

Pre-Operations Report

Operation Name: Runyon Ex
County: Tillamook
Management Basin: Wilson

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Partial cut	41	39
2	Modified Clearcut	115	96
3	Modified Clearcut	6	6
4	Partial cut	71	68
5	Partial cut	51	50
6	Partial cut	102	96
7	Modified Clearcut	19	15
Total		405	370

1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers, reserve areas and non-required thinning areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have varied aspects and range from 10% to over 90%. Elevations range from 460 to 1,880 feet. The major soil types are Killam, Rye, and Enright.

The sale is located on the moderate to very steep slopes around Runyon Creek and other unnamed tributaries south of the Wilson River between Luebke Creek and Ben Smith Creek. There are steep to very steep side slopes throughout Areas 1,4, 5,6 and 7. The sale is underlain by sedimentary and igneous origin rocks, siltstones of the Yamhill Formation and diabase intrusives. Refer to the Overview of Harvest Operations in the Summary document for information.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	PC	125	DF/RA	49	17	170	114	45	39
		Target ³	DF/RA		20	100	29	15	
2	MC	126	DF/RA	49	15	241	191	61	96
3	MC	127	DF/RA	49	15	246	207	37	6
4	PC	128	DF/RA	49	15	224	186	59	68
		Target ³	DF/RA	49	20	113	42	21	
5	PC	129	DF/RA	49	16	234	185	66	50
		Target ³	DF	49	20	86	36	18	
6	PC	130	DF/RA	45	15	182	153	49	96
		Target ³	DF	45	18	78	44	19	
7	MC	131	DF/RA	49	19	135	78		15

1. The source of stand inventory information is from 163 field cruise plots taken in 2008.

2 The net acres are based on orthophotos and GIS and exclude roads, and stream buffers, reserve areas 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 sale areas burned in the 1933 (Tillamook), 1939 (Saddle Mountain), and 1945 (Wilson River) fires. The majority of Area 6 was planted in 1961 with portions planted in 1953 and a portion to the northeast replanted in 1974. The east portion of Area 2 and Area 3 were planted in 1952 and the western portion of Area 2 and Area 1 in 1958. Areas 4, 5 and 7 were planted in the mid to late 1950's. None of the areas have had any prior stand management.

The sale areas have been inventoried using the Stand Level Inventory (SLI) procedure and the stands have been identified as Understory (UDS). See Table 2 for specific stand data.

Areas 2 and 3 are very similar stand types that are comprised of a mix of alder and Douglas-fir. These species are arranged at various densities throughout the sale areas. There are many pockets of alder throughout the areas in various sizes (plus or minus 5 acres). There are alder pockets in Area 6 that may be larger than 5 acres. The actual size and location of these will be determined during sale prep and will be treated as modified clearcuts if they are actually larger than 5 acres.

Area 4 and Area 7 have been determined to have high landslide potential by the NWO Geo Tech. and Area 1 has visual impact concerns, in all three areas the alder and conifer will be thinned.

Area 5 is primarily a Douglas-fir plantation that has alder dominated draws and some scattered alder.

In all of the sale areas the Douglas-fir is overstocked and has slowed diameter and height growth. The smaller Douglas-fir have poor live crown ratios (less than 30%). Due to stand age, the alder in this stand has poor height and diameter growth. The alder in the east portion of Area 4 was aurally sprayed in the 1970's to release the planted conifer resulting in alder trees with short boles and many tops. There are a few scattered hemlock and cedar. Laminated root rot pockets have been identified and are being tracked in the root disease folder in special projects on GIS. Assess the need for alternative harvesting and reforestation strategies during the sale preparation process. Area 5 and Area 6 are separated by an area that was planted slightly earlier and commercially thinned in 1996. There are scattered "legacy" trees from before the fire in the Runyon Creek riparian area. The brush component in all the sale areas is comprised primarily of vine maple, sword fern, and huckleberry. Concentrations are greater in openings and in the riparian areas.

There are some large snags in various states of decay and/or some hard snags created from natural processes. Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some recent windthrow in decay classes 1 and 2 from the winter of 2008 / 2009 snow storm. Down wood inventory from SLI cruise plots show a total of 1,970 to 4,529 cubic feet per acre (28 to 118 cubic feet or this are in decay class 1 and 2, this amount has probably increased do to recent snow events). The number of snags greater than 24 inches in diameter ranged from five to seven per acre. Hard snags greater than 15" diameter in decay class 1 and 2 were below FMP targets.

III. DESIRED FUTURE CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	125	UDS	UDS	LYR	39
2	126	UDS	REG	LYR	96
3	127	UDS	REG	LYR	6
4	128	UDS	UDS	GEN	41
4	128	UDS	UDS	LYR	27
5	129	UDS	UDS	LYR	47
5	129	UDS	UDS	GEN	3
6	130	UDS	UDS	LYR	96
7	131	UDS	REG	LYR	1
7	131	UDS	REG	GEN	14

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.

Area 1: The DFC for this area is Layered (LYR). The vision for this stand is to have a mixed species stand, including Douglas-fir, western hemlock, spruce, cedar, and hardwoods. A new cohort of western hemlock, Douglas-fir, alder, spruce, and cedar after harvest will provide both horizontal and vertical diversity. After thinning in approximately 20-30 years the stand will have a mixture of sizes, species and densities and likely be in a Layered condition.

Area 2: The DFC for this area is LYR, and Older Forest Structure (OFS). The vision is for a mixed stand of Douglas-fir, western hemlock, cedar and alder. The stand will be composed of a mixture of species, size classes, and densities. After the regeneration harvest the stand will be composed of legacy structures retained from the present stand and a young cohort of Douglas-fir, western hemlock and cedar trees. The green trees retained on the site, including some hardwoods, provide a scattered overstory and also contribute to the down wood and snag recruitment as mortality occurs.

Area 3: The DFC for this area is LYR. The vision is for a mixed stand of Douglas-fir, western hemlock and alder. The stand will be composed of a mixture of species, size classes, and densities. After the regeneration harvest the stand will be composed of legacy structures retained from the present stand and a young cohort of Douglas-fir, western hemlock and cedar trees. The green trees retained on the site, including some hardwoods, provide a scattered overstory and also contribute to the down wood and snag recruitment as mortality occurs.

Area 4: The DFC for this area is GEN and LYR. This stand is on a pathway that maintains productivity. This stand will be managed for stand density by providing more growing space while capturing anticipated tree mortality in order to allow for individual tree growth as well as developing understory diversity

Area 5: The DFC for this area is General (GEN), and OFS. The vision is for a mixed stand of Douglas-fir, western hemlock and alder. The stand will be composed of a mixture of species, size classes, and densities. A new cohort of western hemlock, alder, spruce, and cedar in the alder clearcut areas and larger gaps will provide both horizontal and vertical diversity. After thinning in approximately 20-30 years the stand will have a mixture of sizes, species and densities and likely be in a Layered condition. Periodic thinnings will produce a multilayered stand with some of the larger tree trees approaching 32 inches in diameter. In about 60 years there is a high probability that this stand will meet the requirements of OFS.

Area 6: The DFC for this area is Older Forest Structure (OFS). The vision is for a mixed stand of Douglas-fir, western hemlock and alder. The stand will be composed of a mixture of species, size classes, and densities. A new cohort of western hemlock, alder, spruce, and cedar in the alder clearcut areas and larger gaps will provide both horizontal and vertical diversity. After thinning in approximately 20-30 years the stand will have a mixture of sizes, species and densities and likely be in a Layered condition. Periodic thinnings will produce a multilayered stand with some of the larger tree trees approaching 32 inches in diameter. In about 60 years there is a high probability that this stand will meet the requirements of OFS.

Area 7: The DFC for this area is GEN. Because is mostly alder dominated the present stand is not a good candidate for establishing a pathway that maintains productivity. After the regeneration harvest the stand will be composed of legacy structures retained from the present stand and a young cohort of Douglas-fir, western hemlock and cedar trees. The green trees retained on the site, including some hardwoods, provide a scattered overstory and also contribute to the down wood and snag recruitment as mortality occurs.

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.**

Areas 1 and 4 are thinnings that will retain alder in the thinning prescription, Douglas-fir and alder in these areas will thinned to a range of 100 to 120 square feet of average basal area. All other hardwood and conifer species will be reserved.

This will remove the overstocked Douglas-fir and slow growing alder. This prescription will help the stand begin to move towards a more complex structure. The remaining Douglas-fir should respond favorably to thinning increasing growth and out competing remaining alder. The alder over time will start to fall apart and create a more decadant structure

In Areas 2, 3 and 7, a modified clear cut will remove the alder and smaller diameter Douglas-fir. Approximately 10 of the larger Douglas-fir per acre will be retained.

This will remove the smaller Douglas-fir that has poor live crown ratios (approximately 16 inches DBH). The remaining larger Douglas-fir will be used for overstory structure, snag creation and downed wood retention goals. This area will be reforested with a mixture of conifer species. A precommercial 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.

In Areas 5 and 6 a thinning prescription will be used to reduce the Douglas-fir stocking which will maintain the crown ratios, stand vigor, and develop healthier and larger Douglas-fir in the residual stands. The merchantable alder will be clearcut to create gaps. This will remove the overstocked Douglas-fir and slow growing alder. The harvest prescription is designed to achieve variable densities throughout the area. The resulting stand will have Douglas-fir pockets of various sizes and large residual Douglas-fir scattered along the edges of the alder clearcuts. This is a first entry harvest that will begin to move the stand along the pathway to a more complex structure. The openings and gaps will allow for understory re-initiation of shrubs and tree species creating horizontal and vertical diversity. Another thinning will likely be needed in 15 to 20 years to keep this stand on a trajectory to complex stand structure. At this time managers will review density, stand health, and landscape goals to decide future management prescriptions.

Green Tree, Down Wood and Snag Strategies

A variety of methods will be used to achieve green tree retention requirements. These residual green trees will supplement the future stand by promoting growth of dominant/co-dominant leave trees. Small non-merchantable hardwood and conifer will also be retained where possible. These leave trees function as future source of snags and down wood recruitment across the landscape. Green trees will be left on precipitous slopes, headwalls, and those areas not reached by conventional logging methods. Stream buffers adjacent to small perennials and the outer Riparian Management Area (RMA) of Runyon Creek will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

Existing down wood will be left in the sale areas. 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 all harvest areas to enhance down wood levels. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags and down wood. Tops resulting from ground yarding will also be left in the unit. Down wood in decay class 1 may be created in Areas 1, 2, 3, 4, 6 and 7. A decision about Down Wood creation will be determined during sale preparation process.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities (rub trees, lift trees, or tail trees) and over time by natural processes. Snags will be created in Areas 1, 2, 3, 4, 6 and 7. A prescription will be developed after the cruise has been completed.

Due to the size of the trees in Area 5, it is unrealistic to expect that the snag and down wood targets in the FMP will be met with this operation. During sale layout an assessment will be done to help determine the best green tree retention prescription to help meet these goals in the future.

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:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	4738	1350	6088
Stumpage Value (\$/MBF) *	\$125	\$200	
Estimated Gross Value	\$592,250	\$270,000	\$862,250
		Project Costs:	\$370,000
		Estimated Net Value:	\$492,250

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

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Highway 6 and Runyon Creek Road. An easement will be needed to use the portion of Runyon Creek Road across private timberland. This road is currently impassable at the Highway 6 junction. Runyon Creek Road incurred damage during winter storm events and will require extensive reconstruction for the first 0.5 miles across private ownership. ODF will cost share with landowner to repair road for timber access. See maps for specific road locations and conditions.

Approximately 2.0 miles of existing surfaced road will be improved, which includes grading, rocking, widening, culvert replacement, spot rocking, sidecast pullback, and/or adding new culverts. This work will bring all roads up to standards described in *the Forest Roads Manual*. Storm damage repair to the private road access due to the November 2006 event may require a fish culvert at the bottom of Runyon Creek. Cost-share for this improvement or alternative temporary passage over the creek will be evaluated.

Approximately 3.3 miles of rocked road and 0.12 miles of dirt road will be constructed in order to provide access to harvest areas.

Following harvest these roads will be blocked with a gate across private land at the bottom which will limit public access. After reforestation the 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.

Area 1, 4, 5, 6 and 7 will be predominantly cable yarding areas. Areas 2 and 3 are approximately 45% ground yarding and 55% cable yarding.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct			3.3	0.12
Improve			2.0	
Maintain ²				
Close/Block ³			3.3	0.12
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.

Runyon Creek is a medium Type F stream adjacent to Areas 2, 3, 4 and 7. A medium Type F tributary to Ben Smith Creek is adjacent to Area 1 and 4. An unnamed assumed small Type F tributary to the Wilson River is adjacent to Areas 1 and 2. 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 Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys prior to sale layout. Streams of unknown status and assumed Type F 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.

The ODFW fish biologist will work with ODF to identify stream enhancement projects in Ben Smith Creek.

The entire sale area is within the Ben Smith sub-basin. This sub-basin has been identified as a Salmon Anchor Habitat (SAH) Basin. The SAH Basin Strategies will be used in addition to the FMP Riparian Strategies at the time of sale layout and contract development. See the Salmon Anchor Summary Table for tracking of acres managed in each basin.

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.

Perennial Small Type N Streams

A 25’ no-harvest buffer will be established along the small type N streams. Additional trees including some wildlife trees will be retained resulting in, on average, a 65 foot buffer.

Small type N streams just above the F/N boundary

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.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist. Surveys for marbled murrelets are not required due to the absence of potentially suitable habitat. Spotted owl surveys 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*). Potential bald eagle nesting habitat adjacent to the sale areas has been buffered and is not included in the harvest area. The Area Biologist is developing a site plan for a bald eagle nesting territory along Runyon Creek adjacent to Areas 1 and 2 of the sale. The plan protects and buffers potential nest trees in the area. Seasonal restrictions will be required on operations within ¼ mile of the active nest tree or perch trees during the critical period of use (January 1 through August 31). The plan will also address any habitat enhancement activities which can be accomplished through stand management activities within the identified nesting territory. The Area Biologist will be consulted throughout the sale preparation and administration processes.

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.

Wilson

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

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There are steep and very steep side slopes in Areas 4 and 6. The initial risk assessment by the geotechnical specialist for Area 6 is moderate, for Area 2 is low, and for Areas 4, 5 and 7 is high. The geotechnical specialist was consulted during the initial sale layout field work. Another consultation may be necessary during the next sale prep field work period.

The sale areas have been identified as being within the Ben Smith SAH Basin and the most current slope stability SAH Strategies will be used at the time of contract development. See the Summary Document for more information.

X. RECREATION RESOURCES:

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator.

Coordination with the Tillamook Recreation Coordinator, Tillamook Forest Center (TFC), and interpretive staff will be utilized to develop a public safety plan to be implemented during the harvest operations. Seasonal and daily operating restrictions may be utilized to minimize disturbance to the public. Opportunities for harvest and reforestation prescriptions which would enhance interpretive education opportunities will be evaluated during sale preparation. The District Recreation Coordinator will be consulted throughout the sale preparation and administration processes.

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

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary. The district will consult the Public Use Coordinator for appropriate protection and tracking if any potential sites are found.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 1, high sensitivity for portions visible from Highway 6. Highway 6 is a Designated Scenic State Highway. The timber sale boundary will be posted outside the 150 foot visually sensitive corridor.

These areas will be reviewed by the Public Use Coordinator to determine methods to minimize visual impact. The remainder of the sale acreage has a visual classification of Level 3, low sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

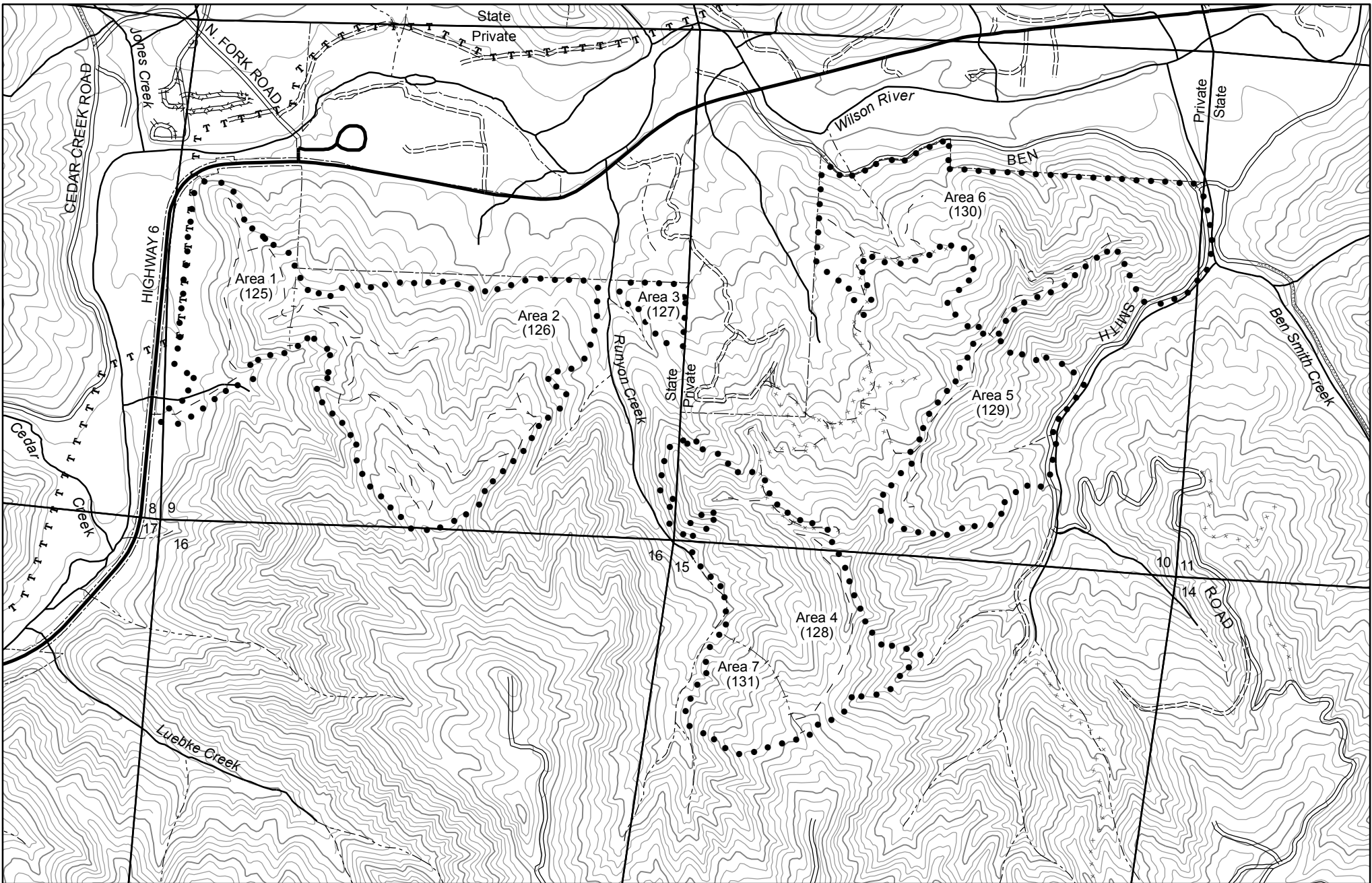
The Bonneville Power Administration (BPA) has transmission lines adjacent to Area 1. The spur road to access the sale will go under these lines. The BPA should be contacted during sale prep to review logging safety and access issues when working in proximity to transmission lines.

In order to harvest this sale area a special use permit will need to be obtained for tailholds that may be needed on private land.

There are permanent inventory plots within the sale area. Permanent plot markings will be protected according to guidelines.

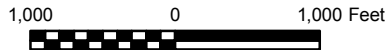
XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale area contains Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized. The sale area contains Focused, Wildlife Habitat because it is within the Ben Smith SAH. The sale areas all contain Focused, Visual (See Section XI, Scenic Resources) and Focused, Recreation (See Section IX, Recreation Resources). 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
- == Surfacd road
- State/Federal highway
- Legacy road
- x x x Blocked road
- - - Road construction
- County road
- T T Transmission line



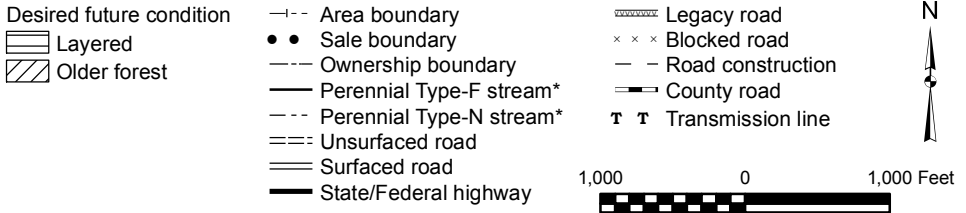
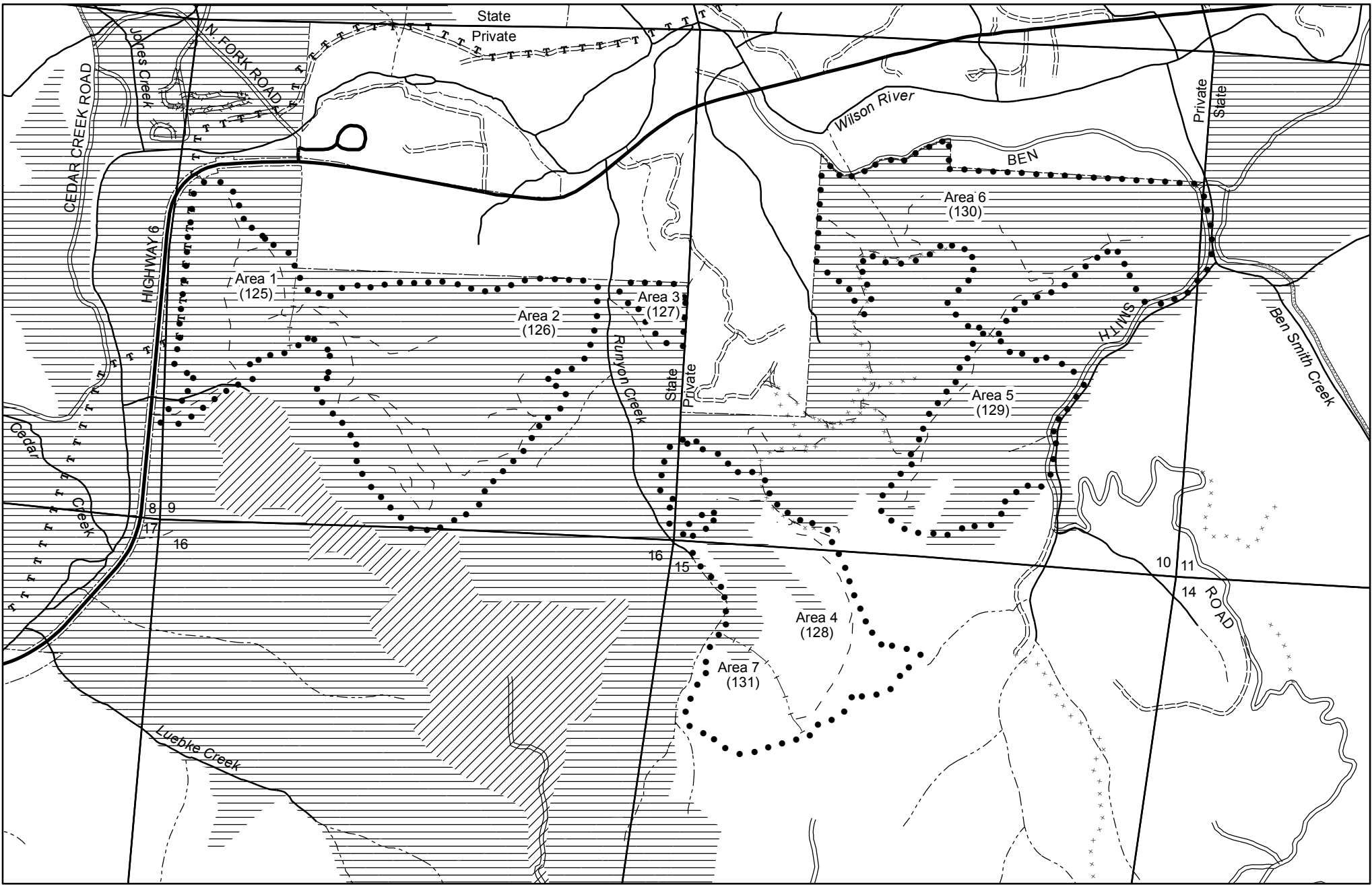
**Runyon Ex
-- Topography --
2010 SALE PLAN
TILLAMOOK DISTRICT**
Portions of Sections 9, 10, 11,
and 15, T1N, R7W, W.M.,
Tillamook County, Oregon

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

Tillamook District GIS
03/11/2009

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	Partial Cut
2	Modified Clearcut
3	Modified Clearcut
4	Partial Cut
5	Partial Cut
6	Partial Cut
7	Modified Clearcut



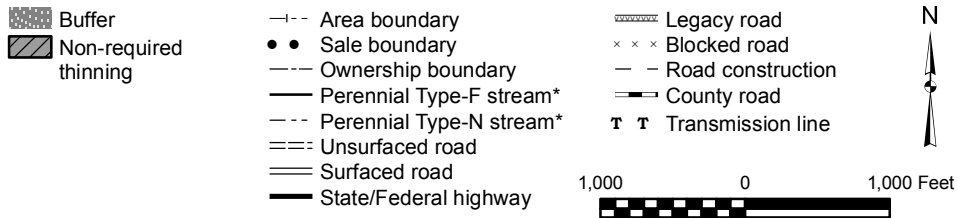
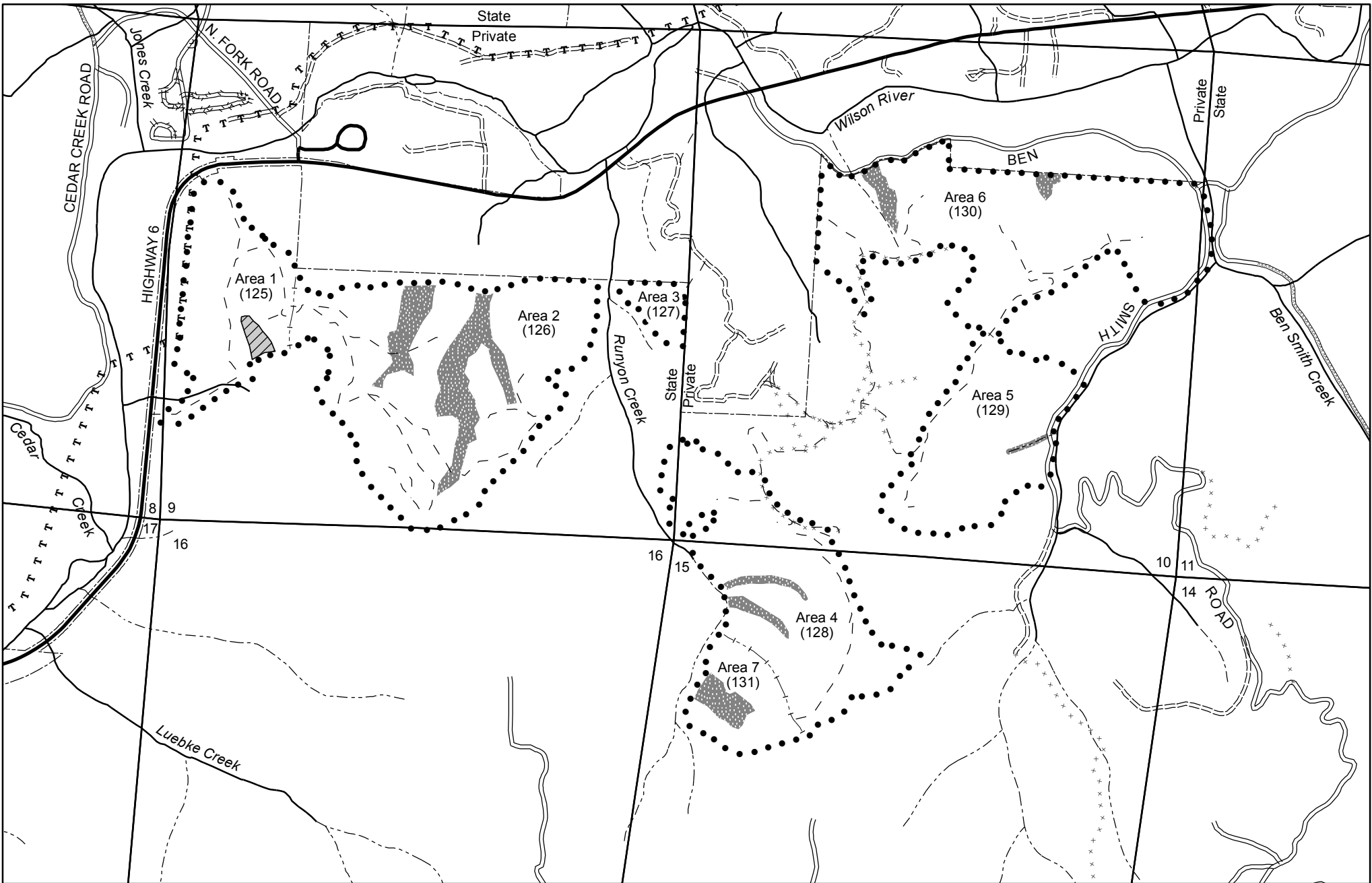
Runyon Ex
-- Current and Future Condition --
2010 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 9, 10, 11,
 and 15, T1N, R7W, W.M.,
 Tillamook County, Oregon

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

Tillamook District GIS
03/12/2009
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	Partial Cut
2	Modified Clearcut
3	Modified Clearcut
4	Partial Cut
5	Partial Cut
6	Partial Cut
7	Modified Clearcut

Attachment B

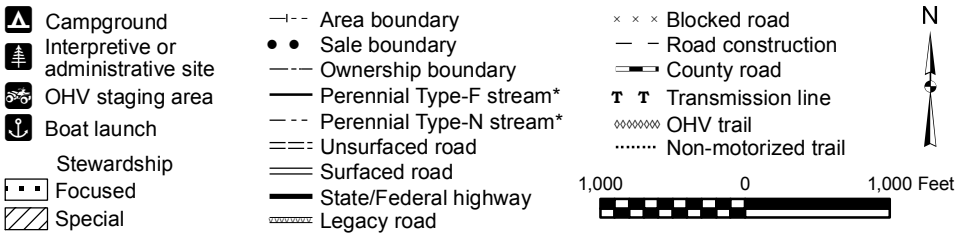
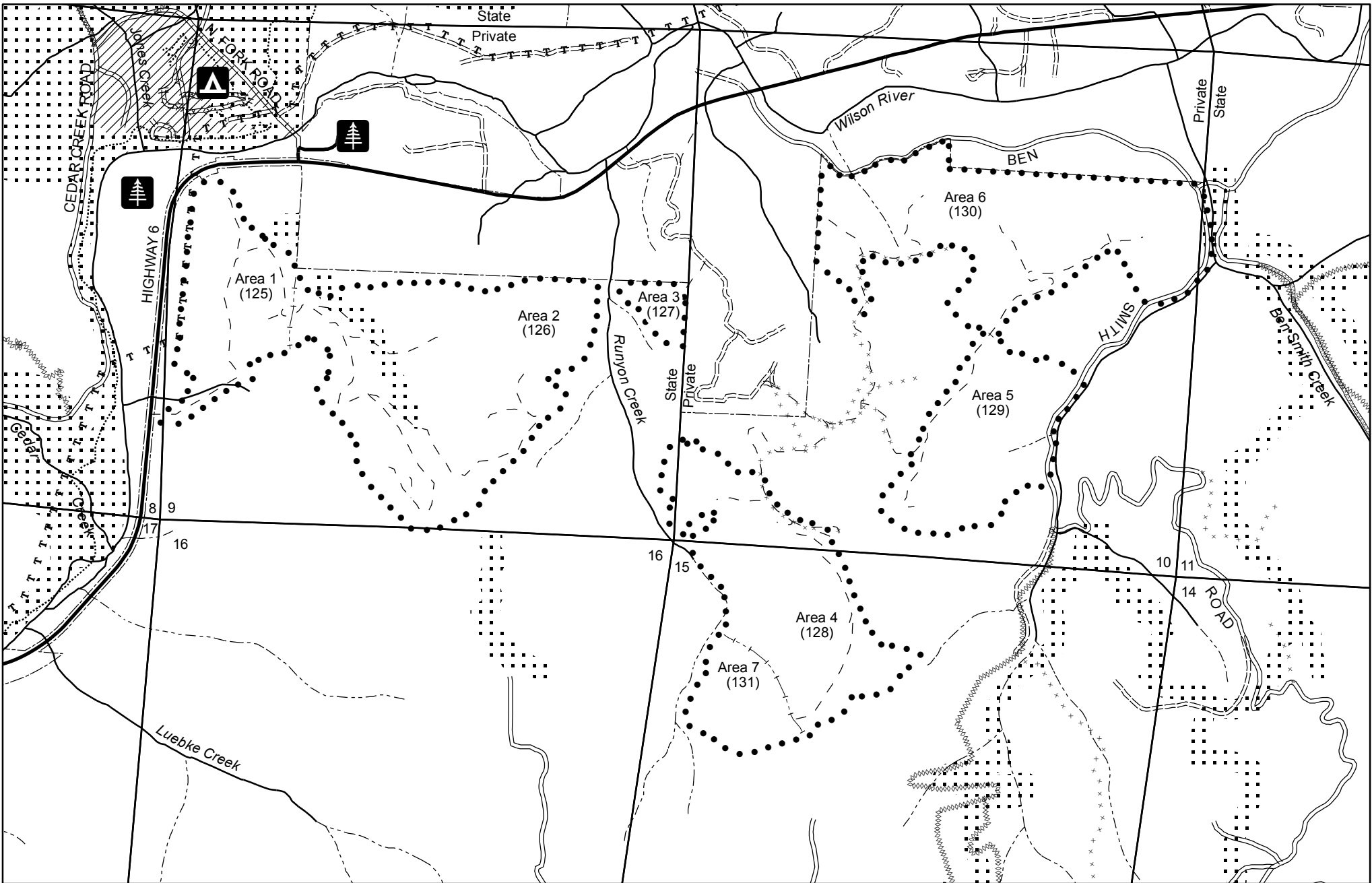


Runyon Ex
-- Key Resources --
2010 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 9, 10, 11,
 and 15, T1N, R7W, W.M.,
 Tillamook County, Oregon

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

Area	Type of Operation
1	Partial Cut
2	Modified Clearcut
3	Modified Clearcut
4	Partial Cut
5	Partial Cut
6	Partial Cut
7	Modified Clearcut

Tillamook District GIS
 03/11/2009
 This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

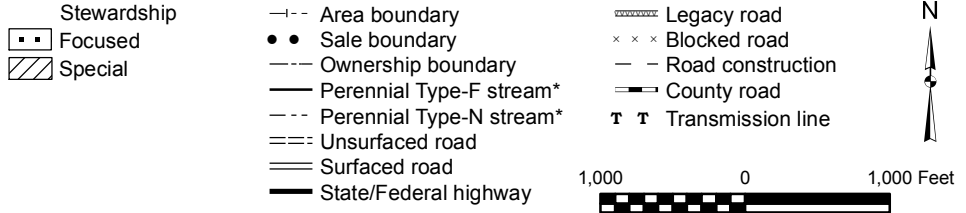
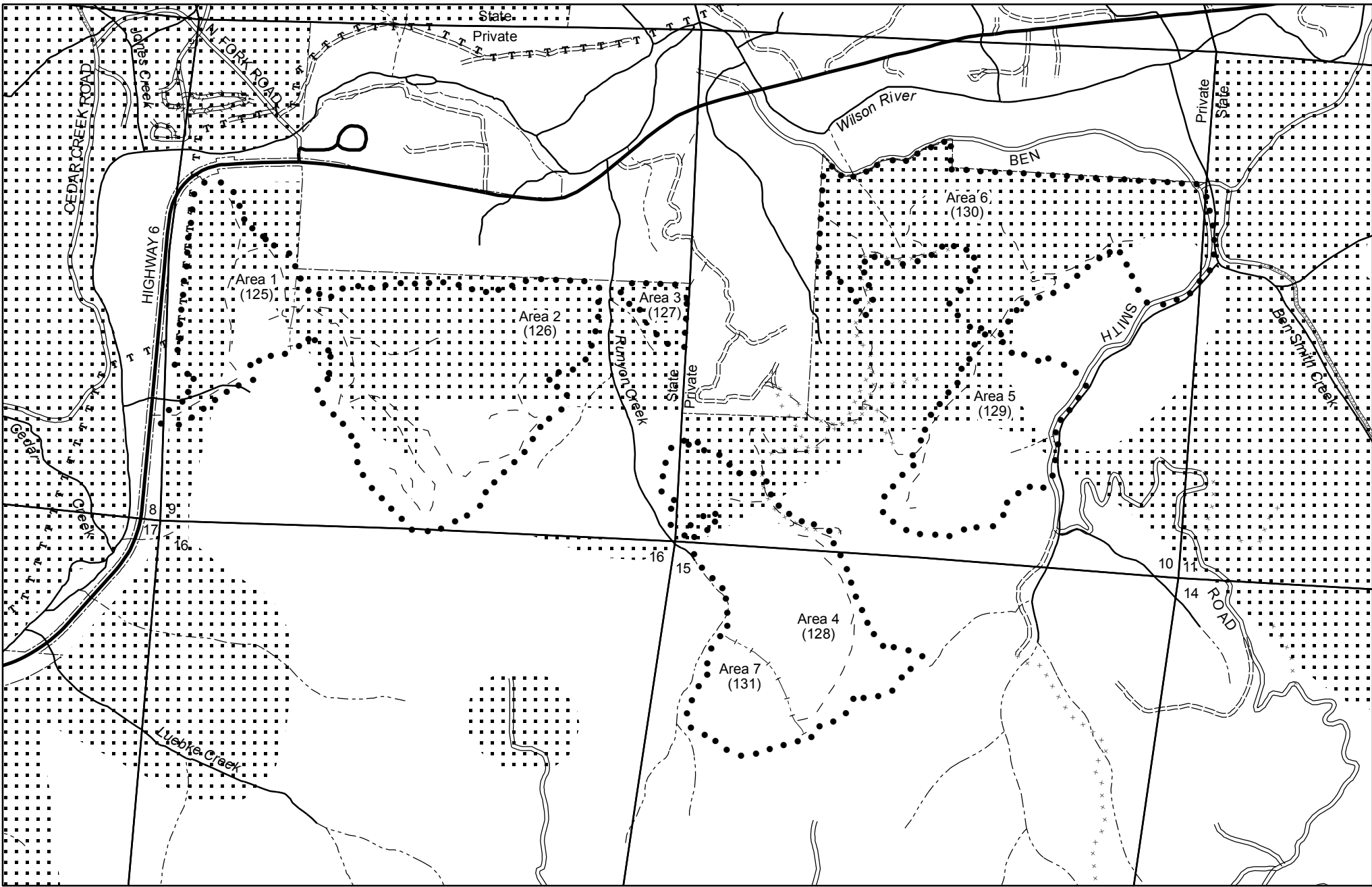


Runyon Ex
-- Key Resources/Recreation --
2010 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 9, 10, 11,
 and 15, T1N, R7W, W.M.,
 Tillamook County, Oregon

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

Tillamook District GIS
 03/11/2009
 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	Partial Cut
2	Modified Clearcut
3	Modified Clearcut
4	Partial Cut
5	Partial Cut
6	Partial Cut
7	Modified Clearcut



**Runyon Ex
-- Key Resources/Visual --
2010 SALE PLAN
TILLAMOOK DISTRICT**

Portions of Sections 9, 10, 11,
and 15, T1N, 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
03/11/2009
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	Partial Cut
2	Modified Clearcut
3	Modified Clearcut
4	Partial Cut
5	Partial Cut
6	Partial Cut
7	Modified Clearcut