

Modification Cover Memo

SUBJECT: SUMMARY OF MODIFICATIONS TO FOUR ACES SINCE APPROVAL OF ANNUAL OPERATIONS PLAN (FY2009 AOP)

FROM: Kevin Boyd

TO: Andy White

DATE: March 16, 2010

CC: Operation File

Changes from the AOP:

- Due to recent wind events, and the stand being predominantly Western Hemlock with poor height diameter ratios, the prescription has been changed from Partial Cut to Modified Clear Cut. Net acreage was reduced due to blow down along the western edge of the sale area and the addition of small Green Tree Retention areas of legacy Hemlock, Spruce, and Cedar.

AOP Modifications Four Aces				
Timber Sale	Net Acres	Prescription		Volume
		MC	PC	MBF
Original Four Aces AOP	104		104	1,209
Revised Four Aces AOP	95	95	0	2,541

Andy White
Andy White, District Forester

3-16-10
Date

Pre-Operations Report

Operation Name: Four Aces
 Legal: Sections 4 & 5, T3N, R9W, WM
 County: Tillamook
 Management Basin: North Fork Nehalem
 SAH Status: None
 FDF: 100%, CSL: 0 %

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified Clearcut	114	95
Total		114	95

1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The sale area is primarily western in aspect. Slopes are predominantly 0-35% with an elevation range of 500 to 800 feet. The major soil type is Pittsburg.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
Area 1	Modified Clearcut	400	WH, SS, WRC, DF	55	16	246	169	51	95

1. The source of stand inventory information is from cruise plots.
2. The net acres are based on orthophotos and GIS and exclude roads, and stream buffers.
3. The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.
4. These numbers are based on plot data taken to this point and final numbers may differ significantly. The directive for minor and major modifications will be followed for further review.

Previous stand management is unknown. This area was acquired in a recent land exchange and is classified as CSC according to the district stand summary (1999). No SLI data is available. The stand is a dense Douglas-fir and western hemlock, with little understory, approaching stem exclusion. Throughout the sale area there are scattered legacy trees infected with mistletoe and large amounts of defect. Shrub and herb understory communities are, for the most part, limited to adjacent stand edges, stream banks and canopy openings due to mortality of overstory species.

See Table 2 for specific stand data.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	400	CSC	REG	GEN	95

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed except in REG stands which occur after harvest.

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition (DFC) goals.

The sale is 100 % GEN. The short term vision is to remove the windthrow prone Hemlock and retain legacy Spruce, Hemlock, and Cedar. This area was recently acquired in a land exchange and was assigned a DFC of General.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:

The prescriptions described below are based on the current stand condition such as overall tree and stand growth, species mix, stand density, and stand health. **See Table 2 for prescription targets.**

Prescription

A modified Clearcut will remove Hemlock, Douglas-fir and Alder. Large legacy trees will be retained through a diameter limit or grouping within Green Tree Retention Areas.

Snag Strategies

Existing snags not determined to be a safety hazard will be retained. Creation of snags is expected during harvest activities and over time by natural processes. Due to the current stand size there will be no snag creation in this area.

Down Wood Strategies

Existing down wood will be left in the sale area. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and tops left during harvest. Obvious defect in conifer logs will be bucked out in the sale area to enhance down wood levels. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will eventually become down wood. Tops resulting from ground yarding will also be left in the unit. Due to the current stand size there will be no down wood

or snag creation in this area. Snag and down wood creation will be evaluated during the second entry thinning.

Pathway

Short Term Vision: The regeneration harvest will remove the current wind throw prone Western Hemlock and Douglas-fir. After the regeneration harvest these stands will be composed of legacy structures retained from the present stand and have a young thriving new cohort of Douglas-fir and western hemlock. A component of red alder will exist along streams and in steep draws and will regenerate naturally with the planted Douglas-fir and Hemlock. The residual Hemlock, Spruce and Cedar in the regeneration harvests will also serve as a source for future recruitment of larger snags and down wood.

Long Term Vision: The vision for this stands is to have a fully stocked mixed species stand that has both vertical and horizontal diversity. The stands will be pre-commercial thinned (PCT) 10 - 15 years after planting. At 35-40 years the stand will be commercially thinned to maintain productivity to maximize revenues at final 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:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	2,481	60	2,541
Stumpage Value (\$/MBF)*	\$75	\$175	
Estimated Gross Value	\$186,075	10,500	\$196,575
		Project Costs:	\$23,500
		Estimated Net Value:	\$173,072

**Hemlock stumpage values based on harvest type.*

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale area is accessed via County Line Road. This is currently an all weather crushed rock road. See maps for specific road location and conditions.

Approximately 0.97 miles of road will be reconstructed which includes grading, culvert installation and some limited rocking. This work will bring all roads up to standards described in *The Forest Roads Manual*. Following harvest it is anticipated that the roads within the sale areas will be blocked. See summary document for more information on road closure.

The operation will be 100% ground yarding. See summary document for more information on this topic.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct				
Improve			0.03	0.94
Maintain ²				
Close/Block ³			0.03	0.94
Vacate ³				

1. *Additional roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest*
2. *All roads accessing the sale area will be maintained during the life of the timber sale contract. Maintenance miles in the table are those roads not being constructed or improved.*
3. *Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.*
4. *The numbers in this table reflect planned Project Work associated with the sale.*

VII. AQUATIC RESOURCES AND WATER QUALITY:

Acey Creek is a verified Type F stream that is north of the sale area and will be buffered appropriately. There is an additional unnamed verified Type F stream and several verified Type N streams within the sale area. Two domestic water intakes exist more than 3,000 feet downstream from the sale boundary on Acey Creek. Landowners with domestic water permits will be notified prior to starting harvest activities. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain. Inner and outer riparian zones will be managed towards mature forest condition.

Stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

Refer to Aquatic Resource Protection Strategies in the Summary document for information on in the “in stream work period’ road work and stream improvement projects.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist (Area Biologist).

It was determined that there is potential marbled murrelet habitat within or adjacent to the sale boundary. Marbled murrelet surveys have been and will be conducted during the 2007 and 2008 survey seasons. All surveys for marbled murrelets were and will be conducted in accordance with the Pacific Seabird Group (PSG) protocol.

See above notes on creating gaps.

It was determined that in the sale area there is potential northern spotted owl habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2007 and 2008 survey season for the northern spotted owl. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. There have been no northern spotted owl detections during the 2007 survey season.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based on analysis of USGS 1:24000 topographic maps.

There are high landslide hazard locations within the sale area, focused along streams. These should be considered inner gorges. The sale drains into Acey Creek. The risk of landslides delivering directly from the sale to Acey Creek is low. The sale appears to be located on a large, deep-seated landslide form.

The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

X. RECREATION RESOURCES:

The sale area is designated as Non-Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. No OHV trails were identified within or adjacent to the sale areas. Recreational use in this area includes hunting, mushroom collection and hiking.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected.

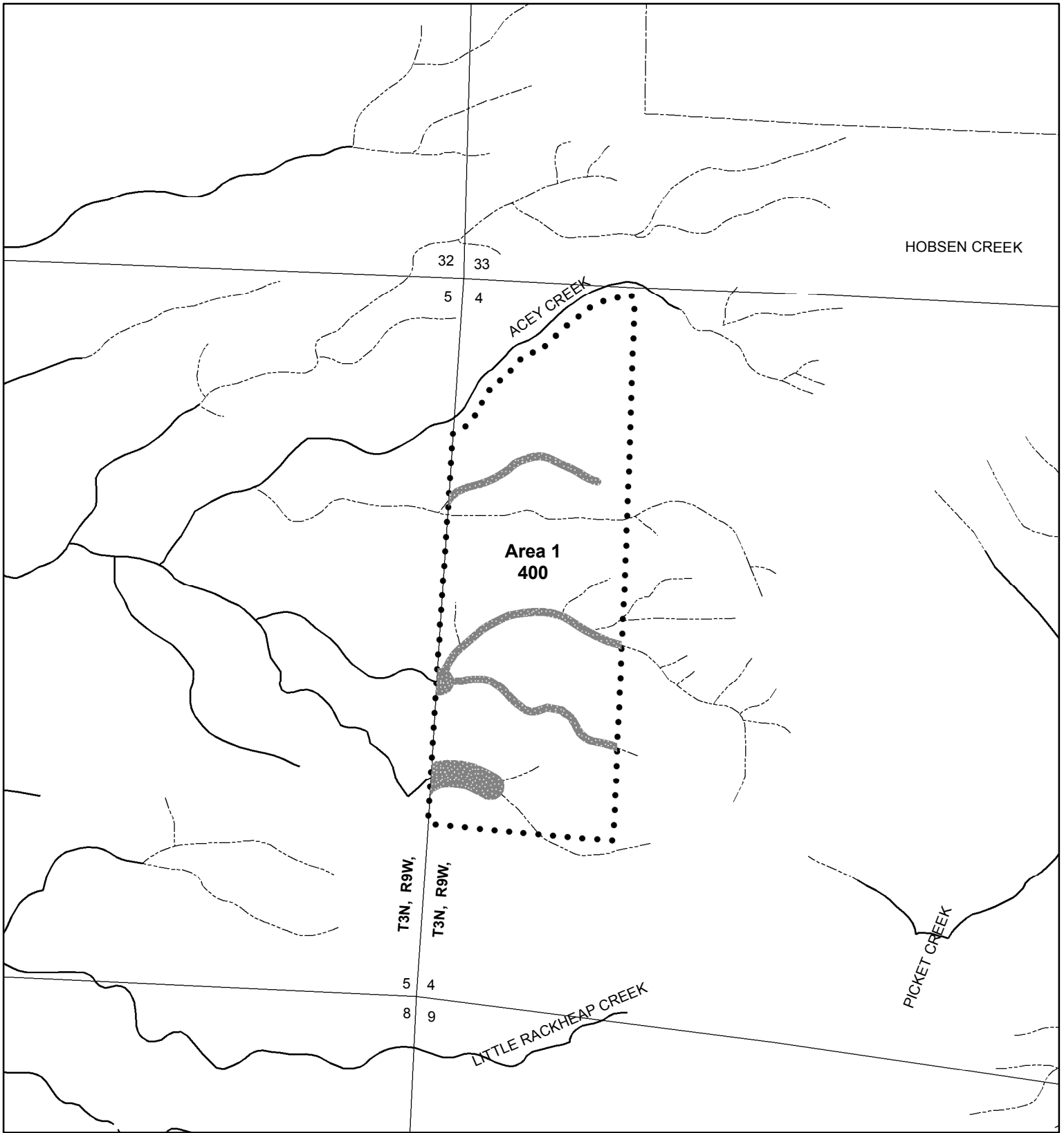
XIII. OTHER RESOURCE CONSIDERATIONS:




None known.














XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale area contains Focused and Special, Aquatic and Riparian Habitat. See section VII. Aquatic Resources and Water Quality, for the management guidelines to be utilized.

Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.



-  Buffer
-  Green Tree Retention
-  Non-required thinning

-  Area boundary
-  Sale boundary
-  Ownership boundary
-  Perennial Type-F stream*
-  Perennial Type-N stream*
-  Unsurfaced road
-  Surfaced road
-  State/Federal highway
-  Legacy road
-  Blocked road
-  Road construction
-  County road
-  Transmission line

Four Aces
-- Key Resources --
2009 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 4 and 5
 T3N, R9W, W.M.,
 Tillamook County, Oregon

0 470 940 Feet



Tillamook District GIS
01/08/2008

This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

Area	Type of Operation
1	Modified Clearcut

*Streams of unknown fish presence are not shown but will be surveyed prior to the sale

