rocks of the informal Smugglers Cove Formation and the Pittsburg Bluff Formation. There are invasive dikes that are Intrusive Grande Ronde Basalt of the Columbia River Basalt Group running (northeast trend) through Areas 1 and 2.

II. CURRENT STAND CONDITION:

Area 1 - This area is a 50 to 60 year stand consisting primarily of Douglas-fir, western hemlock, and large patches of red alder. Other tree species found are noble fir and Sitka spruce. The understory structure is composed of well developed vine maple, blue huckleberry and sword fern with salmonberry found near the streams. This area is classified as a Closed Single Canopy (CSC).

Area 2 - This area consists mostly of 40 to 65 year old Douglas-fir and western hemlock. Scattered noble fir and Sitka spruce are present throughout the area with red alder found near the streams. The understory is composed of small shrubs and ferns influenced by the closed canopy structure. This stand is classified as a Closed Single Canopy (CSC).

Area 3 - This area consists primarily of 55 to 65 year old Douglas-fir with fewer western hemlocks, noble fir, and Sitka spruce in the northern half of the stand. The southern half of the stand is mainly composed of red alder with small patches of conifer species. The understory is composed of small shrubs and

ferns influenced by the closed canopy structure. This stand is classified as an Understory structure (UDS).

Area 4 - This area consists of 70 year old Douglas-fir, noble fir, and Sitka spruce with fewer red alder found along stream channels. The understory is primarily sword fern and Oregon grape with few vine maple scattered throughout the area. This stand is classified an Understory structure (UDS).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Acres [2]
1	MC	1494	DF, WH	53	16	291	210	74	12
		1519	RA	56	16	214	152	54	31
		1530	RA	61	19	181	95	57	4
		1542	WH, DF	59	17	244	162	61	18
		Target [3]	DF,WH,WRC				5		65
2	MC	1450	WH, DF	37	13	148	156	40	13
		1499	WH, DF	65	16	293	222	75	32
		Target [3]	DF,WH,WRC				5		45
3	MC	23783	DF	64	12	304	356	79	22
		23784	RA	52	12	190	255	55	20
		Target [3]	DF,WH,WRC				5		42
4	MC	23769	DF	71	13	304	333	84	70
		Target [3]	DF,WH,WRC				5		70

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

None of the sale areas are planned to have a complex desired future condition on the landscape.

These areas will be regeneration harvested and planted with a mixture of conifer species. Five to seven conifer trees per acre will be left to provide a source for natural regeneration and future downed wood and snags. A pre-commercial thinning is anticipated at 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.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Acres
1	1494	CSC	REGEN	GENERAL	12
	1519	CSC	REGEN	GENERAL	31
	1530	CSC	REGEN	GENERAL	4
	1542	CSC	REGEN	GENERAL	18
2	1450	CSC	REGEN	GENERAL	13
	1499	CSC	REGEN	GENERAL	32
3	23783	UDS	REGEN	GENERAL	22
	23784	UDS	REGEN	GENERAL	20
4	23769	UDS	REGEN	GENERAL	70

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

IV. PROPOSED MANAGEMENT PRESCRIPTION:

Area 1, 2, 3 and 4 - These areas are all proposed for modified clearcuts that will be replanted with a mixture of conifer species.

Snags: During all harvesting activities, all existing snags will be retained unless deemed to be safety hazards. Where fewer than two hard snags per acre are found to exist during sale layout, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels (FMP, "Landscape Management Strategy 3c. Snags", pages 4-53 and 4-54).

Green Trees: 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 may be reserved from cutting; further consideration of those species will be taken during sale layout. It is proposed that a green tree retention area be left as labeled on the map in Area 4

Downed Wood: For all harvesting activities, all existing down woody debris will be retained. Down woody debris levels will be assessed and if deficiencies are found to exist on an individual unit, then additional conifer trees and/or conifer logs will be retained to meet the landscape targets for down woody debris as prescribed in the FMP. (FMP, "Landscape Management Strategy 3d. Down Wood." pages 4-54 and 4-55.).

Site preparation: Site preparation will be provided by mostly cable and ground based harvesting. Slash manipulation is anticipated. Utilization, felling and bucking practice along with field evaluation will determine the extent of slash manipulation. Seedlings will be planted at 300 trees per acre with a mixture of Douglas-fir, western hemlock, and western red cedar. Tree protection measure is anticipated in this geographical area due to high elk populations and Jewell

wildlife refuge location. Paper bud caps and tubes for the Western Red Cedar will be utilized. Herbicide application requires field evaluation at the time the sale is prepared.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	□	4
Planned Quarter:		4th	

	Conifer	Hardwood	Total
Net Volume (MBF)	7,500	900	7,230
Stumpage Value ($/MBF)	$350	$300	
Estimated Gross Value	$2,625,000	$270,000	$2,895,000
		Project Costs:	$613,000
		Estimated Net Value:	$2,282,000

VI. Harvesting and Access Considerations:

Access to Area 1 is from Highway 202 to Wooden Road. Area 2 is accessed via Highway 202 to Swede Road. For the Tidewater Loop area, associated with this sale, a transportation plan will be developed to determine the most efficient access to areas 3 and 4. A Type F stream crossing may be constructed to access these areas. In addition, roadside brushing will be required for safe hauling conditions.

The proposed new roads are composed of relatively short “working” spurs from existing rocked roads. The roads are designed to reach ridge-tops to facilitate cable yarding. Upon development of the transportation plan an assessment will be made to determine whether vacating of approximately 1.5 miles of Tidewater Loop Road is necessary.

Rock crushing at West Tidewater Quarry or Tidewater Loop Quarry will be conducted to provide 23,000cy of rock for in-sale projects.

The Upper Nehalem Watershed Project WIT Action Plan identified a high washout hazard on the Tidewater Loop Road. Further assessment has been completed by ODF Engineering Unit. The situation will be resolved as a project associated with this timber sale.

The sale will have a mixture of cable and ground yarding opportunities. Area 1 is predominately cable yarding with approximately 5 to 10 acres of tractor yarding. Area 2 has approximately 33 acres of cable yarding and 15 acres of tractor

yarding. Area 3 is 100% cable yarding. Area 4 is mostly accessible for tractor logging with approximately 10 acres of cable yarding.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	3	1.4	0.1
Improve	0.0	1.4	2.5	0.0
Maintain	0.0	8.0	2.0	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	1.5	0.1

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Areas 1 and 2 have no Type F streams or domestic use streams associated with the harvest activities. Area 3 is adjacent to large Type F streams on the south, west and east boundaries but are not within the sale area. Area 4 is adjacent to medium Type F streams on the west and east boundaries but these streams are not within the sale area.

Type N Streams: There are perennial Type N streams located within the sale areas.

The operation is not in proximity to streams in which listed fish are present.

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. 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.

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. 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.

In-stream enhancement work will be conducted during in-stream work periods established by ODFW. In-stream woody debris levels in Hamilton Creek have been determined to be low with low recruitment potential. ODFW Fish Habitat Biologist has determined that large woody debris placement in the streams adjacent to Areas 2 and 3 would be beneficial to stream health. Placement of

large wood will be done per ODFW recommendation as a project associated with this timber sale.

VIII. T&E SPECIES CONSIDERATIONS:

All sale areas were surveyed to protocol for northern spotted owls and marbled murrelets in 2006 with no detections and will be surveyed again in 2007.

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:

There are no steep slopes in Areas 1, 2, and 4, and only a few scattered small steep slopes in Area 3. The initial risk assessment by the geotechnical specialist for this sale is low. A field visit by the geotechnical specialist is not expected to be needed, but will be consulted during sale layout if any slope stability concerns are encountered.

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:

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

XII. SCENIC RESOURCES:

Approximately five acres in Area 1 are visible from Highway 202 and are considered a level two visual classification; see page 4-107 in the Forest Management Plan.

XIII. OTHER RESOURCE CONSIDERATIONS:

Property lines have been recently cut up against and appear accurate but witnessing and possible rehabilitation of survey corners and markers may be needed as discussed below.

Area 1:

- ¼ corner to Sections 29 and 32 in sale area. Corner needs to be rewitnessed. Protect during sale layout. Restored in 1950 by Morris, found by Hovden in 1984 and steel fence post installed.

- S 1/16 corner, Section 29 is in sale area. Validate and rewitness if necessary. Protect during slae layout. Est. by Hovden 1984. Survey #B105

Area 2:

- ¼ corner to Section 28 and 29 in sale area. Validate and rewitness if necessary. Protect during layout. Est. Hovden 1984
- CE and SE 1/16 corners in sale area. Validate and rewitness if necessary. Protect during layout. Est. Hovden 1984

Area 3:

- Section corner to Sections 20, 21, 28, and 29 in sale area. Corner needs to be rewitnessed. Protect during layout. Restored by Morris in 1950, found by Hovden in 1984 and steel fence post installed.

Area 4:

- S 1/16 corner to Sections 17 and 18 in sale area. Protect corner during layout. Rewitnessed by Berry 1993

Additional Needs in Area:
Rewitness the following:

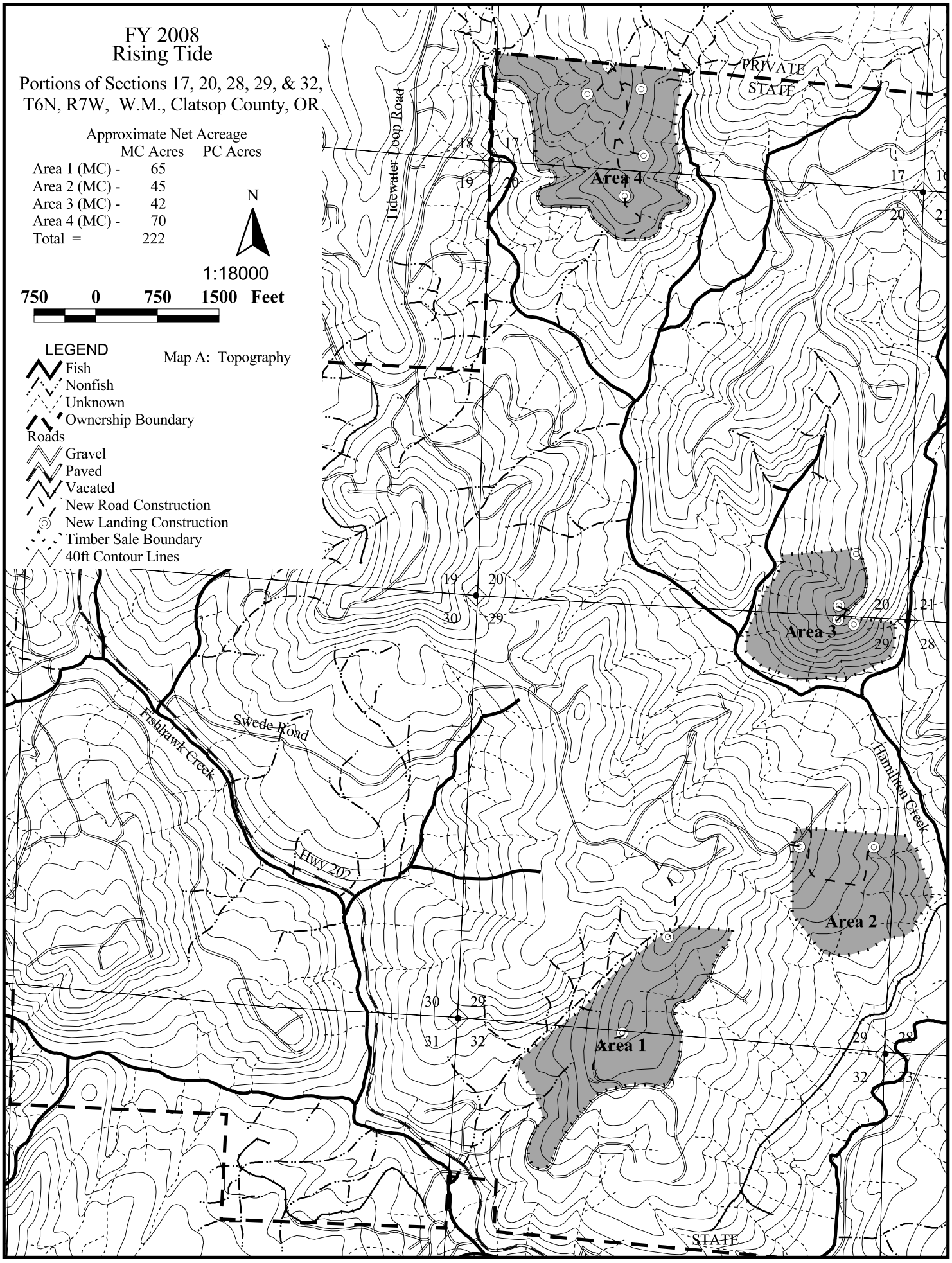
- W 1/16 corner Section 29 (Est. by Hovden 1984)
- Section corner to 19, 20, 29, and 30. (restored 1965, Morris)
- ¼ corner to Sections 20 and 29. (restored 1971, Russell, found 1984, Hovden, steel fence post installed)
- ¼ corner to Section 19 and 30. (reestablished 1970, Morris)
- CW 1/16, Section 19. (Est. 1970, Morris, found 2002 but BT's rotting)
- S 1/16 to Section 16 and 17. (Est. 1970, Morris)
- S 1/16 to Section 27. (Est. 1971, Morris)
- Prop. Corner, Section 31 and 32. (Est. 1976, Russell)
- Section corner to Sections 28, 29, 32 and 33. (restored 1976, Russell)
- ¼ corner to Sections 29 and 30. (restored 1965, Morris)

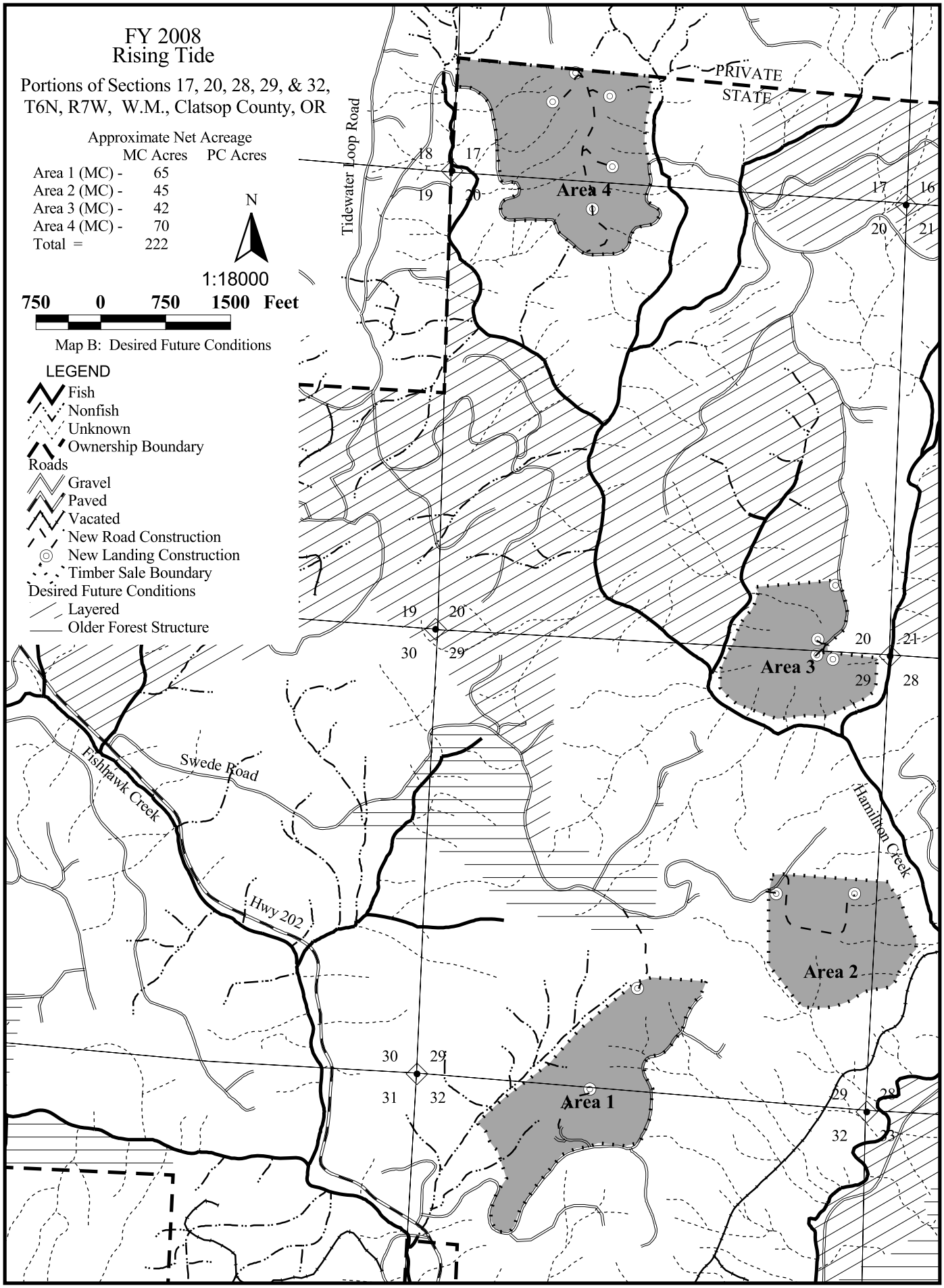
Validate the following:

- C ¼, Section 29. (Est. 1984 Hovden)
- CS 1/16, Section 29. (Est. 1984 Hovden)

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The lands in this timber sale are classified "General" management except for five acres on the southern boundary of Area 1 are considered to be in a scenic corridor of Highway 202. The FMP classifies such areas as Focused Stewardship (FMP, "Scenic Resources" pages 2-72 and 2-73.).


FY 2008
Rising Tide
Portions of Sections 17, 20, 28, 29, & 32,
T6N, R7W, W.M., Clatsop County, OR
Approximate Net Acreage
MC Acres PC Acres
Area 1 (MC) - 65
Area 2 (MC) - 45
Area 3 (MC) - 42
Area 4 (MC) - 70
Total = 222
N
1:18000
750 0 750 1500 Feet
LEGEND
Fish
Nonfish
Unknown
Ownership Boundary
Roads
Gravel
Paved
Vacated
New Road Construction
New Landing Construction
Timber Sale Boundary
40ft Contour Lines
Map A: Topography
PRIVATE
STATE
Tidewater Loop Road
Area 4
Area 3
Area 2
Area 1
Swede Road
Fishhawk Creek
Hamilton Creek
Hwy 202
STATE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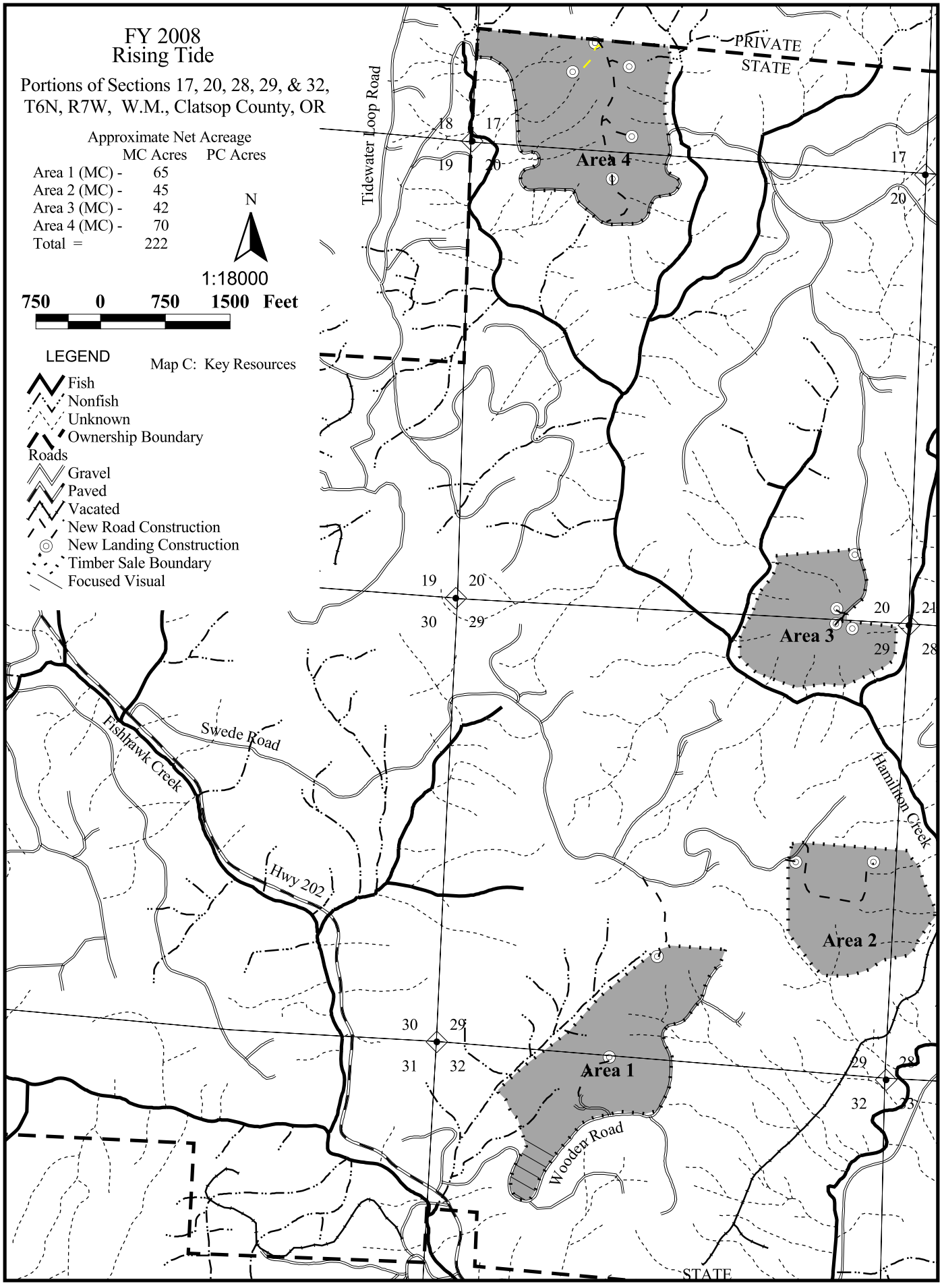
Area 4 (MC) - 70
Total = 222
N
1:18000
750 0 750 1500 Feet
Map B: Desired Future Conditions
LEGEND
Fish
Nonfish
Unknown
Ownership Boundary
Roads
Gravel
Paved
Vacated
New Road Construction
New Landing Construction
Timber Sale Boundary
Desired Future Conditions
Layered
Older Forest Structure
PRIVATE
STATE
Tidewater Loop Road
Area 4
Area 3
Area 2
Area 1
Swede Road
Fishhawk Creek
Hamilton Creek
Hwy 202
18
17
19
20
16
21
30
29
28
31
32
33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Area 4 (MC) - 70
Total = 222
N
1:18000
750 0 750 1500 Feet
LEGEND
Map C: Key Resources
Fish
Nonfish
Unknown
Ownership Boundary
Roads
Gravel
Paved
Vacated
New Road Construction
New Landing Construction
Timber Sale Boundary
Focused Visual
PRIVATE
STATE
Tidewater Loop Road
Area 4
Area 3
Area 2
Area 1
Swede Road
Fishhawk Creek
Hwy 202
Hamilton Creek
Wooden Road
STATE