

Memorandum

Subject: FY2010 AOP Modification; Rusty Ford and Schmidlin Timber Sales
To: Andy White
From: Erik Marcy; Unit Forester
Date: March 17, 2010

Rusty Ford

Based on our most recent reconnaissance of the planned FY10 timber sale known as Rusty Ford, I am hereby recommending a major modification to this sale

Background

At this time the Marketing Unit agrees that the best decision is to add approximately 70 acres of moderate partial cut to this sale. Area 1 would increase by 1 acre, from 12 acres to 13 acres. Area 2 would increase by 69 acres from 249 acres to 318 acres. This decision was made in an effort to (1) increase harvesting efficiency, (2) allow an opportunity to treat adjacent stands of similar stand structure and (3) further develop these stands along the Desired Future Condition pathway.

These additional acres of partial cut are located in the Forest Grove owl cluster. The planned operation is a moderate partial cut, the stand is CSC or UDS, and the total operation acres in the cluster within a 10 year period is less than 8%. The additional acres would be accessed by the construction of approximately 0.5 miles of new road at a cost of \$30,000. This additional cost would be offset by the addition of 1.8 mmbf which is expected to generate additional revenue. These additional acres are also dense, conifer dominated stands that would benefit from the moderate partial cut prescription by developing an understory second stand, a diversity of brush species while allowing for the release of dominant conifers which should lead to a greater possibility of complex stand structure development.

Recommendation

Add the 70 additional acres to the Rusty Ford timber sale.

Schmidlin

Based on the near term need to complete the terms of a land exchange with Longview Fiber Company, I am recommending a major modification to the approved 2010 Annual Operations Plan.

Background

This sale area constitutes a portion of a land exchange with Longview Timber Company. To balance values, the timber in Schmidlin was held in reserve for the State. However, monitoring surveys for the adjacent Iler Creek Owl activity center indicated a continued nearby T&E species presence which was sufficient to preclude ODF from liquidating the reserve. Surveys of the Iler Creek site were continuous through 2009 with no responses in 2007, 2008 & 2009. Because of the lack of responses in three uninterrupted years, the Iler Creek site was designated as historic. This presents the State with an opportunity to complete the terms of the land exchange agreement which will expire on October 31, 2011.

Recommendation

Add the Schmidlin timber sale to the 2010 Annual Operations Plan

Results

The changes in Rusty Ford increase the planned partial-cut harvest by 70 acres from 1,093 to 1,163 acres.

The addition of Schmidlin increase the planned clear-cut harvest by 91 acres from 1161 to 1,252

The new pre-operations report and exhibits for Rusty Ford were sent to resource specialists in November of 2009 for review. Those for Schmidlin were routed in January of 2010. Those who responded supported the modification as presented.

Attached are the updated AOP exhibits, the pre-operations report, and the updated FY10 AOP summary tables.

Approved:

Andy White; District Forester

Date

Pre-Operations Report

Operation Name: Rusty Ford

County: Clatsop

Management Basin: McGregor

Table 1. Operation Areas, Types and Acres

Area	Harvest Type	Gross Acres	Net Acres
1	Partial Cut - Moderate	15	13
2	Partial Cut - Moderate	359	318
Total		374	331

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a north aspect and range from 20% to 60%. The sale elevation is approximately 1,600 feet. Grindstone and Humbug are the major soil types of the sale area.

II. CURRENT STAND CONDITION:

The stands within the sale were burned in the 1933 Wolf Creek fire. Both areas of the sale were fertilized in 2005.

The entire sale has been inventoried using the Stand Level Inventory (SLI) procedure. The sale areas have been classified as UDS and LYR (see Tables 2 and 3 below).

Area 1:

This is a 65-year-old stand of predominantly Douglas-fir. There are some scattered western hemlock, noble fir, western red cedar, and red alder throughout the sale areas. The understory consists primarily of patches of sword fern, salal, and dwarf Oregon grape. Some of the densest areas of the stand are void of any herbaceous understory. Average ground cover from SLI data is 70%.

Area 2:

This is a 65-68 year-old mixed conifer stand of Douglas-fir and western hemlock. Stocking is uniform and dense. Current condition has developed into UDS. There is little evidence of *Phellinus weirii*. The understory consists primarily of sword fern, salal, dwarf Oregon grape, western hemlock, western red cedar, bracken fern, and oxalis. Average ground cover from SLI is 77%.

There is an estimated 400 cu. ft. of classes 1 & 2 down woody debris per acre. There is an estimated 4,000 cu. ft. of classes 3-5 large down wood per acre.

Numerous, old-growth soft snags persist throughout the stand. Estimate from field observation is 2 per acre. Hard snags are present and continue to be recruited through natural processes.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	PC-M	7219*	DFCX	65	18	248	145	60	13
		Target³			20	140	90	35	13
2	PC-M	7219	DFCX	65	18	248	145	60	208
		7220	DF	58	21	194	84	45	26
		7223*	DFCX	68	17	217	136	54	48
		7230	DFWH	63	20	261	126	61	30
		7233	DF	57	17	207	130	51	3
		7240	DF	57	19	207	102	49	3
		Target³			20	140	90	35	318

¹The source of stand inventory information is SLI grown forward to 2009 for trees 8 inches and larger. Stand ID's shown with a (*) are unmeasured stands, the source of inventory information for these stands is data imputed from similar stands.

²The acres are based on GIS and exclude roads, stream buffers, reserve areas, etc.

³The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

* In addition, Area 1 also contains 1 Acre of Stand 7202 which currently is misrepresented in the SLI database. The stand type of this 1 acre is consistent with stand 7219.

III. DESIRED FUTURE CONDITION/VISION:

According to the landscape design for the McGregor Basin (*Forest Grove District Implementation Plan, 2009*), the desired future condition (DFC) for Area 1 is OFS. The DFC for Area 2 is 8% LYR and 92% OFS.

Area 1 & 2:

This is a first entry moderate partial cut. By conducting a moderate partial cut, the area will receive a much-needed release allowing for increased diameter growth in reserve timber, as well as allowance for understory development. The harvest operation will maintain the LYR structure of this stand where it exists. This prescription is expected to develop the UDS structure of this stand into layered (LYR) structure in 15-25 years and older forest structure (OFS) in the longer term. The prescription is designed for only one entry to be made to move the stand along its desired pathway. All western redcedar, noble fir, and red alder will be reserved from cutting during the partial harvest. This, along with the hemlock in the overstory, will help to maintain the species diversity and allow additional natural seeding to enhance the developing understory of shade tolerant conifers.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	7219	LYR	LYR	OFS	13
2	7219	LYR	LYR	OFS	208
	7220	UDS	UDS	LYR	26
	7223	UDS	UDS	OFS	48
	7230	LYR	LYR	OFS	30
	7233	LYR	LYR	OFS	3
	7240	UDS	UDS	OFS	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 AND PATHWAY:

Partial Cut - Moderate:

The target standard density index (SDI) is approximately 35. Douglas-fir and western hemlock will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 140 square feet. The average diameter breast height (DBH) of the residual stand will be approximately 20 inches. Residual trees will be trees with the largest DBH and height, and which are of the best form and vigor. All trees less than 8 inches, western redcedar, noble fir and hardwoods shall be reserved and shall not count toward the target basal area.

This stand has been designated for a single entry prescription which will result in a LYR stand condition 15-25 years after harvest. It is expected to remain in a LYR condition for an additional 20-30 years. At that time future managers will have the option of moving the stand into an OFS stand and a portion of General condition or applying another harvest prescription.

Existing snags determined not to be a safety hazard will be retained and any felled snags will be left for downed wood. Additional snags will be created over time through natural processes.

No underplanting is planned. It is anticipated that natural regeneration from shade tolerant species will enhance the understory vegetation.

All existing downed woody debris (DWD) will be reserved in the sale areas. DWD recruitment is expected through mortality, windthrow of residual trees, felled snags, and logging slash.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,900 MBF		5,900 MBF
Stumpage Value (\$/MBF)	\$200.00		
Estimated Gross Value	\$1,180,000.00		\$1,180,000
		Project Costs:	\$160,000
		Estimated Net Value:	\$1,020,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Music Road, off of HWY 26 and approximately one mile to the sale areas. Music Road (approximately 2.0 miles) will be resurfaced with crushed rock from the lower Rock Creek stockpile at an estimated cost of \$35,000.

Approximately 1.84 miles of rock road will be constructed to provide access to cable yarding landing locations. New construction is limited to ridgetops and gentle to moderate sideslopes and will have sustainable grades upon completion. Proposed roads will not cross any streams. Estimated cost is \$125,000.

Total project costs: \$160,000.

All haul roads will have high quality crushed rock or pit run surfacing. Roads will provide access to all timber within the sale area and allow for logging methods and hauling which will minimize impacts to soils, residual timber, streams, and riparian areas.

Following harvest, roads and skid trails within the sale areas will be evaluated for closure.

The operation will be 70% cable yarding and 30% ground yarding. (Percentages are based on area). The maximum cable yarding distance will be approximately 2,000 feet in Area 2. The maximum ground based yarding distance will be approximately 500 feet.

All cable yarding will have at least one end suspension when yarding across streams and at least full suspension when yarding in the Inner Zone of a riparian area.

Table 5. Transportation Management Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	1.84	0	0
Improve	2.0	0	0	0
Maintenance	0	0	0	0
Closure/Vacation	0	0	0	0

VII. AQUATIC RESOURCES AND WATER QUALITY:

Several small Type N and Type F tributaries drain from within and adjacent to the sale areas, into a small Type F tributary to the North Fork Wolf Creek, a large Type F stream. The North Fork Wolf Creek drains into the Nehalem River. Appropriate riparian management areas (RMA's) will be applied as per the Forest Management Plan. RMA's maintain leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide large wood to improve fish habitat.

Small type N streams can influence stream temperature of downstream fish-bearing streams. Sufficient trees will be retained within 500' of the confluence with type F streams to achieve 80% shade over streams.

A 170' RMA is established on all fish streams. Management of the Inner Zone is allowed beyond 25 feet from the average annual high water level. The goal for harvesting within Inner Zones 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 period than if no harvesting were to take place and will maintain all snags and downed wood. Management activities will maintain the UDS structure of these stands and promote a layered structure (15-25 years) in the short term and in the longer term an older forest structure in adjacent uplands from the Inner Zone. Once a mature forest condition is achieved there will be no management in the Inner Zone of type F streams.

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.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Both sale areas have been reviewed with the ODF Northwest Oregon Area Biologist.

Northern Spotted Owl surveys were conducted during the 2008 survey season with no owls detected. The sale will be surveyed again during the 2009 survey season. All surveys will be/were conducted in accordance with USFWS protocol.

A portion of this operation will be conducted inside the Forest Grove owl cluster designation.

This operation involves an activity that is listed in the National Marine Fisheries Service adopted rules under Section 4(d) of the Endangered Species Act. The sale area is in proximity to streams in which listed salmon and/or steelhead are present. For a discussion of protection measures for listed fish, see sections VI and VII.

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale. The District T&E Coordinator made the determination that the sale is non-suitable habitat for marbled murrelets. The ODF wildlife biologist for the NW Oregon Area reviewed and approved this determination.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records. No listed plant records were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based on USGS 1:24,000 topographic maps and available geologic maps. There are a few high landslide hazard locations in Area II. There may be a few high landslide hazard locations in Area I. The entire sale area drains to the North Fork of Wolf Creek. The risk of landslides delivering to the North Fork of Wolf Creek is low from Area I and low to moderate from Area II. Area II appears to be located on a large, deep-seated landslide landform. The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

X. RECREATION RESOURCES:

The sale area is located within an area designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

Recreational use common to this area includes hunting and mushroom picking. Following harvest, roads and skid trails within the sale areas will be evaluated for closure.

XI. CULTURAL RESOURCES:

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format). No cultural resource records were identified within or adjacent* to the operation areas. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

**Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

XII. SCENIC RESOURCES:

The sale area has a visual classification of Level 3, low sensitivity.

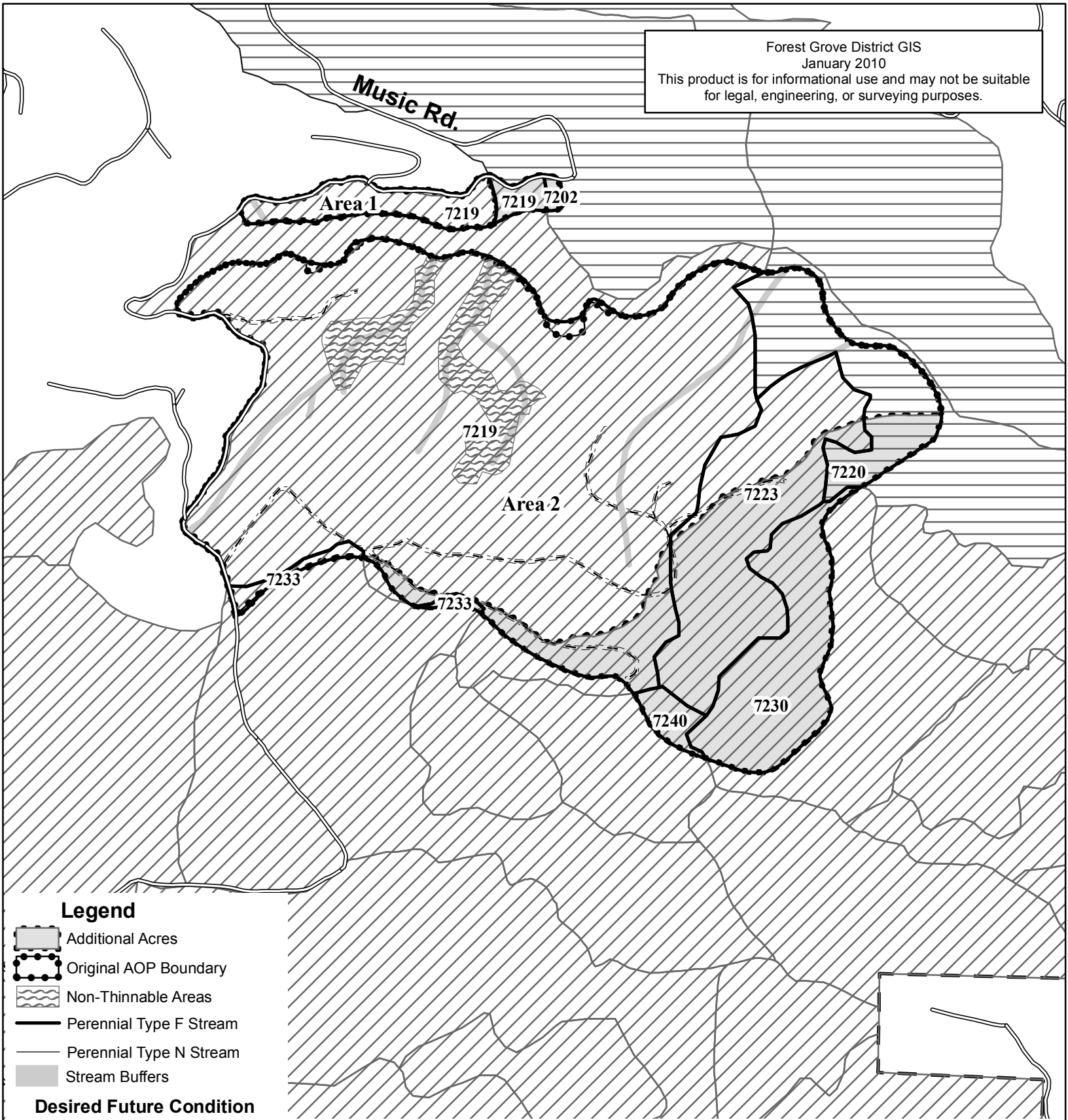
XIII. OTHER RESOURCE CONSIDERATIONS:

No property survey is needed. No other resources of significance are involved. All known survey corners and witness trees shall be protected from damage during any operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

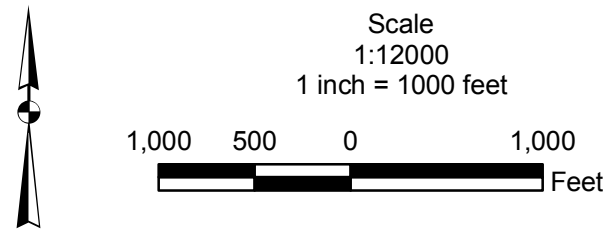
The sale area contains Focused and Special Stewardship, Aquatic and Riparian Habitat due to the presence of streams within the sale. Section VII "Aquatic Resources and Water Quality" describes the management guidelines to be applied in these areas.

Forest Grove District GIS
 January 2010
 This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.



- Legend**
- Additional Acres
 - Original AOP Boundary
 - Non-Thinnable Areas
 - Perennial Type F Stream
 - Perennial Type N Stream
 - Stream Buffers
- Desired Future Condition**
- GEN
 - LYR
 - OFS
 - SLI Polygons (Stand ID#)
- Road Construction
- Road Construction Right-of-Way
- Existing Roads
- Highway
- ODF Ownership

FY 2010
 RUSTY FORD
 PORTIONS OF SECTIONS 27 & 34 T04N, R06W, W.M.
 CLATSOP COUNTY, OREGON



APPROXIMATE NET ACREAGE		
Area 1	13	ACRES (PC-M)
Area 2	318	ACRES (PC-M)
Area 3	8	ACRES (R/W)
TOTAL	339	ACRES

Pre-Operations Report

Operation Name: Schmidlin

County: Washington

Management Basin: Gales Creek

Longview Timber Company Property- Land Exchange Timber Reserve

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
I	Clearcut	95	91
Total	Regeneration Harvest	95	91

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The sale area has mostly moderate slopes (5-50%). All aspects are represented. Elevation for the sale area ranges from 1000' to 1200'. The sale area is within a portion of the 1945 Tillamook Burn boundary.

The landform is moderate to steep slopes along Bateman Creek. The underlying rock units are igneous with small amount of sedimentary origin, Tertiary Intrusive, diabase with Yahmill, mudstone in the north of the sale area.

II. CURRENT STAND CONDITION:

Overstory: Consists primarily of medium to well stocked stands of 54 year old Douglas-fir.

Understory: The understory consists of salal, sword fern, dwarf Oregon-grape and some vine maple for a total percent cover of approximately 90%.

Snags: During reconnaissance <1 hard snag and <1 soft snag per acre were observed.

Down woody debris: An estimate of 100 cu.ft./acre of classes 1-2 and 2000 cu.ft./acre of classes 3-5 of large woody debris is present.

Insects and disease: No problems were observed during reconnaissance.

Table 2. Stand Inventory Information

Area	Prescription ³	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	CC	2	DF	36	12	174	208	50	6
	CC	4	DF	54	15	172	131	44	35
	CC	5	DF	54	14	180	177	48	6
	CC	6	DF	55	14	231	211	61	35
	CC	254	DF	30	10	123	224	39	9

¹ The source of stand inventory information is land exchange cruise data from October, 2001.

² The acres are based on GIS and GPS traverse data and exclude roads, streams buffers, reserve areas, etc.

³ CC = Clearcut

III. DESIRED STAND CONDITION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ²	Desired Future ³	Acres
1	2	CSC	REG	N/A	6
	4	CSC	REG	N/A	35
	5	CSC	REG	N/A	6
	6	CSC	REG	N/A	35
	254	CSC	REG	N/A	9

² The stand is expected to develop into this condition in the five to ten years after this operation is completed.

³ The FMP designations do not apply to these units.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

The sale area is a clearcut harvest designed to Forest Practices Act standards. This sale is a portion of the timber reserve resulting from the ODF-Longview Timber land exchange. Longview Timber Company will be the landowner at the time of harvest.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		1	

	Conifer	Hardwood	Total
Net Volume (MBF)	1,900	300	2,200
Stumpage Value (\$/MBF)	300	300	
Estimated Gross Value	570,000	90,000	660,000
		Project Costs:	29,000
		Estimated Net Value:	631,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The logging systems for this sale are approximately 80% cable and 20% ground based. The 0.2 mile of new construction is for accessing the ridge top to facilitate cable logging. The new road construction will not cross any perennial streams. The 0.6 miles of road improvement is to improve the existing road within the sale area. There is approximately 1.0 mile of road on private ownership that will need to be maintained. The rock source for the roads will be determined by the District Engineer.

Table 5. Transportation Management Summary (Miles).

Activity	High Use	Medium Use	Low Use
Construction			0.2
Improvement			0.6
Maintenance			1.8
Vacation			

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are no known Type F streams within the sale area. Due to topography and green tree retention, the western sale boundary is posted a minimum of 50' from Bateman Creek a small – medium Type F stream. The southern boundary of the north half of the sale area is posted a minimum of 25' from a small unnamed perennial stream. A few unnamed small perennial and seasonal Type N streams flow through the sale. All RMA's are a conifer and alder mix.

Forest Practices Act riparian strategies will apply. High quality crushed rock road surface will be maintained to avoid impacts to water quality. Additional restrictions will be placed on log hauling from November 1st through March 31st. These include limits on the number of loads per day, and no hauling when weather conditions warrant.

VIII. T&E SPECIES CONSIDERATIONS:

The sale area contains habitat that is suitable for Northern Spotted Owls. Initially, the sale was within a 1.5 mile buffer on the Iler Creek pair of owls whose activity center was located approximately 850 feet south of the sale boundary. Monitoring surveys for this pair covered the Schmidlin sale area and was continuous through 2009. In 2007, 2008, and 2009 survey years, there were no responses to survey calls and the site was reclassified to historic.

Schmidlin was surveyed for marbled murrelets in 2003, and 2005 due to the presence of potentially suitable murrelet habitat within and adjacent to the sale area. Since these surveys did not meet protocol standards for timing, and there is currently insufficient time to complete protocol surveys prior to the termination of the land exchange agreement, it was decided that the habitat trees would need to be climbed to determine whether or not they have been used for nesting. 42 trees were selected for assessment by the Northwest Area Biologist. These were climbed and examined by a contractor in March of 2010. No evidence of nesting activity was found.

The sale area was 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:

The hazard and risk potential was evaluated by the Northwest Oregon Area geotechnical specialist. The assessment indicates that for the Bateman Creek drainage, the public safety risk level is low for high landslide hazard locations. For the Johnson Creek drainage, the assessment indicates that the public safety risk level is intermediate for high landslide hazards. The assessment states that the planned timber harvest in the sale area can legally proceed without further modifications, but recommends some minor adjustments to the sale area boundary. These changes have been implemented.

X. RECREATION RESOURCES:

Longview Timber Company restricts recreation to hunting and foot traffic only.

XI. CULTURAL RESOURCES:

The sale area was checked against the Tillamook State Forest Cultural Resource Inventory database. No cultural resource records were identified within the sale area.

XII. SCENIC RESOURCES:

The sale is in an area of low visual sensitivity (level 3).

XIII. OTHER RESOURCE CONSIDERATIONS:

The approximate east property line location was determined by the District Engineer. The west property line is blazed.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:










The Land Management Classification System does not apply to this unit, as the sale is on Longview Timber Company property.

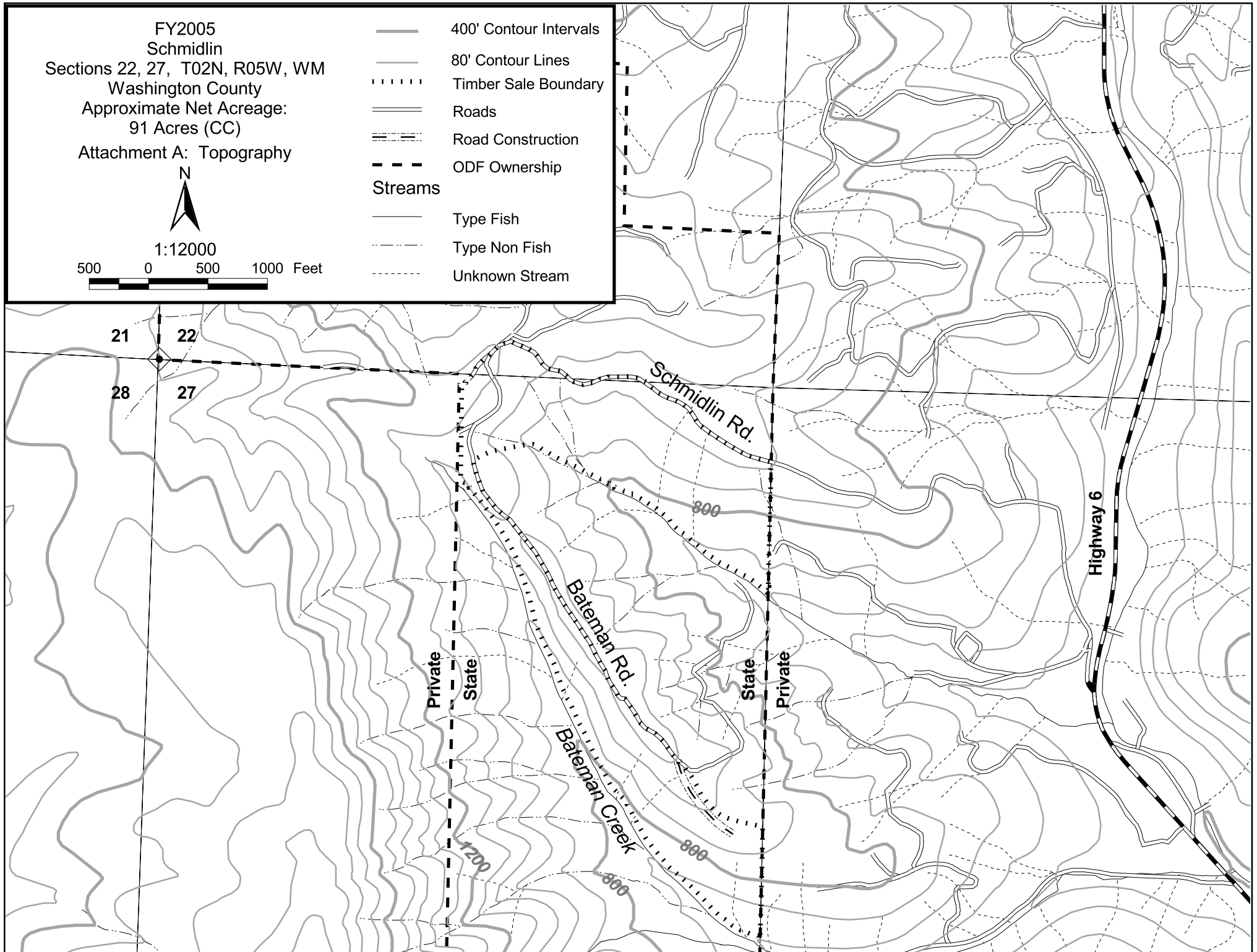
FY2005
Schmidlin
Sections 22, 27, T02N, R05W, WM
Washington County
Approximate Net Acreage:
91 Acres (CC)
Attachment A: Topography



1:12000

500 0 500 1000 Feet

-  400' Contour Intervals
-  80' Contour Lines
-  Timber Sale Boundary
-  Roads
-  Road Construction
-  ODF Ownership
- Streams**
-  Type Fish
-  Type Non Fish
-  Unknown Stream

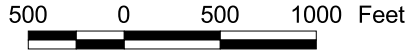


FY2005
 Schmidlin
 Sections 22, 27, T02N, R05W, WM
 Washington County
 Approximate Net Acreage:
 91 Acres (CC)


Attachment B: Desired Future Condition



1:12000



Desired Future Condition

-  Layered
-  Older Forest Structure
-  Timber Sale Boundary
-  Roads
-  Road Construction
-  ODF Ownership
- Streams**
-  Type Fish
-  Type Non Fish
-  Unknown Stream

21 22
 28 27

Private

State

State

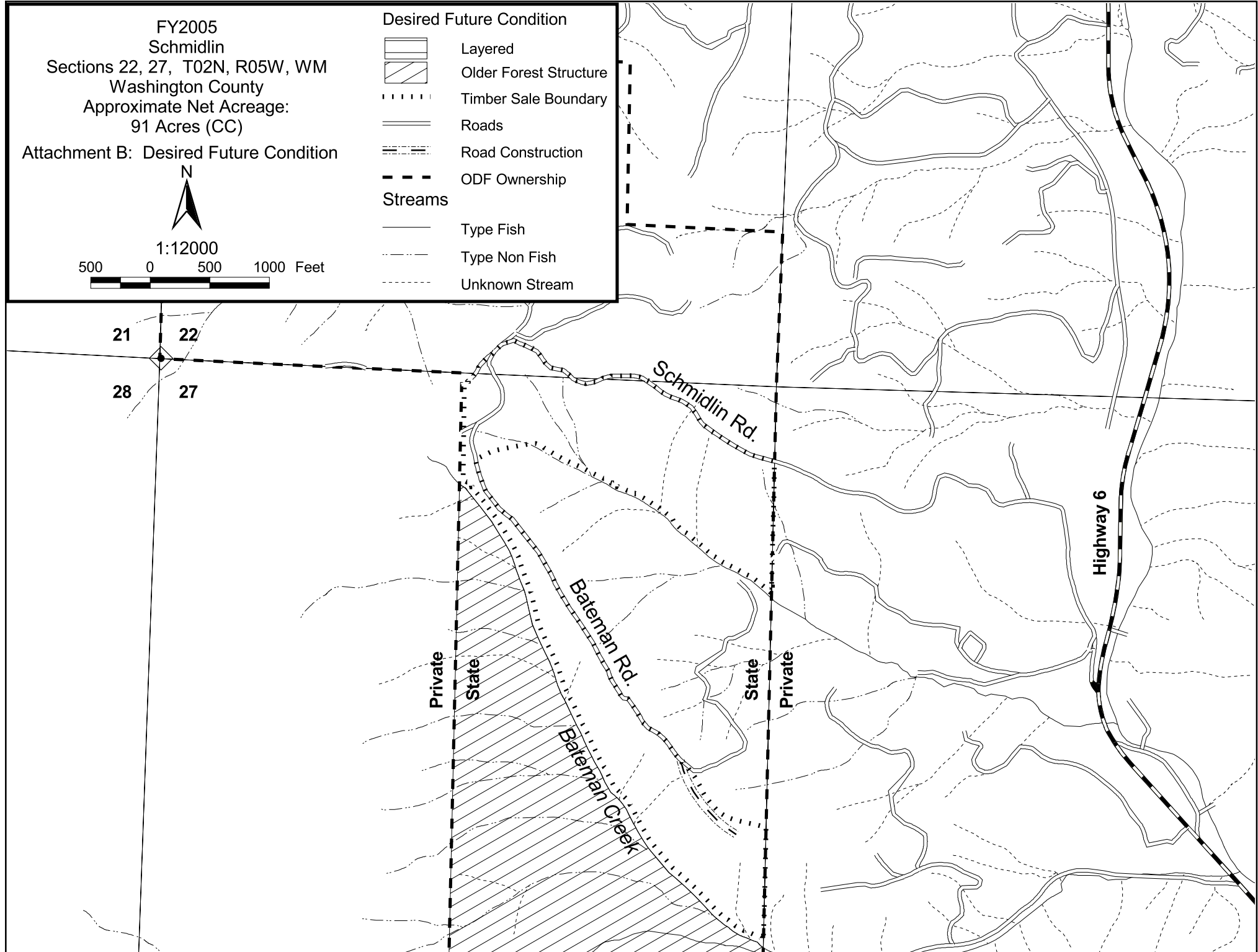
Private

Schmidlin Rd.

Bateman Rd.

Bateman Creek

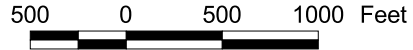
Highway 6



FY2005
Schmidlin
Sections 22, 27, T02N, R05W, WM
Washington County
Approximate Net Acreage:
91 Acres (CC)
Attachment C: Key Resources



1:12000



- Timber Sale Boundary
- Roads
- Road Construction
- - - ODF Ownership
- Streams
- Type Fish
- Type Non Fish
- Unknown Stream

21 22
28 27

Private

State

State

Private

Bateman Rd.

Bateman Creek

Schmidlin Rd.

Highway 6

