

Pre-Operations Report

Operation Name: Alder Joy
Legal: Portions of 13, 14, 22, 23, 24, and 25, T2S, R8W
Management Basin: Trask

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified Clearcut	17	13
2	Modified Clearcut	120	99
3	Modified Clearcut	149	131
4	Modified Clearcut	92	91
Total		378	334

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 are ½ northern aspects and ½ southern aspects with slopes ranging from 5% to over 65%. Elevations range from 600 to 1850 feet. The major soil types are Rye and Killam.

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	304	DF, RA	39	13.5	56	56	15	13
2	MC	305	DF, RA	39	12.9	102	112	28	99
3	MC	306	DF, RA	50	14	168	158	45	131
4	MC	318	DF, RA	37	13.3	150	156	41	91

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.

Areas 1 & 2: These areas burned in the 1933 (Tillamook), 1939 (Saddle Mountain) and 1951 (North Fork / Elkhorn) fires and were planted with Douglas-fir. The areas were pre-commercially thinned between 1989 and 1990 (Bill Creek PCT) and fertilized in 1992. The Douglas-fir is from an off-site seed source and has Swiss needle cast (SNC) symptoms resulting in slowed diameter growth. Douglas-fir is the main species. The trees in these stands have grown at the same rate with very little differentiation.

The few dominant trees display somewhat moderate crowns of 30-40% but the overall majority of Douglas-fir in the stand have 25% or less live crown ratios. The stands have less than two years of needles as the result of Swiss needle cast and have responded little to multiple management activities. The current stands are not on a productive pathway and cannot be grown to complex structure.

Sale Areas 1 and 2 are classified as 100% Understory (UDS). (SLI imputed stand information)

There is scattered alder throughout the sale area and in pure patches where it is the dominant species. Most of the alder that is present is on disturbed sites or riparian areas where brush species is more prevalent. The alder components of these stands were aerially sprayed in the 1970's to release planted conifer, resulting in short boles and many limbs. This "zombie" alder occupies more growing space than unsprayed alder and is of lower quality and poor form where mixed with conifer species. Other areas dominated by hardwoods have resulted in tall and straight alder. Due to age and past management (aerial spraying), the alder are slowing significantly in growth.

See Table 2 for specific stand data.

The brush component in all the sale areas is comprised primarily of sword fern. Oregon grape is heavy on ridge tops. Other species such as vine maple, salmonberry and bracken fern occur sporadically.

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. Some portions of the sale were salvaged in the mid to late 1950's leaving patches of large diameter logs piled in the current stand. Stand Level Inventory data within the Joyce Creek and Bill Creek basin show three 24" (or greater) snags per acre and seven 12" (or greater) snags per acre, both of which currently meet *Stand Structure Classification Criteria*. However, cubic feet of down wood per acre is far below target level, with only 95 ft³/acre of down wood in decay classes 1 and 2, and only 1268 ft³/acre of total down wood. In addition, there are currently 0 Down Wood logs per acre, >24" (large end) in decay classes 1 or 2, where the target is at least two per acre. There are also 0 snags per acre, >=15" DBH in decay classes 1 or 2, where the goal is at least two per acre.

Area 3: The sale area burned in the 1933 (Tillamook), 1939 (Saddle Mountain) and 1951 (North Fork / Elkhorn) fires and were planted with Douglas-fir. Area 3 is approximately 90% (UDS), with about 10% Closed Single Canopy (CSC) along the northern boundary of the area.

This stand is comprised of both red alder and Douglas-fir, with a slightly heavier component of red-alder. Unlike Areas 1 and 2, the alder in this area was not sprayed in the 1970's, resulting in better quality trees. Due to age, however, the alder is slowing in growth. The Douglas-fir is from an off-site seed source and has severe Swiss needle cast (SNC) symptoms resulting in slowed diameter and height growth. This stand has not responded to past management.

The harvest area is located on both sides of Joyce Creek with a buffer greater than or equal to 300 feet separating the two sides. The area is 131 acres; 115 acres on the southeast side of Joyce Creek and 16 acres on the northwest side of Joyce Creek.

See Table 2 for specific stand data.

Area 4: The sale area burned in the 1933 (Tillamook), 1939 (Saddle Mountain) and 1951 (North Fork / Elkhorn) fires and were planted with Douglas-fir. The area was pre-commercially thinned between 1989 and 1990 and fertilized in 1992.

Area 4 is roughly 80% Closed Single Canopy (CSC), with the remaining 20% being (UDS) and located in the southern portion of the area. The stand is comprised mainly of Douglas-fir, with red alder being less of a component. The Douglas-fir is from an off-site seed source and has Swiss needle cast symptoms resulting in slowed diameter and height growth. The majority of the Douglas-fir has 25% live crown but some of the dominant trees have 30-40% live crowns.

The alder components that are present were aerially sprayed in the 1970's to release planted conifer, resulting in alder trees with short boles and many limbs. This "zombie" alder occupies more growing space than unsprayed alder and is of lower quality and poor form where mixed with conifer species. Due to age and past management, the alder are slowing significantly in growth.

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	304	CSC	REG	GEN	13
2	305	CSC	REG	GEN	99
3	306	CSC	REG	GEN	131
4	318	CSC	REG	GEN	91

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.

Joyce Creek Landscape View: This operation, in combination with other operations in the Joyce Creek and Bill Creek basins, will create openings from 5 to 120 acres and stands of differing residual densities. The Joyce Creek road system has recently been constructed and improved and there are many opportunities for management over the next ten years through partial cut and regeneration harvest operations. Currently there are no T&E issues in the two drainages and the Tillamook Burn fires entirely encompassed the area, resulting in Douglas-fir dominated basins of very similar age classes.

Areas 1, 2, 3, and 4 – The DFC for all sale areas is designated General (GEN).

Short Term Vision:

The regeneration harvest will remove the current slow growing Douglas-fir and red alder and replace it with a young thriving stand 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 larger residual Douglas-fir will add complexity to the stand. The residual Douglas-fir in the regeneration harvest will also serve as a source for future recruitment of larger snags and down wood. The stand will be on a pathway that maintains productivity while adding structural components.

Long Term Vision: The vision for this stand is to have a thriving, vigorous, and fast growing stand of Douglas-fir. Following density management, the stand will continue to be managed for productivity to maximize revenue at the time of final harvest.

As the future stand matures the residual trees from this entry will add to complexity of sizes, species and densities. The residual trees will also contribute to recruitment of snags and down wood over time and through the life of the next

stand. Down wood and snags created and reserved in this entry will become more decayed components for the future stand.

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 alder and Douglas-fir will be harvested. A “trees per acre” limit will be used to reserve some Douglas-fir. Other conifer and hardwood species are reserved.

Green Trees

An average of 5 trees per acre will be left in and adjacent to the sale areas. A variety of methods will be used to achieve green tree retention requirements such as green tree retention areas, stream buffers, and trees scattered across the sale areas. A “trees per acre” limit will be used to select an average of 5 trees per acre scattered within the harvest unit and will be the largest and most vigorous conifer trees within the existing stand. Green trees will also be left on precipitous slopes and headwalls. Small non-merchantable hardwood and conifer will also be retained where possible. Stream buffers adjacent to small perennials and the outer Riparian Management Area (RMA) of fish bearing creeks will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

Snags

Additional trees will be left to manage for two snags per acre, either within the buffers or green tree leave patches or scattered within the unit. In addition existing snags in the stand will be reserved and protected during harvest activities where they are not a safety issue.

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 500 cubic feet of logs in decay classes 1-2 per acre will be added to enhance down woody debris within the sale areas. Currently, there is only 96 cubic feet per acre (decay classes 1-2). The goal for down wood will be reached by bucking and leaving obvious defect and portions of the butt logs from felled Douglas-fir and western hemlocks. If necessary, additional trees may be felled to meet the down wood goal.

Future 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 contribute to snags and down wood.

Pathway

Areas 1, 2, 3 and 4: These areas will be reforested with a mix of western hemlock and Douglas-fir. The stand will be pre-commercially thinned in 10 - 15 years after planting. The stand will be commercially thinned when it reaches 35 - 40 years of age. This will ensure rapid growth and maximize growing space and resources for residual trees, setting it 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)	2732	1160	3892
Stumpage Value (\$/MBF)*	\$100	\$150	
Estimated Gross Value	\$273,200	\$174,000	\$447,200
		Project Costs:	\$32,257
		Estimated Net Value:	*\$414,943

*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 Trask River County Road to South Fork Trask Road to Joyce Creek Road. South Fork Trask Road and Joyce Creek Road are surfaced with crushed rock.

See maps for specific road locations and conditions.

Approximately 0.59 miles of abandoned road will be improved 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 0.41 miles total of roads will be constructed in order to realign an existing road and to provide access to cable yarding areas. Following harvest, approximately 0.7 miles of road within the sale areas will be closed. Ground yarding roads will be closed and water-barred following harvest.

The operation will be 90% cable yarding and 10% ground yarding. A right-of-way permit from the BLM is secured for Areas 1, 2, and 3. An easement from Stimson Lumber is required for Area 4 (road and tailhold access).

The cable yarding areas will reach across Joyce Creek at Area 3 and log some lower portions of the slope. These areas were not logged when earlier operations upslope occurred. The final boundary lines on the north side of Joyce Creek will be reviewed more during layout to determine the appropriate distance that can be reached across the creek. Any trees felled within this buffer area will be left for down wood.

The Trask River County Road Fee will apply to this sale.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	0.41	0
Improve	0	0	0.59	0
Maintain ²	7.5	5.15	3.25	0
Close/Block ³	0	0	0.70	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:

A watershed analysis has been completed for the Trask basin. South Fork Trask River, Edwards Creek, Bill Creek and Joyce Creek are large and medium Type F streams that are within or adjacent to the sale areas and haul route. Oregon Department of Fish and Wildlife (ODFW) have completed stream surveys to verify fish use.

Bill Creek and Joyce Creek are adjacent to the timber sale areas. Joyce Creek becomes a type N before entering Area 3. The sale areas also contain small perennial and seasonal type N streams. These streams 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.

Small type N streams can influence stream temperature of downstream fish-bearing streams. A 25 foot no harvest buffer will be established along the small type N streams. Additional trees including some wildlife trees will be retained resulting in a 30-50 foot buffer. Sufficient trees will be retained within 500 feet of the confluence with type F streams to achieve 80% shade over streams. A 170 foot riparian management area is established on all fish streams. Management is allowed beyond 25 feet in the "inner zone". Management in the "inner zone" will result in large diameter trees in a shorter time frame than if no harvesting were to take place and will maintain all snags and downed wood.

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 has been reviewed with the ODF Northwest Oregon Area Biologist. Surveys for marbled murrelets are not required for this sale due to the absence of potentially suitable habitat. Surveys for northern spotted owls are not required as the sale is within the Tillamook Burn (see November 2002 ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands).

Streams in this sale are in the headwaters of the Trask 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 USGS 1:24,000 topographic maps and available geologic maps. There are high landslide hazard locations throughout the sale

area. The sale area drains to the South Fork of the Trask River, Joyce Creek, and unnamed tributaries of the South Fork of the Trask River. The risk of landslides delivering to these streams from Areas 1, 2 and 3 is high and from Area 4 is moderate. Portions of the sale area may 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).

Joyce Creek Road trail has a short dead end section within the sale boundaries. The current location of the trail is planned for a dirt spur during operations. Since the trail is a dead end trail and located on an abandoned road, the impacts to recreational opportunities are expected to be minimal. The trail will be closed during active operations and blocked to truck traffic at the end of the sale. A dispersed campsite at the junction of Bill Creek will be protected to allow camping during harvesting.

XI. CULTURAL RESOURCES:

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

XII. SCENIC RESOURCES:

The majority of sale areas have a visual classification of Level 3, low sensitivity. A portion of Area 1 has a Deed restriction that could potentially classify the area along the South Fork Trask River as Level 2, moderate sensitivity. The sale may be reviewed by the Public Use Coordinator during sale layout. The sale cannot be seen from highway or county road so no scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

A property line needs to be established on the southern boundary of Area 3 and southwest corner of Area 4 (shared with Stimson Lumber). The district Engineering Unit has received the request to review survey records and will complete the work to establish the property line before sale prep begins. Property lines will need to be confirmed and all property or corner markers protected from damage.

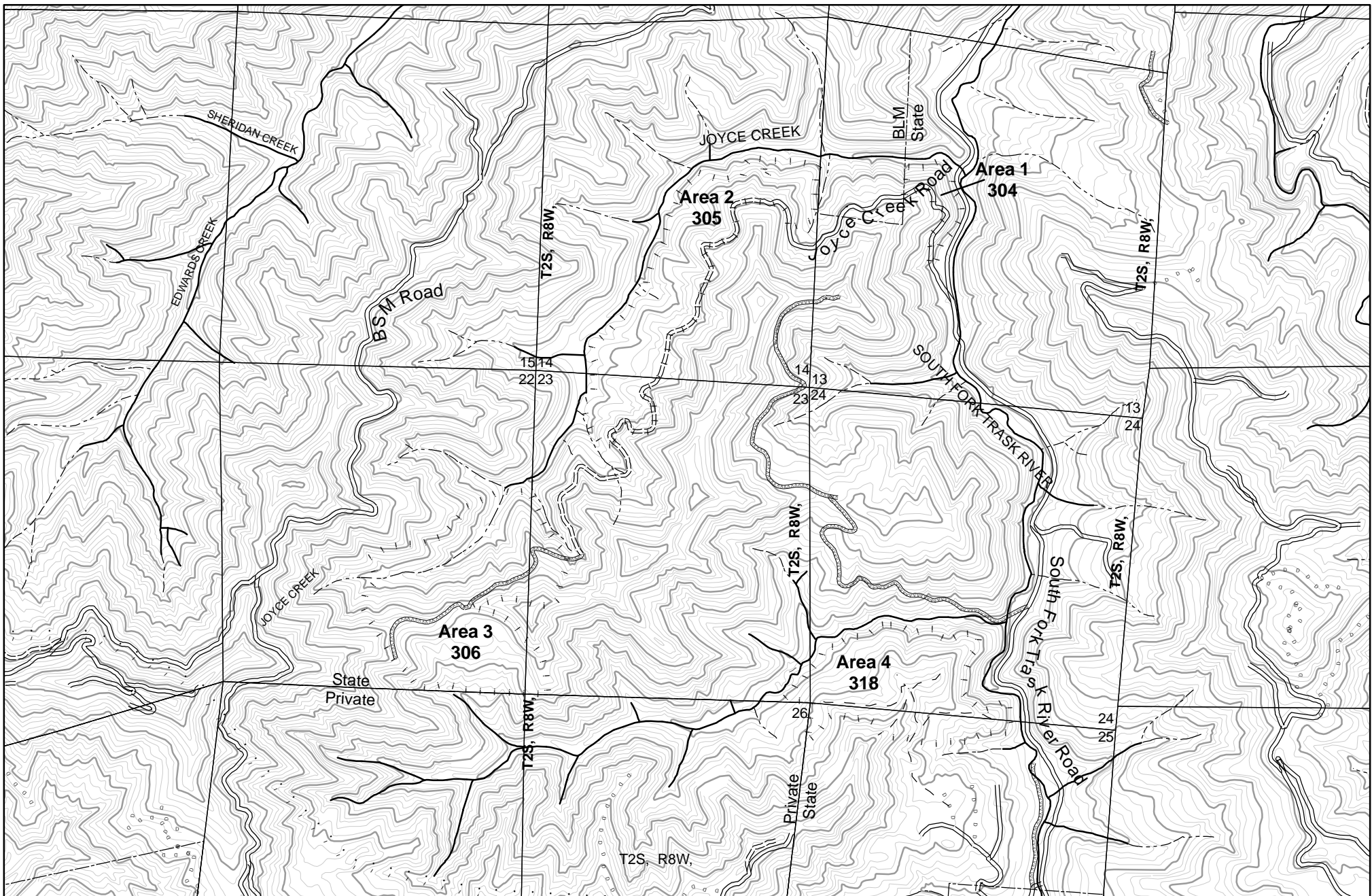
A Road Use Agreement is needed from Stimson Lumber Co. to use the existing road in the SE¼ of section 25 to access Area 4.

A deed restriction is in place along the South Fork Trask River, referred to as County Resolution Lands (Fund 54). See Section XII for more information.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

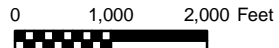
The sale area contains Focused and Special, Aquatic and Riparian Habitat and Special, Operationally Limited designation. See Section VII, Aquatic Resources and Water Quality, and Section IX, Slope Stability and Geotechnical Issues for the management guidelines to be utilized. This sale also contains Focused Stewardship, Recreation. See Section X., Recreation Resources 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
- o o o Blocked road
- - - Road construction
- County road
- ; ; Transmission line



3

Alder Joy -- Topography -- 2010 SALE PLAN TILLAMOOK DISTRICT

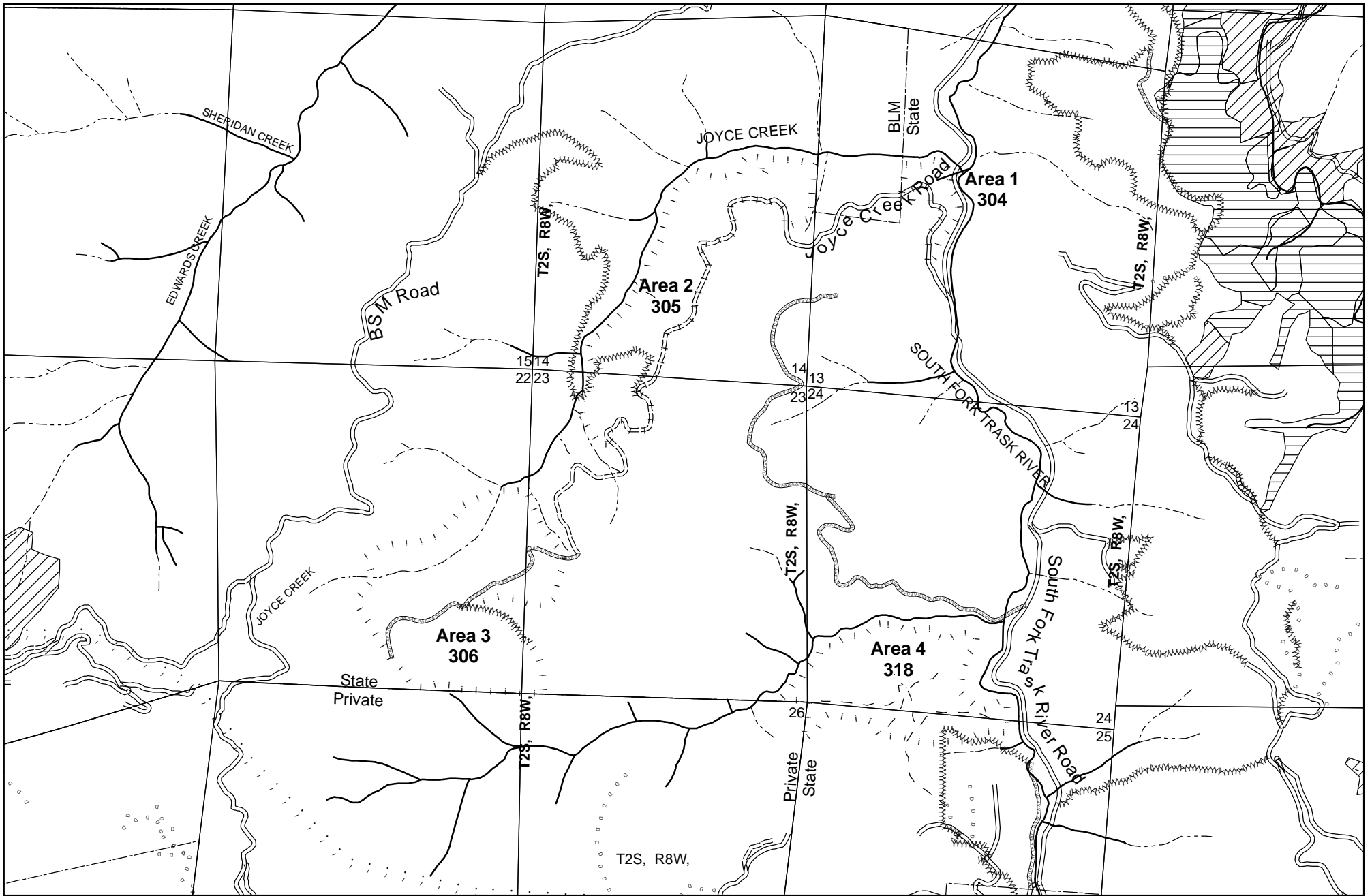
Portions of Sections 13, 14, 22, 23, 24 and 25
T2S, R8W, W.M.,
Tillamook County, Oregon

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

Tillamook District GIS
10/14/2008

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
2	Modified Clearcut
3	Modified Clearcut
4	Modified Clearcut

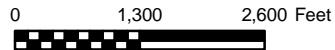


Desired future condition

- Layered
- Older forest

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

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



3

**Alder Joy
-- Current and Future Condition --
2010 SALE PLAN
TILLAMOOK DISTRICT**

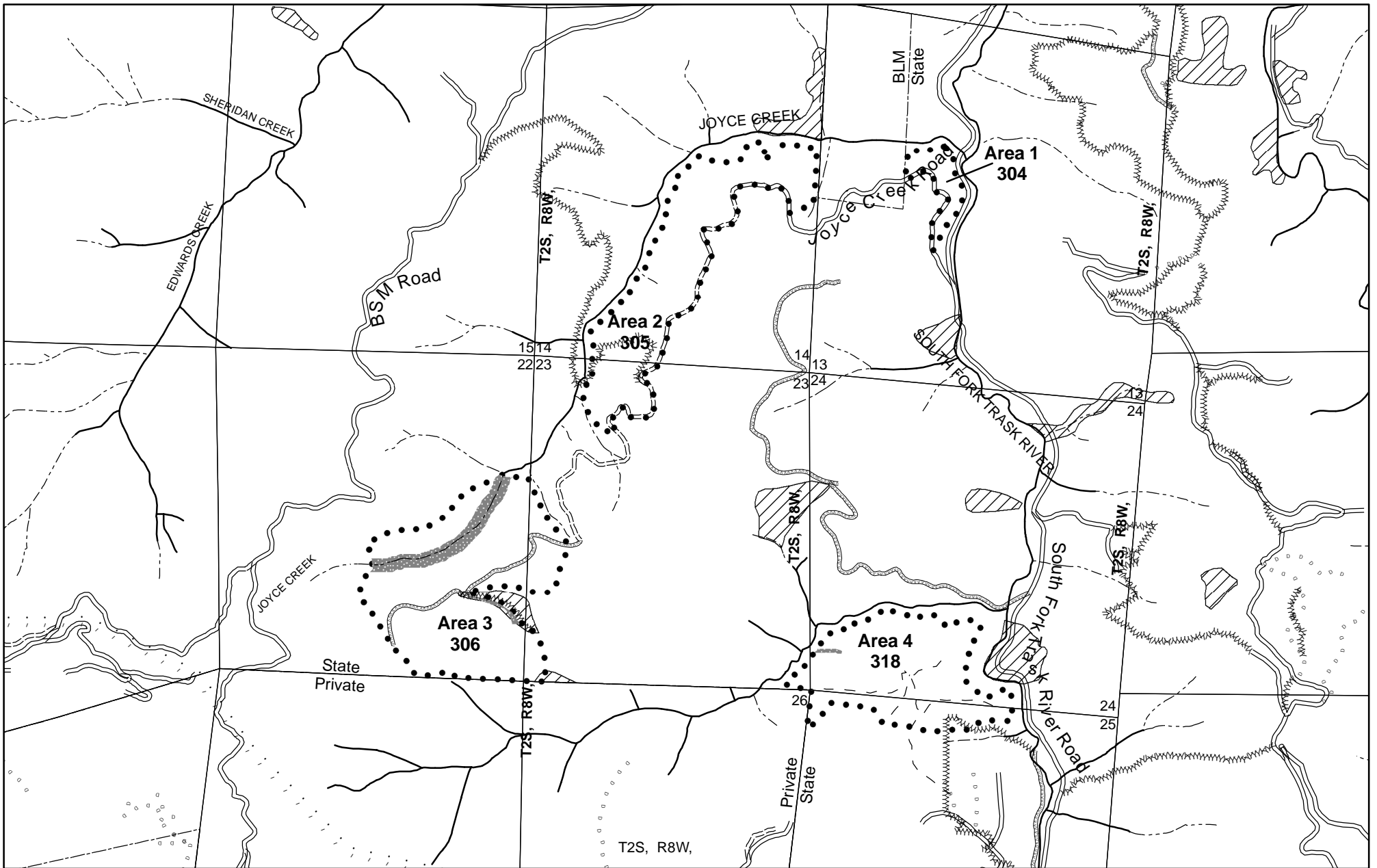
Portions of Sections 13, 14, 22, 23, 24 and 25
T2S, R8W, W.M.,
Tillamook County, Oregon

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

Tillamook District GIS
5/20/2009

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



3 -- Key Resources/Operationally Limited --
2010 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 13, 14, 22, 23, 24 and 25
 T2S, R8W, W.M.,
 Tillamook County, Oregon

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

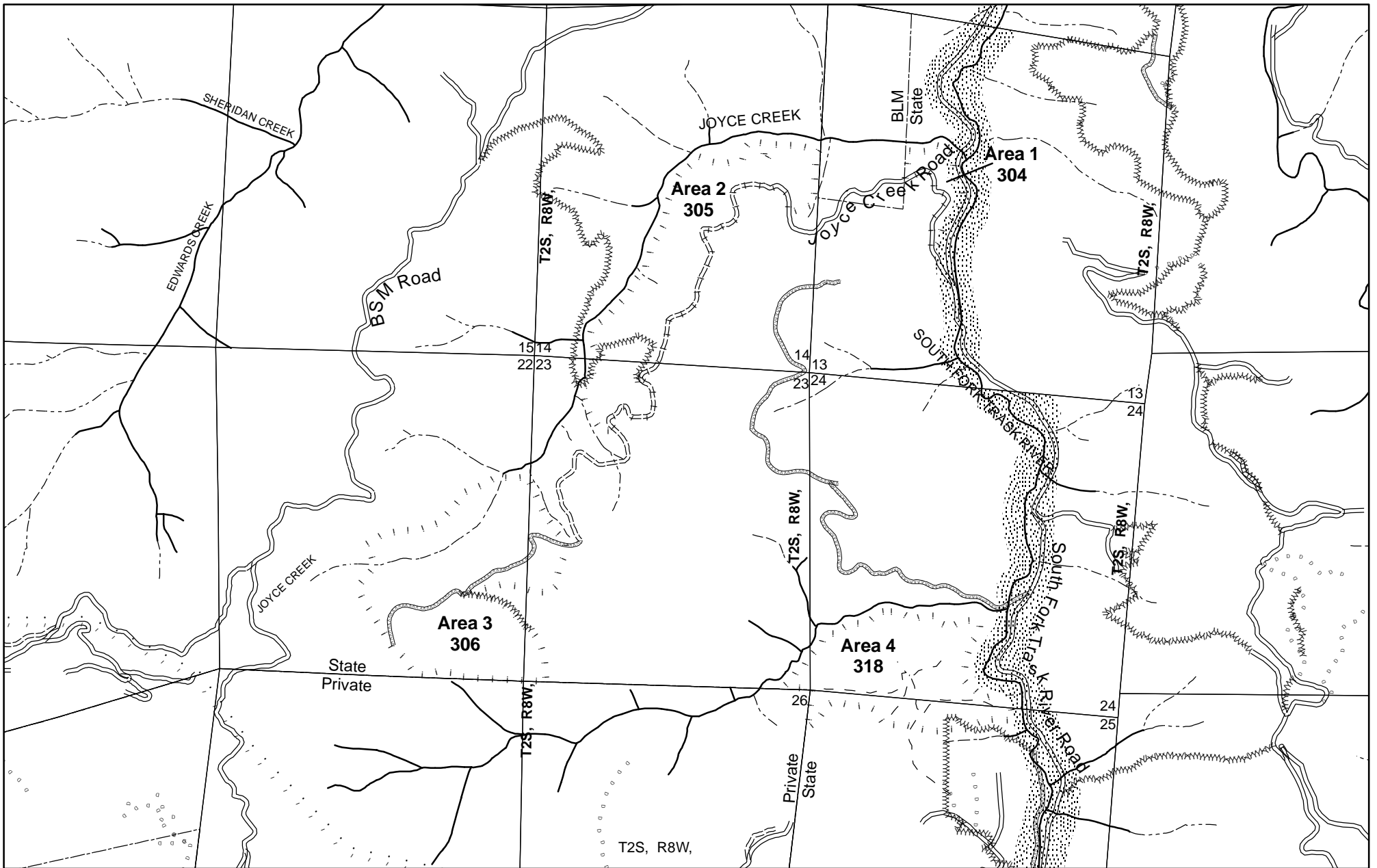
Tillamook District GIS
 6/20/2009

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

Buffer	Area boundary	Abandoned road
Special	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	

0 1,000 2,000 Feet



☐ Focused

- - - 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 1,000 2,000 Feet



3

Alder Joy -- Key Resources/Recreation -- 2010 SALE PLAN TILLAMOOK DISTRICT

Portions of Sections 13, 14, 22, 23, 24 and 25
T2S, R8W, W.M.,
Tillamook County, Oregon

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

Tillamook District GIS
3/20/2009

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