

Pre-Operations Report

Operation Name: Diamond Point

Legal: Portions of Sections 25 and 26, T2N, R8W, W.M., Tillamook County

Management Basin: Wilson

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified Clearcut	103	101
2	Modified Clearcut	110	109
Total		213	210

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

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes in the sale area have predominantly northern aspects with slopes ranging from 25% to over 85%. Elevations range from 600 to 1850 feet. The major soil types are Killam, Jewell, and Rye.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information³

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	310	DF, WH, RA	50	12.9	152	168	42	101
2	MC	317	DF, WH, RA	50	13	166	181	46	109

1. The source of stand inventory information is from recon plots taken in June, 2008.

2. The net acres are based on orthophotos and GIS and exclude roads, and stream buffers. Modified clear cut acres are not contiguous and do not exceed 120 acres.

3. 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 sale area burned in the 1933 (Tillamook) and 1945 (Wilson River/Salmonberry) fires and was seeded with Douglas-fir from 1959 to 1961. This stand is comprised mainly of Douglas-fir, but also includes some naturally regenerated western hemlock and red alder. There are also some noble fir remnants at the higher elevations. Portions of the sale area are mixed conifer and alder while other areas contain more distinct patches of either conifer or hardwood. The dominant trees have 30-40% live crown ratios, with 25% live crown in the remainder of the Douglas-fir. The conifer components are becoming dense and are showing signs of stem exclusion and slowed growth.

The alder components along the upper reaches of the two small non-fish streams (along the southern sale boundary) were aerially sprayed in the late 1970's to release planted conifer, resulting in alder trees with short boles and many limbs. Stand age is also contributing to the slowed growth of the alder.

The brush component in the sale area is comprised primarily of sword fern, oxalis, and salmonberry. There are numerous large snags in various states of decay left from the fire history of the area. Down wood consists of scattered large old logs (36"+) in a Class 4 stage of decay. SLI data shows 21.61 cubic feet per acre of down wood in decay classes 1 and 2 and a total of 6753.35 cubic feet of down wood for the stand.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	310	UDS	REG	GEN	101
2	317	UDS	REG	GEN	109

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.

North Fork Wilson Landscape View: This operation, in combination with other operations in the North Fork Wilson River basin, will create openings (5-120 acres) and stands of differing residual densities. Currently there are no threatened or endangered species issues in the drainage. The Tillamook Burn fires entirely encompassed the area, resulting in Douglas-fir dominated basins of very similar age classes.

Areas 1 and 2– The DFC for the sale area is General (GEN).

Short Term Vision: The regeneration harvest will remove the slow-growing alder, Douglas-fir, and small diameter hemlock. After the regeneration harvest this stand will be comprised of legacy structures retained from the present stand and have a new cohort of Douglas-fir, western hemlock, red alder, and western red-cedar that will provide both horizontal and vertical diversity.

Long Term Vision: The vision for this stand is to have a mixed species stand that has both vertical and horizontal diversity and that has maintained productivity to maximize revenues at final harvest.

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.**

MODIFIED CLEARCUT

Areas 1 and 2

Prescription: Merchantable alder and Douglas-fir will be harvested. A tree per acre limit/target will be used to reserve the largest and most vigorous trees. All other conifer and hardwood species will be reserved.

Green Trees

A tree per acre limit will be used to select an average of 5 trees per acre for green tree retention; some will be scattered within the harvest unit and will be the largest and most vigorous conifer trees within the existing stand. Residual standing green trees will be left from the hemlock component, whenever possible, while the snags and down wood will generally be derived from the Douglas-fir stock. A component of the green tree retention will be alder retained in stream buffers adjacent to and within the harvest unit.

Snags

Snag creation will be done with this harvest operation. Approximately 2 snags per acre greater than 15" will be created within the sale area. Snags currently present in the stand will be reserved from felling as long as the snags are not a safety issue. If snags are cut, they will be left to contribute to down wood goals.

Down Wood

The existing down wood will be reserved in the sale areas and additional down wood will be created during this harvest operation. Approximately 600 cubic feet of logs in decay classes 1-2 per acre will be added to enhance down woody debris within the sale area. The goal for down wood creation is anticipated to be accomplished by bucking and leaving obvious defect and butt logs from felled Douglas-fir and western hemlocks. If necessary, more down wood may be derived from felling trees with larger diameter classes.

Down wood recruitment is also expected through mortality and windthrow of residual trees, felled snags and tops left during harvest. Non-merchantable hardwoods and conifers will be retained in the sale areas with the expectation that they will eventually become 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 minor component of other conifer species will be scattered across the area and alder will be retained in stream buffers. 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, setting the stand up for a 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"/>	X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	1596	630	2226
Stumpage Value (\$/MBF)*	\$100	\$150	
Estimated Gross Value	\$159,600	\$94,500	\$254,100
		Project Costs:	\$32,695
		Estimated Net Value:	\$221,405*

*Additional pulp value is expected in sale (hardwood and conifer) but was not estimated as the overall value volume during recon cruise.

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via North Fork Wilson River road to Diamond Mill Road. North Fork Wilson River Road and Diamond Mill Road are both all-weather roads and are surfaced with crushed rock. Additional abandoned roads will be reopened by road construction and improvement to access cable logging areas.

See maps for specific road locations and conditions.

Approximately 0.43 miles of abandoned road will be reconstructed which includes grading and rocking. This work will bring all roads up to standards described in *the Forest Roads Manual*. The roads are ridge top roads with no stream crossings.

Approximately 0.14 miles total of roads will be constructed in order to realign an existing road and to provide access to cable yarding areas. Following harvest, Spur 1 will be closed (0.28 miles), while Spur 2 will be kept open for access to an

eventual helipad which will be used for reforestation purposes. Ground yarding roads will be closed and water-barred following harvest.

The operation will be 90% cable yarding and 10% ground yarding. No helicopter yarding is planned for this sale. No permits are required to access any of the sale areas.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0.57	0
Improve	0	0	0.	0
Maintain ²	7.3	0	0	0
Close/Block ³	0	0	0.28	0
Vacate ³	0	0	0	0

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:

There are two small unnamed Type N streams and no Type F streams within the sale area. The West Fork of the North Fork of the Wilson River is adjacent to the sale (northern boundary) and is a Type F stream.

Streams within the sale area will be reviewed and posted with appropriate buffers during sale layout. All stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. A sub-set of those standards are highlighted below.

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 25' no-harvest buffer is the minimum width established along the small type N streams. For this sale, additional trees including some wildlife trees will be

retained resulting in a 150 foot buffer each side of the stream which separates the two clearcut harvest areas.

Riparian management areas result in leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat.

VIII. T&E SPECIES CONSIDERATIONS:

The sale was reviewed by the Northwest Area Biologist. Surveys for marbled murrelets are not required due to the absence of potentially suitable habitat. Northern spotted owl surveys are not required by policy as the sale is within the interior of the Tillamook burn and the average DBH of the trees in this sale are below that which is required for surveys (see November 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*).

Streams in this sale are in the headwaters of the Wilson basin. As of March 2008, coastal coho salmon are listed as threatened for the Oregon Coast. The riparian and aquatic strategies combined with road and harvest practices described in this Annual Operations Plan and our Northwest Oregon State Forests Management Plan (FMP) are designed to minimize impacts and or restore aquatic habitats that influence aquatic species.

T&E Plant Species: The sale areas were checked against the Oregon National 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 a LiDAR-generated 1 m digital elevation model and available geologic maps. There are high landslide hazard locations in the sale area. The sale area drains to the West Fork of the North Fork of the Wilson River. The risk of landslides delivering to the West Fork from the sale area is high. Portions of the sale area appear to be located on large, deep-seated landslide landforms. The geotechnical specialist will be consulted during sale layout.

X. RECREATION RESOURCES:

The sale area is designated as Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

The northern end of the OHV trail “Sticks and Stones” connects with Diamond Mill Road near the south-central boundary of sales Area 2. There is also a short (approximately 1/3 of a mile) unnamed recreation trail just inside of the southeastern boundary of sales Area 2 which also spurs off of Diamond Mill Road.

Access to “Sticks and Stones” may be temporarily limited during actual timber harvest. The unnamed trail may be affected by the timber harvest. However, there are no current plans to convert the trail to an access road, so it should remain intact.

XI. CULTURAL RESOURCES:

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

XII. SCENIC RESOURCES:

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

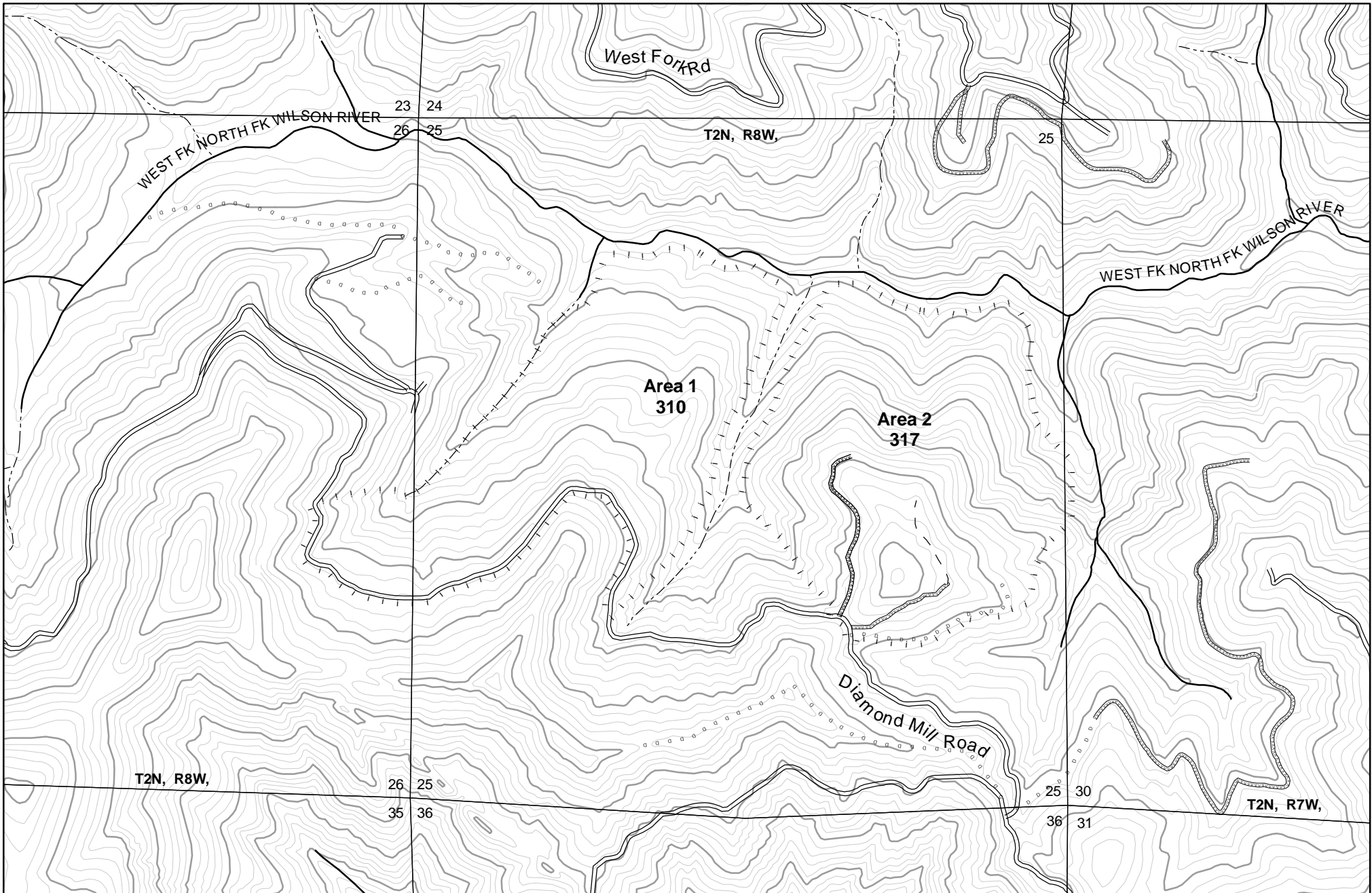
XIII. OTHER RESOURCE CONSIDERATIONS:

A research area is adjacent to the west side of Area 1. Cable logging of Area 1 may require tailholds in the research area. Check with staff wildlife biologist if trees need to be felled.

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). This sale also includes Special Stewardship, Operationally Limited. This area will be evaluated further with the geotechnical specialist to determine if this classification shows in the correct location. See Section IX, Slope Stability and Geotechnical Issues, for additional information.

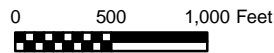
Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process



Contour Interval 40'

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

- Abandoned road
- □ Blocked road
- - - Road construction
- County road
- : : Transmission line



3

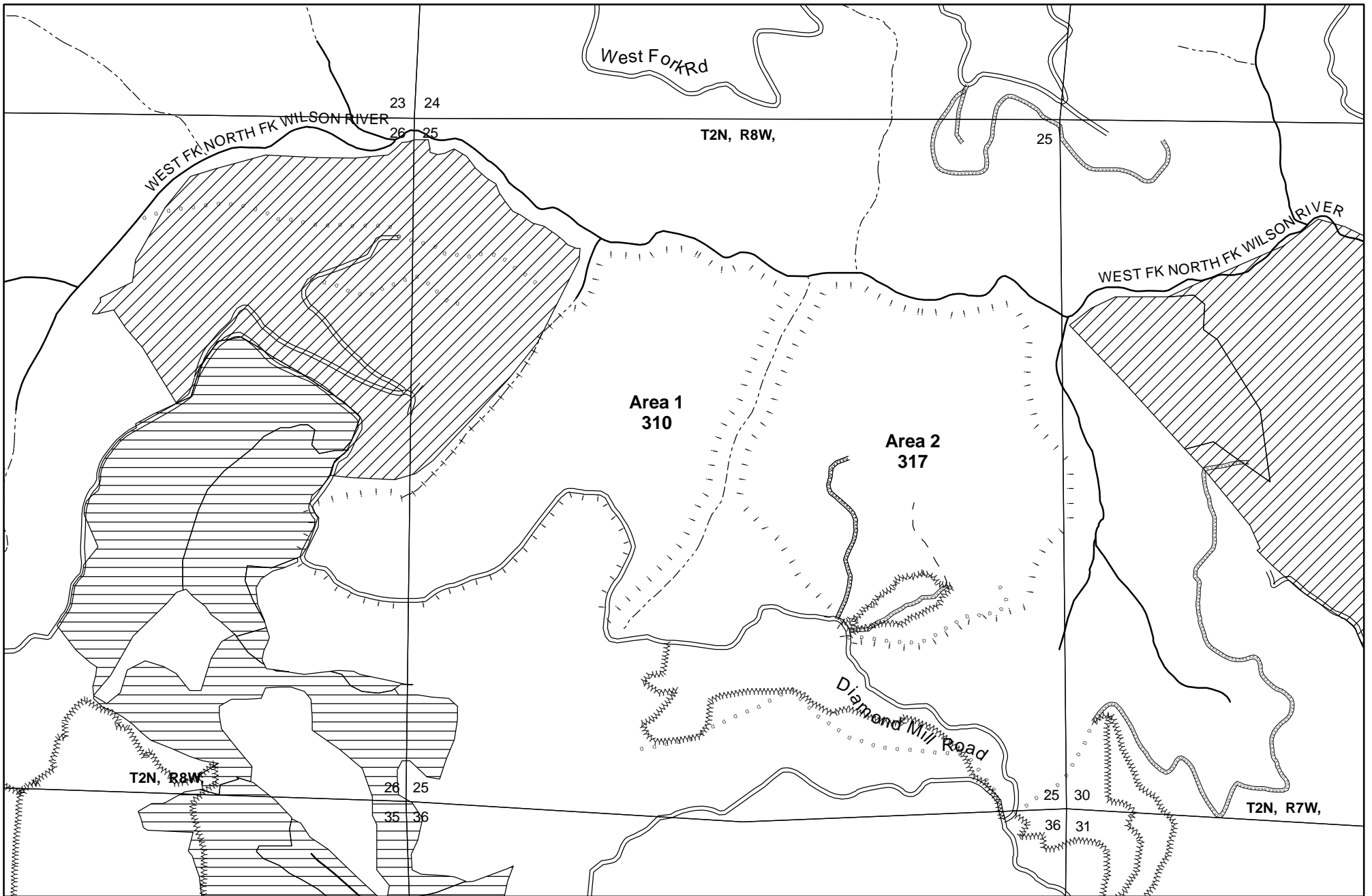
**Diamond Point
-- Topography --
2010 SALE PLAN
TILLAMOOK DISTRICT**
Portions of Sections 25 and 26
T2N, R8W, W.M., and
Portions of Section 30
T2N, R7W, W.M.,
Tillamook County, Oregon

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

Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut

Tillamook District GIS
6/20/2009
This product is for informational use and
may not have been prepared for, or suitable
for legal, engineering, or surveying purposes.

Attachment A



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

Abandoned road
 Blocked road
 Road construction
 County road
 Transmission line
 OHV trail
 Non-motorized trail

0 500 1,000 Feet

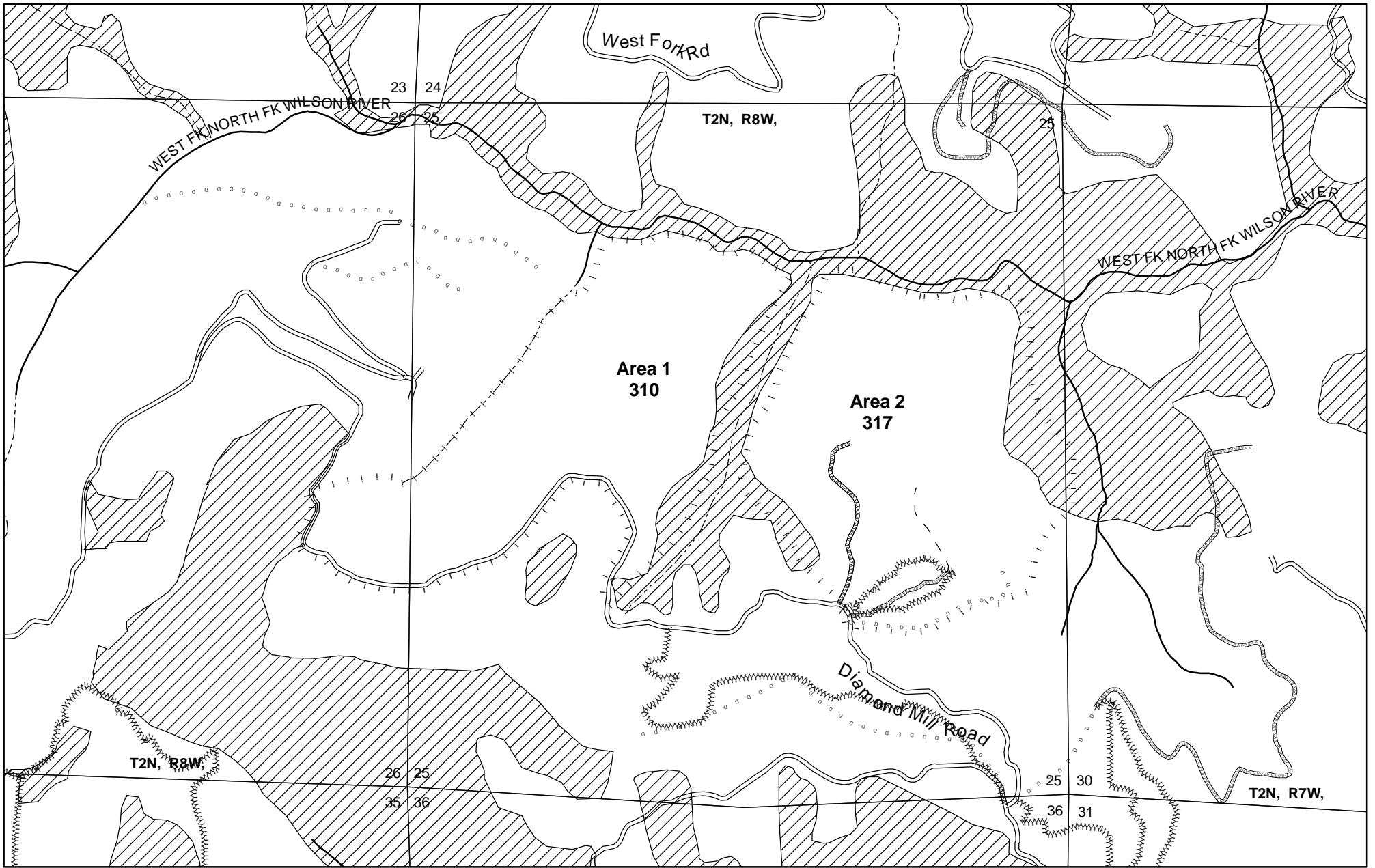
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Diamond Point
-- Current and Future Condition --
2010 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 25 and 26
 T2N, R8W, W.M., and
 Portions of Section 30
 T2N, R7W, W.M.,
 Tillamook County, Oregon

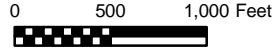
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- Special
- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream*
- Perennial Type-N stream*
- Unsurfaced road
- Surfaced road
- State/Federal highway
- Abandoned road
- Blocked road
- Road construction
- County road
- Transmission line
- OHV trail
- Non-motorized trail



3

-- Key Resources/Operationally Limited --
2010 SALE PLAN
TILLAMOOK DISTRICT

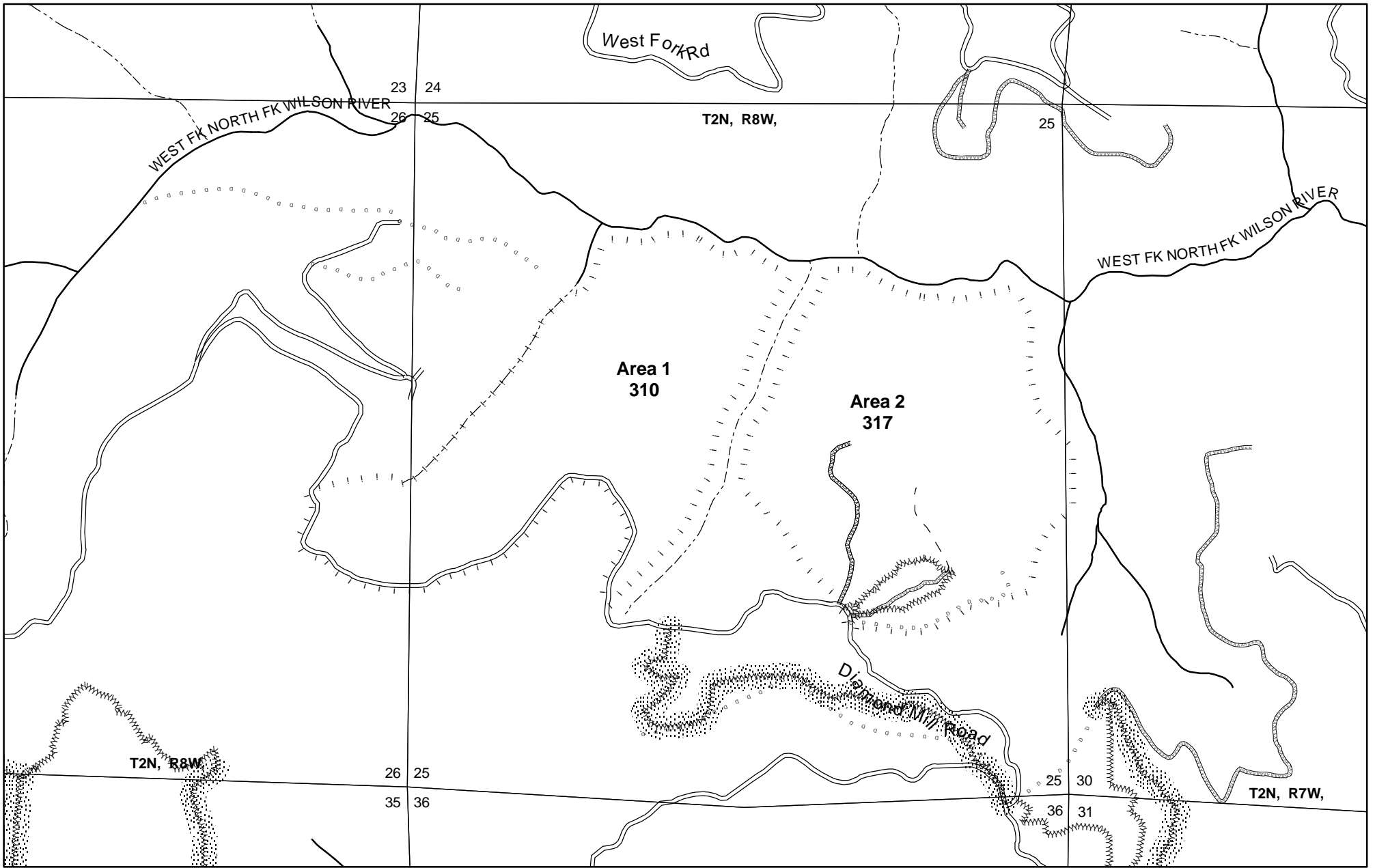
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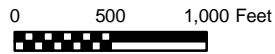
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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut



- | | | |
|--------------------------|--------------------------|---------------------|
| Special | Area boundary | Abandoned road |
| Focused | Sale boundary | Blocked road |
| Ownership boundary | Perennial Type-F stream* | Road construction |
| Perennial Type-N stream* | County road | Transmission line |
| Unsurfaced road | Surfaced road | OHV trail |
| State/Federal highway | | Non-motorized trail |



3

Diamond Point -- Key Resources/Recreation -- 2010 SALE PLAN TILLAMOOK DISTRICT

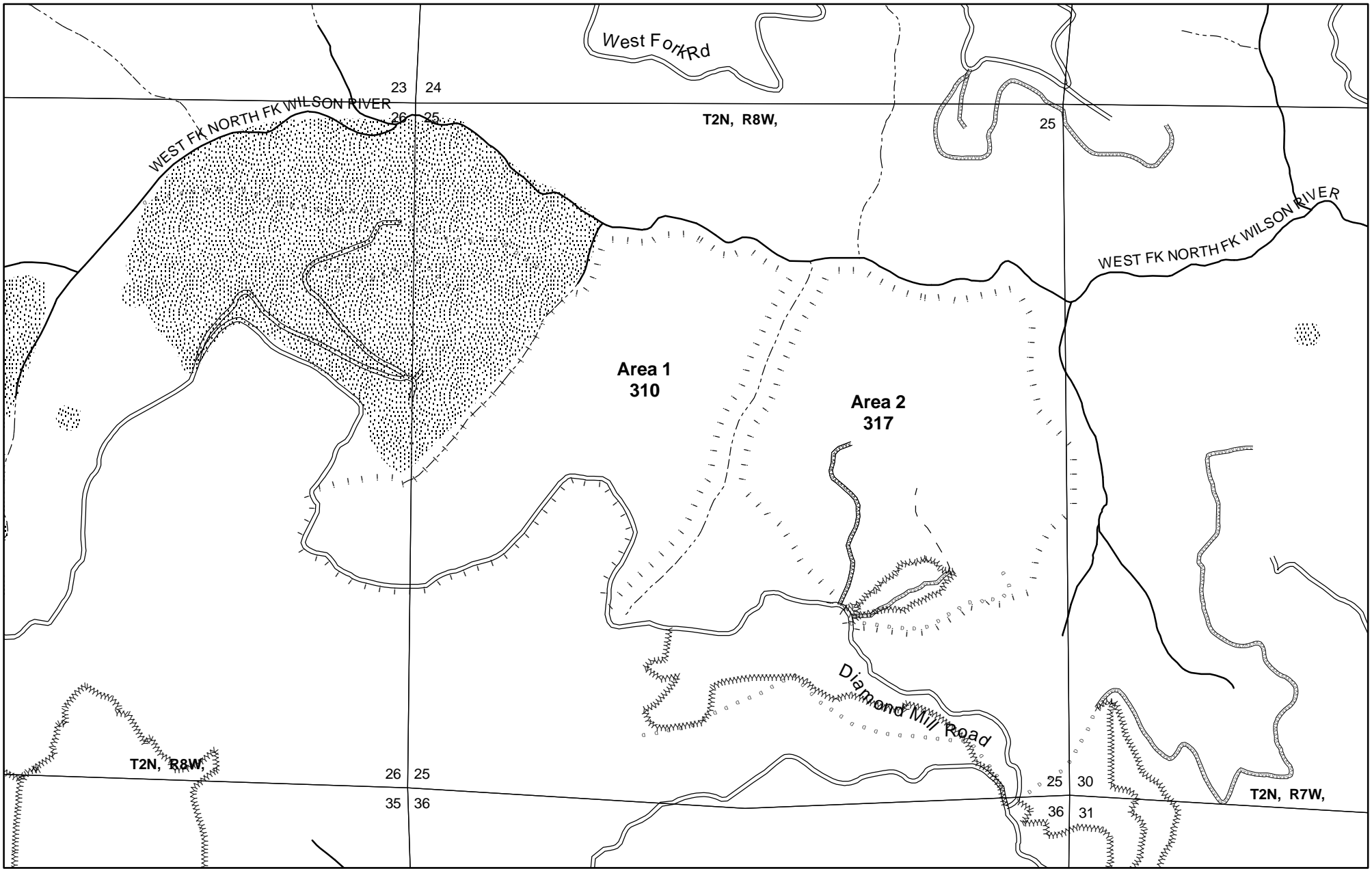
Portions of Sections 25 and 26
T2N, R8W, W.M., and
Portions of Section 30
T2N, R7W, W.M.,
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*Streams of unknown fish presence are not shown but will be surveyed prior to the sale

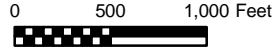
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Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut



- | | | | | | |
|--|---------|--|--------------------------|--|---------------------|
| | Special | | Area boundary | | Abandoned road |
| | Focused | | Sale boundary | | Blocked road |
| | | | Ownership boundary | | Road construction |
| | | | Perennial Type-F stream* | | County road |
| | | | Perennial Type-N stream* | | Transmission line |
| | | | Unsurfaced road | | OHV trail |
| | | | Surfaced road | | Non-motorized trail |
| | | | State/Federal highway | | |



3

Diamond Point -- Key Resources/Research -- 2010 SALE PLAN TILLAMOOK DISTRICT

Portions of Sections 25 and 26
T2N, R8W, W.M., and
Portions of Section 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
6/20/2009

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Area	Type of Operation
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2	Modified Clearcut