

Pre-Operations Report

Operation Name: West Mill (Alternate)

County: Tillamook

Management Basin: Wilson

Legal: Portions of Sections 29 and 30 of T2N, R7W, W.M.

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	42	35
2	Modified Clearcut	63	57
3	Modified Clearcut	50	45
4	Modified Clearcut	97	87
Total		252	224

1. Net acres are based on orthophotos and GIS and exclude roads, stream buffers and reserve areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a predominantly north aspects and range from 10-90+%. Elevations range from 1,080 feet to 2,680 feet. The major soil type is Rye with minor amounts of Killam and Osweg.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	121	DF/RA/ WH	47	15	168	135	44	35
2	MC	122	DF/RA/ WH	47	13	189	208	52	57
3	MC	123	DF/WH/ RA	47	13.5	147	142	39	45
4	MC	124	DF/WH/ RA	47	13.5	178	179	48	87

1. The source of stand inventory information is from a timber cruise.

2. The net acres are based on orthophotos and GIS and exclude roads, and stream buffers, reserve area and non-required thinning areas. Modified clear cut acres are not contiguous and do not exceed 120 acres.

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.

The entire sale area burned in the 1933 (Tillamook) fire and the 1945 (Wilson River / Salmonberry) fire. Areas 1, 2, 3 and 4 were aerially seeded in 1960. The sale area has had no prior stand management.

Stand Level Inventory (SLI) has been completed on the sale areas and they are classified as Understory (UDS). See Table 2 for specific stand data.

Areas 1 and 2 are a Douglas-fir plantation that has alder dominated draws and the northern portion is an alder stand. There are other minor conifer species.

Areas 3 and 4 are a Douglas-fir plantation that has alder dominated draws and in scattered pockets. There are other minor conifer species.

The Douglas-fir in all areas shows symptoms of Swiss Needle Cast, are overstocked and have small live crown ratios (25-35%) resulting in slowed diameter and height growth.

Due to stand age and site quality, the alder in all areas have poor height and diameter growth.

No other significant insect or disease problems have been discovered at this time.

The brush component in all the sale areas is comprised primarily of vine maple, huckleberry and sword fern. The vine maple and huckleberry occur primarily in gaps.

In Areas 1, 2 and 3, SLI information shows 215 cubic feet of down wood in decay Class 1 and 2 and a total of 5,965 cubic of down wood per acre. In Area 4, SLI information shows 39 cubic feet of down wood in decay Class 1 and 2 and a total of 1,161 cubic feet of down wood per acre.

A timber cruise recorded 10 snags per acre in the sale areas. 50% were legacy snags from the Tillamook Burn and 50% are from bear kill and wind damage. Stand Level Inventory completed in portions of each sale area recorded between 20-55 cubic feet of down wood in decay class 1 and 2. The inventory also recorded 5000 to 6000 cubic feet of down wood in all decay classes.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	121	UDS	MC	GEN	35
2	122	UDS	MC	GEN	53
3	123	UDS	MC	GEN	45
4	124	UDS	MC	GEN	87

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.

Areas 1, 2, 3 and 4-The designation for Areas 1, 2, 3 and 4 are all General (GEN).

Short Term Vision:

Due to stand age and site quality; the Douglas-fir stands are not a good candidate for establishing a pathway that maintains productivity and reach the DFC in a reasonable amount of time. After the regeneration harvest the stands will be composed of legacy structures retained from the present stand and a new cohort of noble fir, western hemlock and Douglas-fir.

Long Term Vision:

Long term vision is to create a mixed conifer stand with patches and strips of hardwood in the stand. The stand will also have large over story legacy trees from the current planned harvest as well as down wood and snags added over time from the residual trees.

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.

Modified Clearcut:

Areas 1, 2, 3 and 4

Prescription: Merchantable Douglas-fir and alder will be removed. All other species will be reserved.

Green Trees: A diameter limit will be used to on the Douglas-fir trees to supplement the existing hemlock trees to obtain 5 reserve trees per acre for green tree retention. The residual Douglas-fir and hemlock will be distributed both in clumps and scattered within the area depending on their location. A component of alder and conifer will also be retained in the stream buffers and high landslide hazard locations (HLHL).

Snags: Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags. Creation of snags is expected during harvest activities (rub trees, lift trees, and/or tail trees). Existing snags not determined to be a safety hazard will be retained. Snag recruitment is expected through mortality of residual and/or leave trees.

In addition, 2 Douglas-fir trees per acre with a DBH of 15” and greater will be reserved for girdling to create snags.

Down Wood: Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term down wood. Existing snags that are determined to be a safety hazard will be felled and left for down wood. Down wood recruitment is expected through wind throw of residual and/or leave trees and tops left during harvest.

In addition, 2 Douglas-fir trees per acre with a DBH of 24’ and greater will be felled to create down wood.

Pathway: The area will be reforested with a mixture of conifer species: western hemlock, SNC tolerant Douglas-fir, western red cedar and/or noble fir. A pre-commercial thinning is anticipated at 12 to 17 years when the crowns begin to close. A commercial thinning will then be planned at age 35 to 40. At this time managers will review density, stand health and landscape goals to decide future management prescriptions.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		x
Planned Quarter:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	2,720	543	3,263
Stumpage Value (\$/MBF) *	\$225	\$200	
Estimated Gross Value	\$612,000	\$108,600	\$720,600
		Project Costs:	\$187,720
		Estimated Net Value:	\$532,880

**Combined Douglas-fir stumpage values based on harvest type.*

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via the Cedar Creek Road and Diamond Mill Road. They are currently an all weather, crushed rock roads. See maps for specific road locations and conditions.

Approximately 1.2 miles of road will be improved and 1.22 miles of road will be constructed to provide access to cable and ground yarding areas. Of this 0.94 miles will be new rocked roads and 0.26 miles will be dirt spur roads. Dirt roads will be closed at the end of operating season and/or the end of the sale. Following reforestation the remaining roads within the sale areas will be reviewed for closure. Ground yarding roads will be closed and water-barred following harvest. See summary document for more information on road closure. No other project work is currently planned with this sale.

The operation will be 10% ground yarded and 90% cable yarded.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct			.94	0.26 Spurs 1A & 2A
Improve			1.2	
Maintain ²	5.8	0.83	0.89	
Close/Block ³				0.26 Spurs 1A & 2A
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:

A watershed analysis is being conducted for the Wilson River basin at this time. Recommendations from this assessment will be incorporated into the sale where feasible.

West Fork North Fork Wilson River is a verified, large Type F stream adjacent to the sale. There are two verified, medium Type F streams with one being adjacent and another being within the sale. One assumed small Type F stream is also located adjacent to the sale. There are additional unnamed small perennial and seasonal Type N streams within the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain. The inner and outer riparian zones of these Type N streams will be managed towards mature forest condition.

The Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys prior to sale layout. Streams of unknown status or assumed fish status will be treated as Type F until surveys are completed to verify fish use.

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 for 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. Surveys for marbled murrelets and northern spotted owls are not required due to the absence of potentially suitable habitat.

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
Tillamook District
FINAL

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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 1:24,000 topographic maps.

There are high landslide hazard locations scattered throughout the sale. The sale drains into the West Fork of the North Fork of the Wilson River. The risk of landslides delivering directly from the sale to the West Fork of the North Fork of the Wilson River is high. Portions of the sale appear to be located on large, deep-seated landslide landforms.

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

X. RECREATION RESOURCES:

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993).

Recreational use common to this area includes hiking, hunting, camping, fishing, and OHV use.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within the proposed sale boundary. If any sites are identified, the Public Use Coordinator will be contacted.

XII. SCENIC RESOURCES:

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

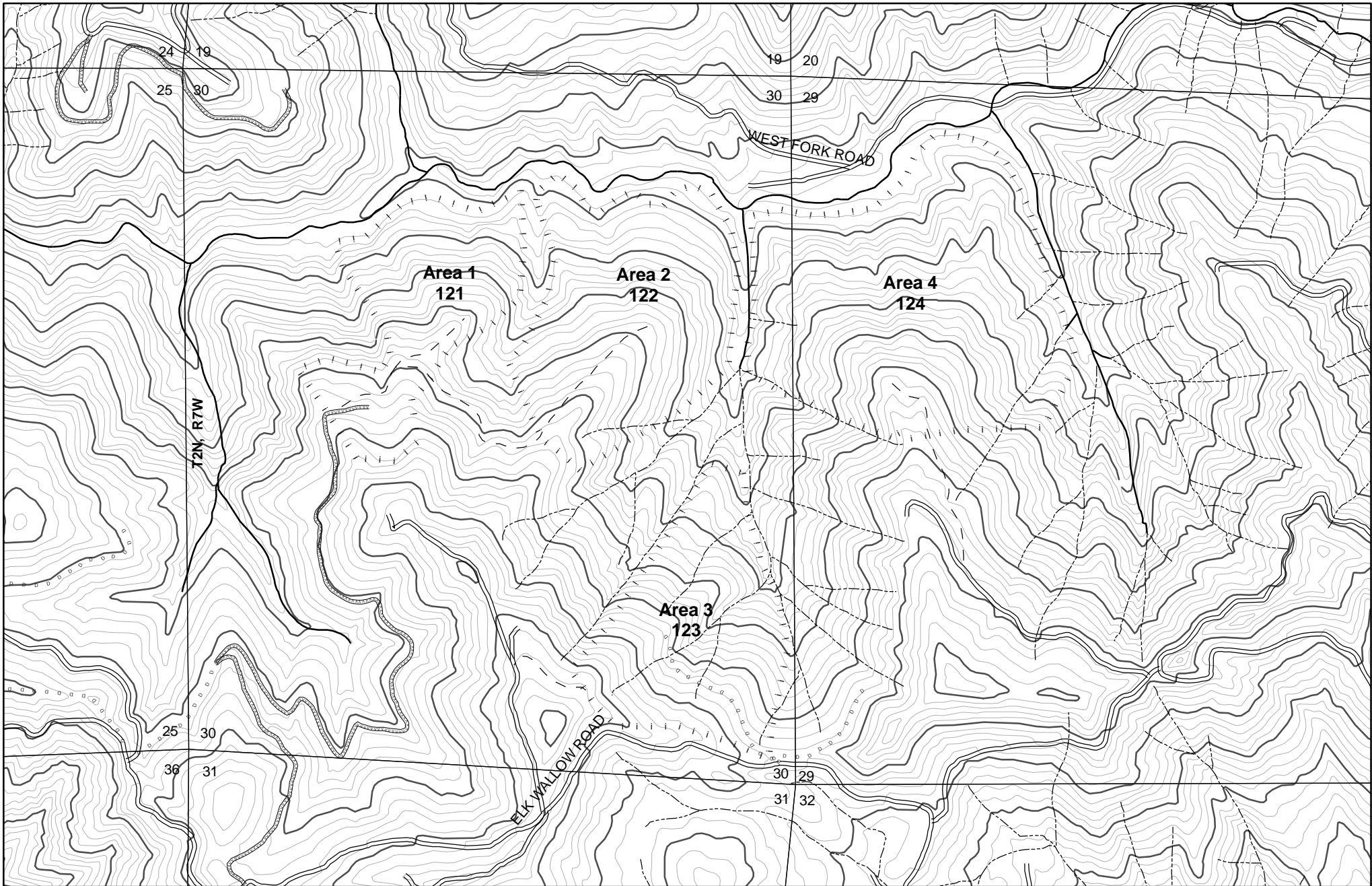
XIII. OTHER RESOURCE CONSIDERATIONS:

A permanent inventory plot is located within Area 1. Permanent plot markings will be protected according to the guidelines.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale areas contain Focused and Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.

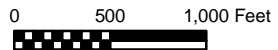
Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.



Contour Interval 40'

- Area boundary
- ! ! Sale boundary
- Ownership boundary
- Perennial Type-F stream*
- - - Perennial Type-N stream*
- == Surfsaced road
- == Surfsaced road
- State/Federal highway

- ▬ Legacy road
- ◻ ◻ ◻ Blocked road
- - - Road construction
- County road
- ; ; Transmission line



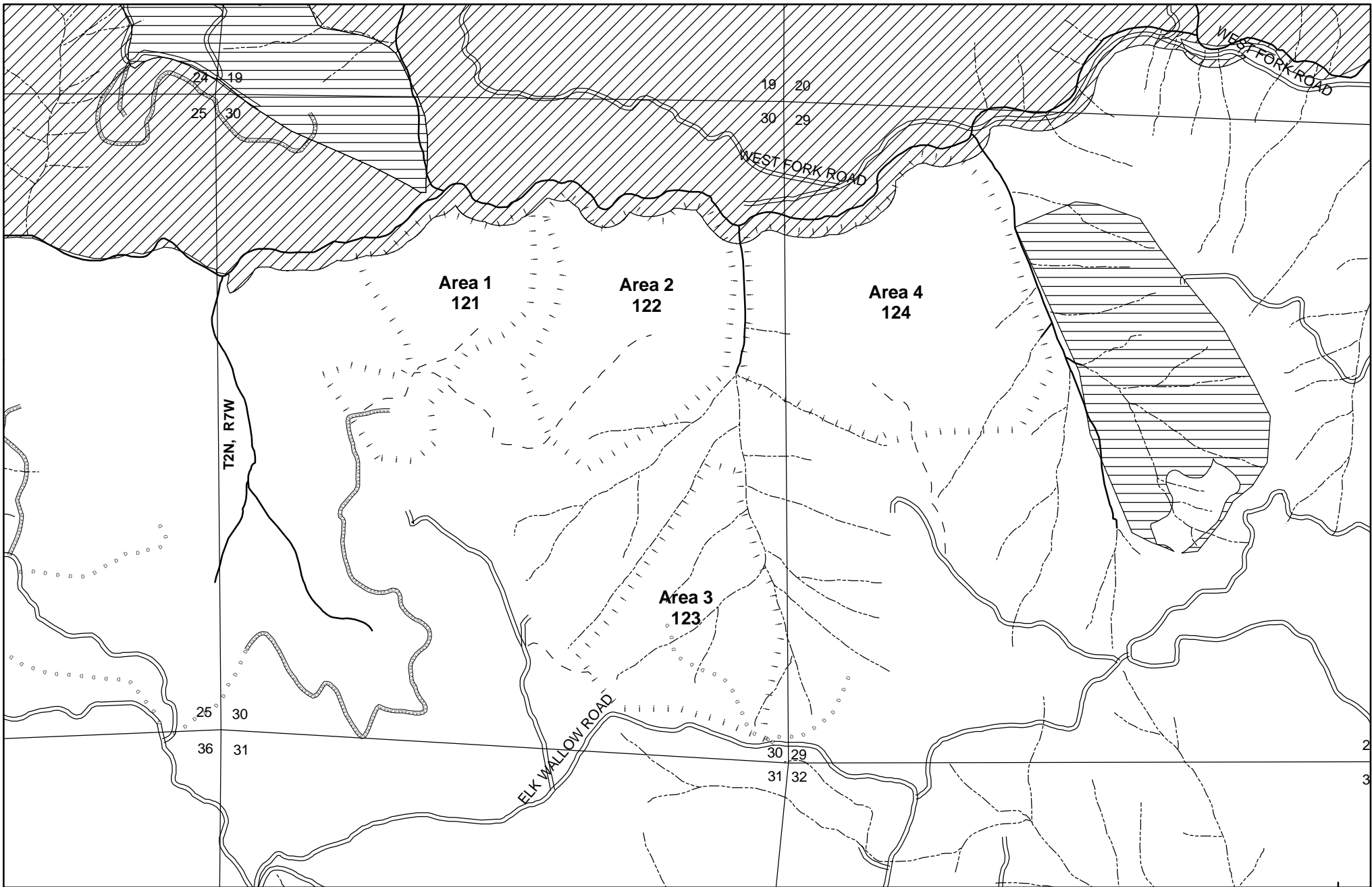
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**West Mill
-- Topography --
2009 SALE PLAN
TILLAMOOK DISTRICT
Portions of Sections 29 and 30
T2N, R7W, W.M.,
Tillamook County, Oregon**

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

Tillamook District GIS
10/24/2007
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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified Clearcut
4	Modified Clearcut



Desired future condition

- Layered
- Older forest

- 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

0 500 1,000 Feet



3

**West Mill
-- Current and Future Condition --
2009 SALE PLAN
TILLAMOOK DISTRICT**

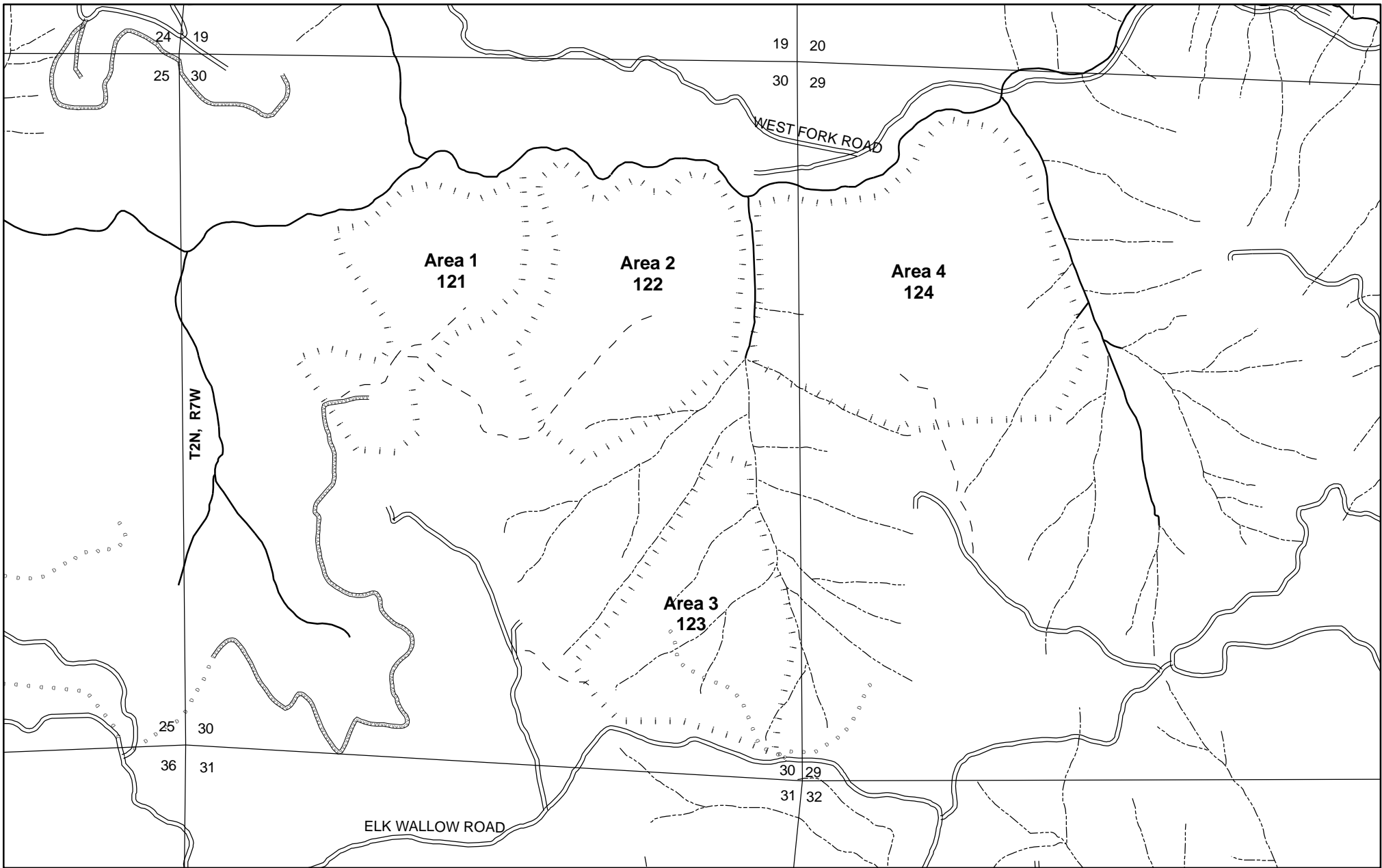
Portions of Sections 29 and 30
T2N, R7W, W.M.,
Tillamook County, Oregon












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




Tillamook District GIS
01/08/2008

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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified Clearcut
4	Modified Clearcut



-  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



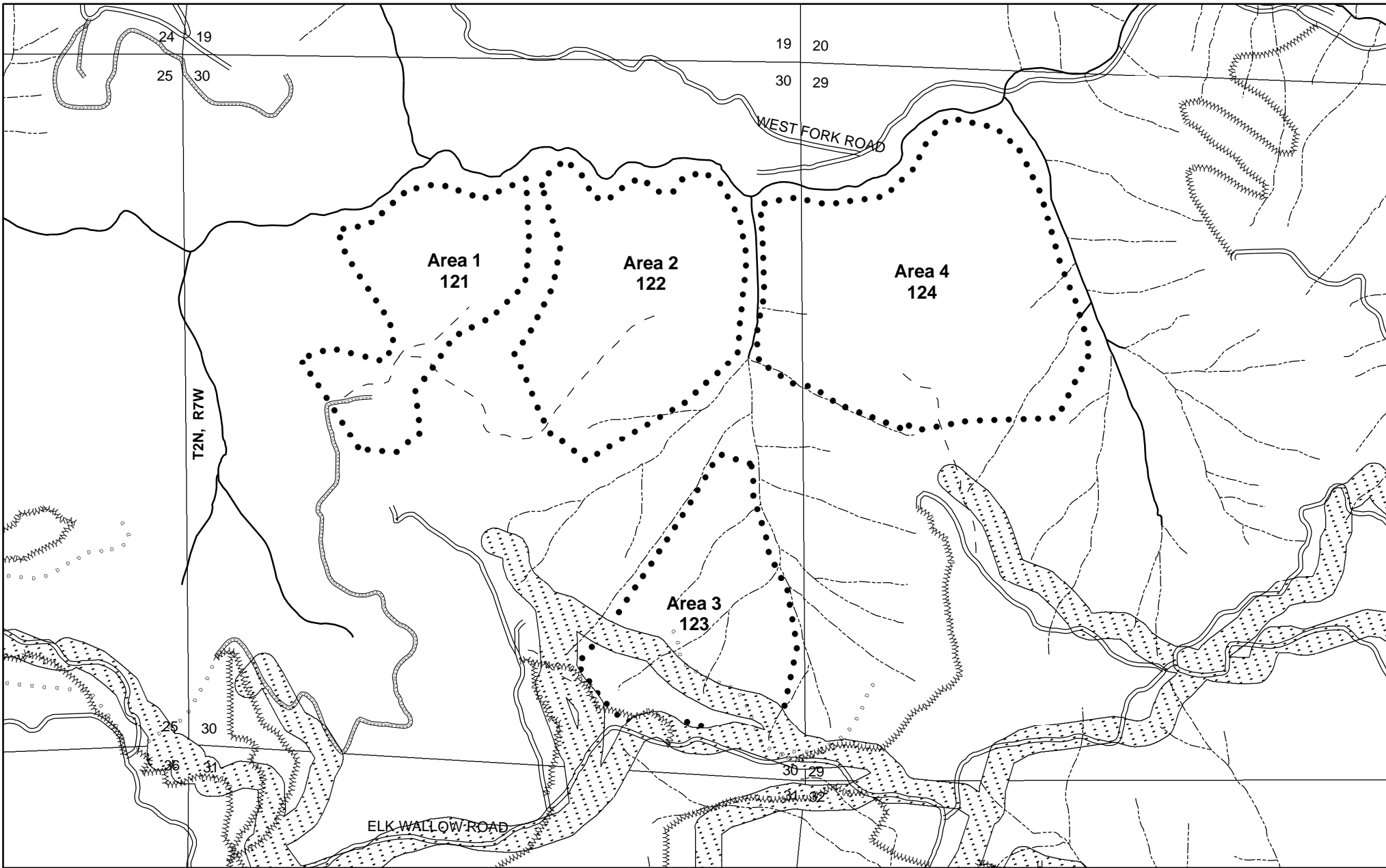
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West Mill
-- Key Resources --
2009 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Section 29 and 30
 T2N, R7W, W.M.,
 Tillamook County, Oregon

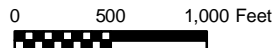
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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified clearcut
4	Modified Clearcut



- Administrative
- Boat Launch
- Campground
- Day Use
- Interpretive Site
- OHV Staging Area
- Trail Head
- Motorized Trail
- 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



3

West Mill
-- Key Resources / Recreation --
2009 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Section 29 and 30
 T2N, R7W, W.M.,
 Tillamook County, Oregon

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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified clearcut
4	Modified Clearcut