

Pre-Operations Report

Operation Name: East Butte
County: Tillamook
Management Basin: Wilson

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified clearcut	130	112
2	Modified clearcut	85	83
Total		215	195

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, primarily east facing. Slopes range from 20 to more than 90%. Elevations range from 1,000 to 2,050 feet. The major soil type is Humbug, with minor amounts of Nedonna on the ridges. The sale is located in the headwaters of Wolf Creek and Ryan Creek below the ridgeline divide between the North Fork of the Wilson River and the Little North Fork Wilson River. There are steep to very steep side slopes and draws throughout both areas. The sale is underlain by igneous origin rocks of the Tillamook Volcanics Formation. Refer to the Overview of Harvest Operations in the Summary document for information.

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	104	DF/RA	52	13	119	121	32	112
2	MC	105	DF	52	10	190	340	60	83

1. The source of stand inventory information is from field reconnaissance cruise plots taken in 2006 and SLI in 2003.

2. The net acres are based on orthophotos and GIS and exclude roads, stream buffers, reserve areas and non-required thinning areas. 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 areas burned in the 1933 (Tillamook) and 1939 (Saddle Mountain) fires. Approximately two acres in the south portion of the sale also burned in the 1945

(Wilson River/Salmonberry) fire. The area was planted in 1953 to 1955 and has had no prior stand management.

Stand Level Inventory (SLI) has not been completed on these sale areas. The stands in the sale areas are classified as 100% Closed Single Canopy (CSC) according to the district stand summary information (1999). Both Areas 1 and 2 will be further evaluated (as defined by the July 2004 guidance, “*Planned Sale Inventory Requirements – Alternative to Full Stand Level Inventory*”). See Table 2 for specific stand data.

Areas 1 and 2 are primarily Douglas-fir plantations that have alder dominated riparian areas. There are also several small pockets of alder (less than 1 acre) scattered throughout both areas. Area 2 also has two large alder areas that are approximately 3 to 5 acres.

The Douglas-fir in both of these areas have symptoms of Swiss needle cast (SNC) and have crown ratios less than 30%, resulting in slowed diameter and height growth. The Douglas-fir in Area 2 is also overstocked (SDI 60%). A pocket of laminated root rot was identified in Area 1. The alder was aerially sprayed in the 1970’s to release the planted conifer, resulting in alder trees with short boles and many tops. No other significant insect or disease problems have been discovered at this time.

The brush component in both areas is comprised primarily of swordfern, salmonberry and huckleberry. Salmonberry is concentrated in draws and alder patches with swordfern as the primarily understory under the denser conifer.

There are some large snags in various states of decay and 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 windthrow in decay classes 1 and 2. SLI cruise plots in the vicinity of the sale areas identified 6,277 cubic feet of total down wood per acre of which 16 cubic feet was in decay classes 1 and 2. Seven snags per acre were identified over 12 inches in diameter with none greater than 15 inches in diameter in decay class 1 and 2. These numbers are above the FMP targets in total down wood and snags but below the target for decay class 1 and 2 structures.

III. DESIRED STAND CONDITION AND VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	104	CSC	REG	LYR	112
2	105	CSC	REG	LYR	83

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

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

The DFC for both of these areas is Layered (LYR). Because of small live crown ratios, slow growth rates, and Swiss Needle cast; the present stand is 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 stand will be composed of legacy structures retained from the present stand and a young cohort of Douglas-fir, western hemlock and alder trees. The green trees, including some hardwoods, retained on the site, provide a scattered overstory and also contribute to the down wood and snag recruitment as mortality occurs. In approximately 60 years the combination of residual trees, multiple species and trees size will provide a Layered 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.

Areas 1 and 2: Merchantable Douglas-fir and red alder will be harvested. A diameter limit will be used to reserve the largest diameter Douglas-fir (approximately 7 to 9 and acre). All other species will be reserved.

This harvest will remove the slow growing sprayed alder and the Douglas-fir that have poor crown ratios and slow growth. The residual trees will be distributed both in groups and scattered across the area. A component of alder and other conifer will be retained in the sale areas and stream buffers. 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 at age 40 will produce a stand that has an average diameter of about 16 inches and 125 trees per acre. This will keep the stand on the desired trajectory, and produce revenue. Other treatments, such as the creation of small gaps, may be considered at this time to increase diversity. At about 60 years the stand will have an average diameter of 20 inches. At this time it will be evaluated for Layered characteristics and another thinning will likely be prescribed.

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 legacy trees, 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 Wolf Creek and the Type F, unnamed tributary to Wolf 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 harvest areas.

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.

Due to the size of the trees in these areas 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"/>	<input checked="" type="checkbox"/>
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	1944	315	2259
Stumpage Value (\$/MBF)*	\$250	\$250	
Estimated Gross Value	\$486,000	\$78,750	\$564,750
		Project Costs:	\$45,950
		Estimated Net Value:	\$518,800

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Cedar Butte Road, an all weather, crushed rock road. See maps for specific road locations and conditions.

Approximately 0.09 of existing unsurfaced 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*.

Approximately 0.63 miles of road will be reconstructed and 0.8 miles of road will be constructed in order to provide access to cable yarding areas. It is anticipated that approximately 0.4 miles of new construction will be closed with the sale. Following reforestation the remaining roads within the sale areas will be reviewed for closure. See summary document for more information on road closure. No other project work is currently planned for this sale. The operation will be 100% cable yarding.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct			0.80	
Improve			0.72	
Maintain ²		3.5		
Close/Block ³			0.40	
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.

Wolf Creek (medium) and an unnamed tributary to Wolf Creek (small) are Type F streams that are within or adjacent to the sale areas. 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 where possible.

The Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys prior to sale layout. Streams of unknown 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.

Approximately 29 acres of the sale are located in the Little North Fork Wilson 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.

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*).

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

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There are steep and very steep side slopes and draws throughout Areas 1 and 2. The initial risk assessment by the geotechnical specialist for the sale is high. The geotechnical specialist will be consulted during sale layout field work.

Portions of the sale are within an area identified as a 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.

Cedar Ridge is an Off Highway Vehicle (OHV) trail that is within the sale areas. Short term closure of this trail will occur to facilitate logging and public safety. Portions of these trails will be improved for logging access. A plan will be developed in conjunction with the District Recreation Coordinator to address these situations. Slash will be removed from the trails upon completion of the operation. Recreational use common to this area includes hunting 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 sites are noted during sale preparation or administration.

XII. SCENIC RESOURCES:

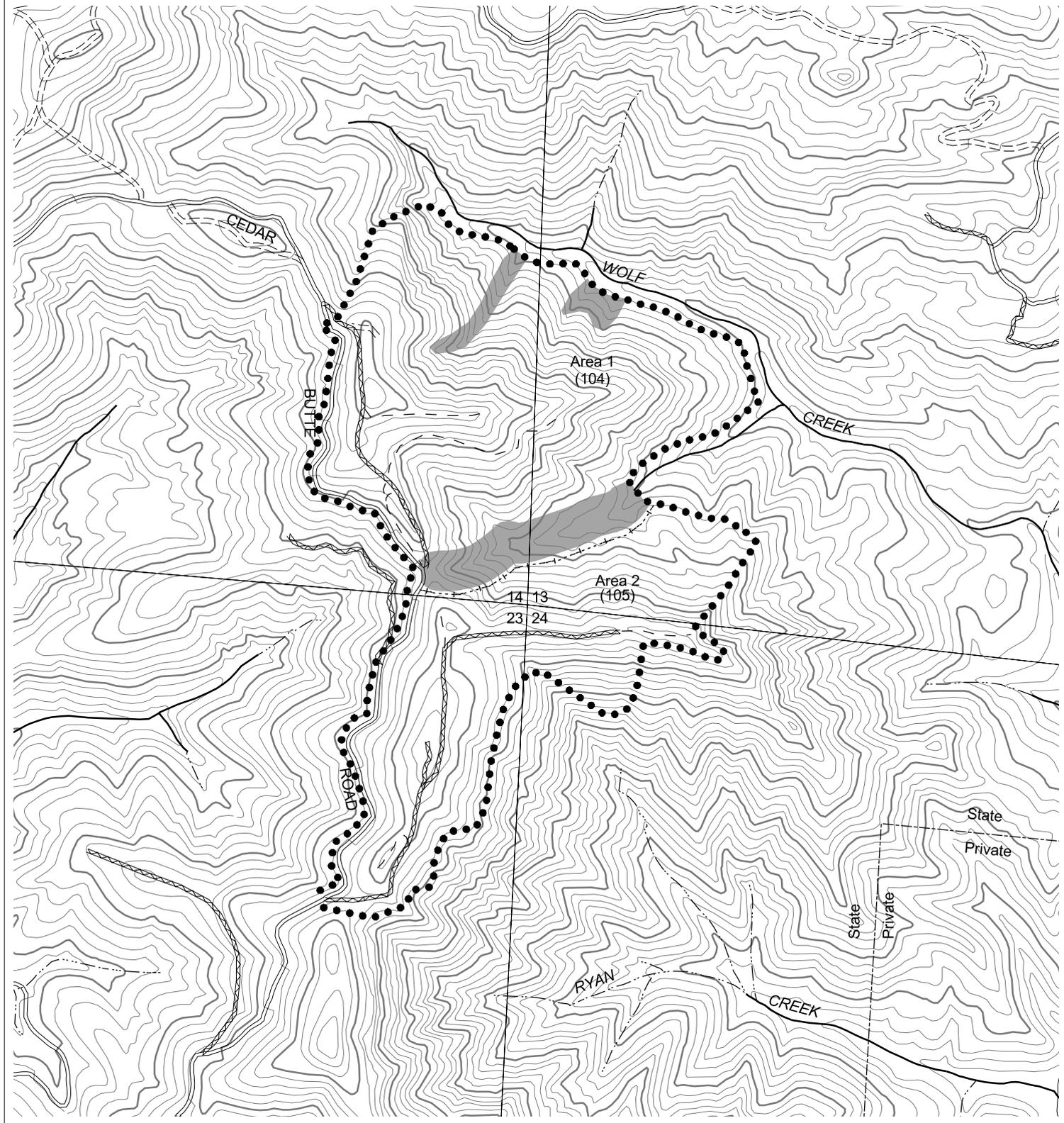
The sale areas have a visual classification of Level 3, low sensitivity. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

Approximately five acres of Area 1 is currently listed in LMCS as Operationally limited, Silviculturally non-productive land. This acreage will be evaluated further and may be removed from the sale if this is a valid designation.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale areas contain Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized. Both areas contain Focused, Recreation. See Section X, Recreation Resources. Area 1 contains Special, Operationally Limited. See Section XIII, Other Resource Consideration. 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
 - ==== Legacy road
 - xxxxxx Blocked road
 - - - Road construction
 - County road
 - T T Transmission line

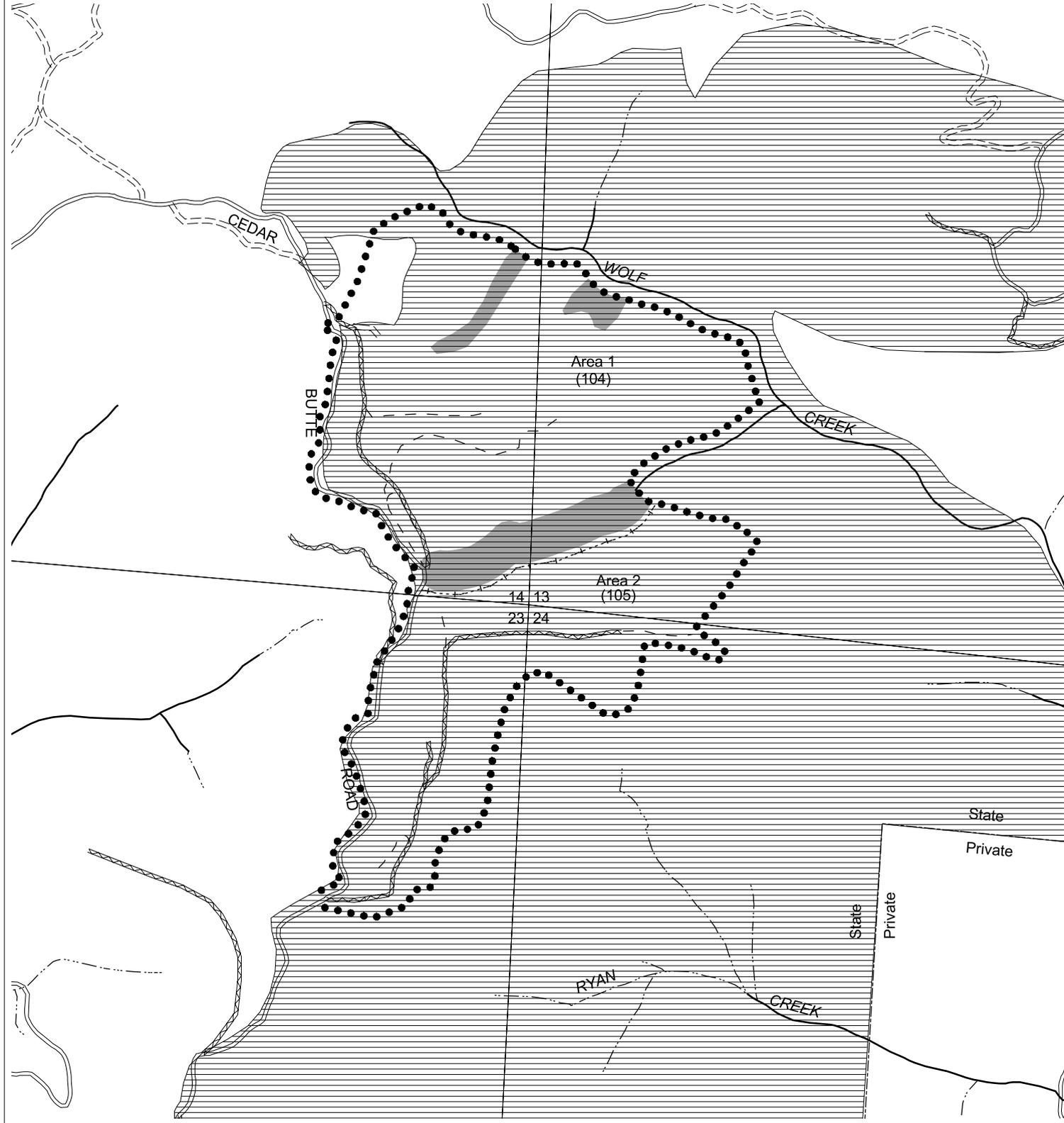
East Butte
-- Topography --
2008 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 13, 14, 23,
 and 24, T1N, R8W, W. M.
 Tillamook County, Oregon

Area	Type of Operation
1	Modified clearcut
2	Modified clearcut



Tillamook District GIS
 02/06/2007
 This product is for informational use and
 may not have been prepared for, or suitable
 for legal, engineering, or surveying purposes.

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



East Butte

**-- Current and Future Condition --
2008 SALE PLAN
TILLAMOOK DISTRICT**

Portions of Sections 13, 14, 23,
and 24, T1N, R8W, W. M.
Tillamook County, Oregon

Area	Type of Operation
1	Modified clearcut
2	Modified clearcut

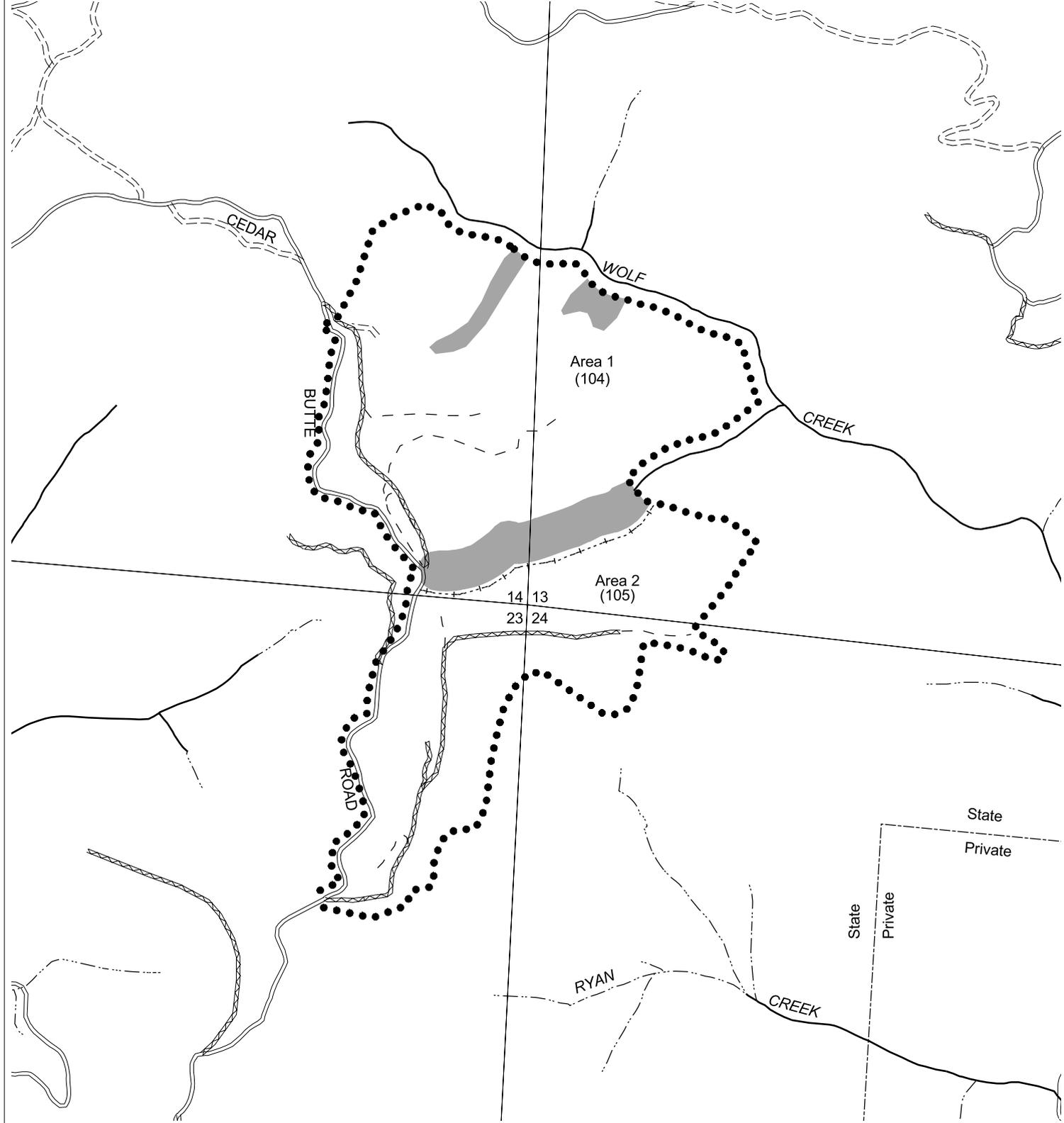
- Desired future condition
- Layered
 - Older forest
 - Area boundary
 - Sale boundary
 - Ownership boundary
 - Perennial Type-F stream *
 - Perennial Type-N stream *
 - Unsurfaced road
 - Surfaced road
 - State/Federal highway
 - Legacy road
 - Blocked road
 - Road construction
 - County road
 - Transmission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



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- Buffer
- Area boundary
- Non-required thinning
- 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

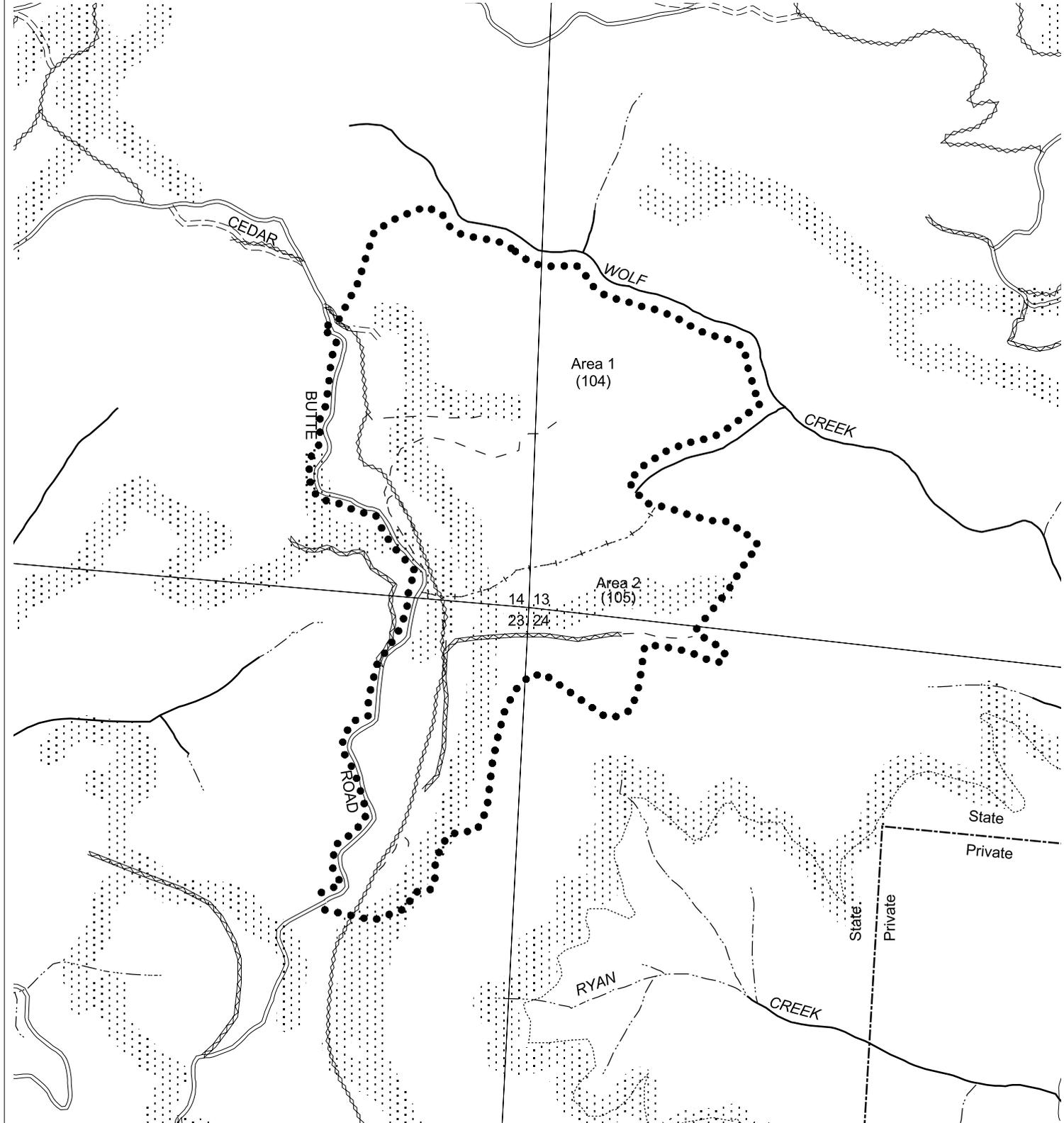
East Butte
-- Key Resources --
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1000 0 1000 Feet

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Area	Type of Operation
1	Modified clearcut
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- Campground
- Day Use Site
- OHV Staging Area
- Trail Head
- Boat Launch
- Interpretive or Administrative Site
- Stewardship
- Focused
- Special
- OHV trail
- Non-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

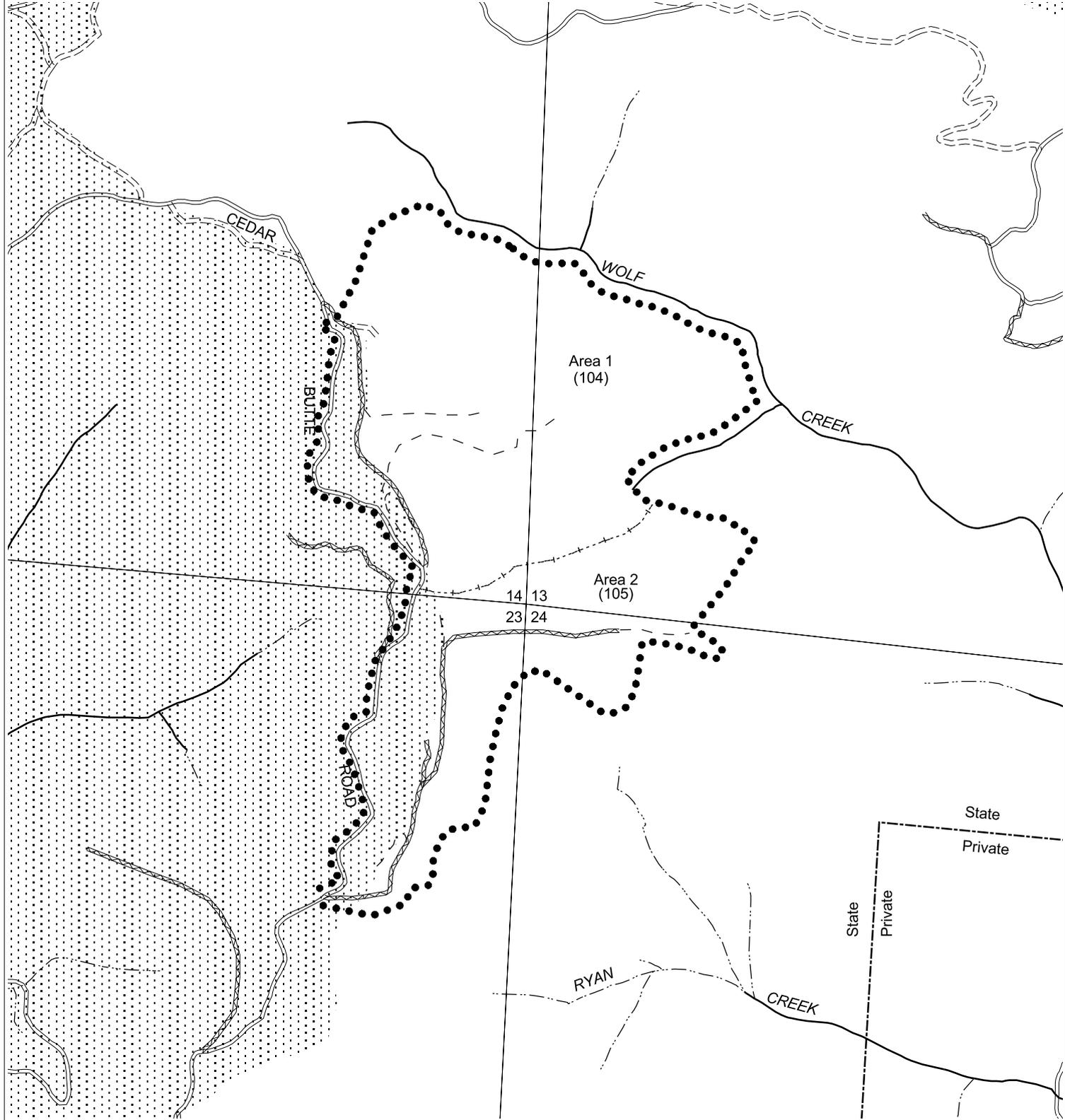
East Butte
--Key Resources/Recreation --
2008 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 13, 14, 23,
 and 24, T1N, R8W, W. M.
 Tillamook County, Oregon



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Area	Type of Operation
1	Modified clearcut
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- Stewardship**
- Focused
 - Special
- 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

East Butte
-- Key Resources/Wildlife Habitat --
2008 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 13, 14, 23,
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 Tillamook County, Oregon



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1	Modified clearcut
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