

# Pre-Operations Report

**Operation Name: McKenney Flats**

**Legal: Portions of Sections 8, 9, 16, and 17, T3N, R8W, W.M.,  
Tillamook County, Oregon**

**Management Basin: Lower Nehalem**

**SAH Status: All acres Cook Creek sub-basin**

**FDF: 100% CSL: 0%**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	MC	111	106
2	MC	66	60
3	MC	85	83
4	PC	148	139
Total		410	388

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

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

Slopes have a predominant northern aspect and range from 20% to 90%. Elevations in Areas 1 and 2 range from 400 to 1520 feet and in Area 3 range from 1440 to 2320 feet and Area 4 range from 1560-2800 feet. The major soil types are Jewell, Osweg, Dovre, Rye and Killam.

## **II. CURRENT STAND CONDITION:**

**Table 2. Stand Inventory Information<sup>4</sup>**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	MC	513	DF/RA	50	12.8	220	248	61	106
2	MC	514	DF/RA	50	12.8	220	248	61	60
3	MC	515	DF/RA	50	12.8	220	248	61	83
4	PC	516	DF/WH/RA	50	12.9	227	250	63	139
4	PC	Target <sup>3</sup>	DF/WH/RA	50	15.3	120	99	30	139

*1. The source of stand inventory information is from adjacent sale info.*

*2. The net acres are based on GIS and exclude roads, and stream buffers. 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 were burned during the 1933 Tillamook Fire and the 1945 Wilson River and Salmonberry Fires. Portions of the sale areas were seeded in 1958-59, 1959-60 and 1960-61. In addition to seeding, Areas 1 and 2 were planted during two planting seasons (1965-67), Area 3 was planted in 1966-67, and Area 4 during the 1967-68 planting season.

The red alder in Areas 1, 2, and 4 were sprayed in 1977. There has been no other stand management in these areas.

### III. DESIRED STAND CONDITION and VISION:

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	513	CSC	REG	GEN	106
2	514	CSC	REG	GEN	60
3	515	CSC	REG	GEN	83
4	516	CSC	UDS	OFS	116
4	516	CSC	UDS	LYR	23

*1. The stand is expected to develop into this condition in ten to twenty years post harvest.*

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

#### **Areas 1, 2, and 3:**

Areas 1, 2, and 3 are designated as General.

**Short Term Vision:** The prescription will harvest the merchantable alder and Douglas-fir in all sale areas to create a new mixed conifer stand for timber production.

**Long Term Vision:** The vision is to establish a productive mixed conifer stand. Due to the terrain and long yarding reaches these stands will remain in GEN designation and managed by regeneration harvest and shorter rotations.

#### **Area 4:**

The Desired Future Condition for Area 4 is 116 acres Older Forest Structure and 23 acres Layered

**Short Term Vision:** This partial cut prescription will reduce the conifer stocking which will maintain the crown ratios, stand vigor, and develop healthier and larger hemlock and Douglas-fir in the residual stand. The conifer SDI will be approximately 25% to 30%. There will be several small alder clearcuts (less than 5 acres each) within both of these areas. This stand is on a pathway that maintains productivity and that provides for complex structure.

**Long Term Vision:** The vision for these areas is to manage for stands of scattered Douglas-fir, western hemlock and alder. The stands will be composed of a mixture of species, size classes, and densities. A new cohort of western hemlock and alder in the larger gaps will provide both horizontal and vertical diversity. After thinning in approximately 15 to 20 years, these stands will have a mixture of sizes, species and densities and likely be in a Layered condition. Additional 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.

#### **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, Douglas-fir and hemlock will be harvested. Approximately 4 to 6 small conifer areas, 2 to 5 acres each, will be thinned to a basal area range of 120ft<sup>2</sup> to 140 ft<sup>2</sup>. All other conifer and hardwood species will be reserved.

**Green Trees:** Approximately 5 conifer trees per acre will be left in thinned conifer pockets within the harvest unit. A component of alder will be retained in stream buffers adjacent to and within the harvest unit.

**Snags and Down Wood:** Due to the size of the trees in this area snags and additional down wood will not be created with this harvest. Instead, additional trees will be left to grow so in the future they can be made into snags and down wood. An additional 5 to 7 conifer green trees per acre will be left adjacent to the outer zone of the Type F streams, in headwalls, and other high landslide hazard areas adjacent to Area 1 to help compensate for basin level needs of snags and down wood. During sale layout an assessment will be done on these areas to adjust the green tree retention prescription to help meet these goals in the future.

**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 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.

Refer to Green Tree, Snag and Down Wood Strategies in the Summary document for strategies used on every sale.

### **Area 3**

**Prescription:** Merchantable alder, Douglas-fir and hemlock will be harvested. All other conifer and hardwood species will be reserved.

**Green Trees:** Approximately 5 conifer trees per acre will be left in the sale area.

**Snags and Down Wood:** Due to the size of the trees in this area snags and down wood will not be created with this operation. Instead an additional 2 to 4 trees per acre will be left within the harvest area and in stream buffers to serve as future snags and down wood. During sale layout an assessment will be done on these areas to adjust the green tree retention prescription to help meet these goals in the future.

**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 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.

Refer to Green Tree, Snag and Down Wood Strategies in the Summary document for strategies used on every sale.

## **Partial Cut**

### **Area 4**

**Prescription:** A partial cut will thin the Douglas-fir, hemlock, and alder to a basal area range of 120ft<sup>2</sup> to 140 ft<sup>2</sup>. All other conifer and hardwood species will be reserved.

**Snags and Down Wood:** Due to the current stand size there will be no down wood or snag creation in these areas. Down wood and snag creation will be evaluated during the second entry thinning.

**Pathway:** Another thinning will likely be needed in this stand 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, snag and down wood levels, and landscape goals to decide future management prescriptions.

**V. ESTIMATED TIMBER AND REVENUE INFORMATION:**

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		x
Planned Quarter: 2			

	Conifer	Hardwood	Total
Net Volume (MBF)	4660	1453	6103
Stumpage Value (\$/MBF)*	\$185	\$190	
Estimated Gross Value	\$859,800	\$279,475	\$1,139,275
		Project Costs:	\$191,910
		Estimated Net Value:	\$947,365

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

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas will be accessed via FB3, South Fork Cook Creek and Doe Flats Road. These are currently all weather crushed rock roads.

Approximately 1.14 miles of road will be new construction and 1.25 miles of road will be reconstructed which includes grading, culvert installation and rocking. This work will bring all roads up to standards described in *The Forest Roads Manual*. Following harvest it is anticipated that the new construction roads and 0.75 of the reconstructed roads within the sale areas will be blocked. See summary document for more information on road closure.

No other project work is currently planned with this sale. The operation will be 95% cable and 5% ground based yarding. See summary document for more information on this topic.

**Table 5. Transportation Planning Summary (Miles)<sup>4</sup>**

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct			0.69	0.45
Improve			1.25	
Maintain <sup>2</sup>	2.0	8.0		
Close/Block <sup>3</sup>			1.44	0.45
Vacate <sup>3</sup>				

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:**

South Fork Cook Creek, east of Areas 1 and 2, is a verified Type F as well as McKenney Creek south of Area 4. There are multiple intermittent, perennial and unclassified Type N streams within the sale areas. There are several unknown stream types in the eastern portion of Area 4 and the northwestern portion of Area 1 that are tributaries of McKenney Creek. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain. The inner and outer riparian zones will be managed towards mature forest condition.

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.

All of the sale areas are within the Cook Creek sub-basin. This sub-basin has been identified as a Salmon Anchor Habitat (SAH) Basin. The riparian 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 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).

**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). In June 2008 a listed plant was tentatively identified at the south boundary of Area 4. The Oregon Department of Agriculture was notified in order to verify whether or not the plant was a T&E species. If verified, foresters

will work with ODA to protect the plants with either seasonal restrictions, buffers, or both.

**IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

This assessment is based on analysis of USGS 1:24,000 topographic maps.

There are high landslide hazard locations scattered throughout the sale. Areas 1 and 2 drain into McKenny Creek, Starr Creek, and all the unnamed tributaries to Cook Creek and the South Fork of Cook Creek in between. Area 3 drains into Starr Creek and an unnamed tributary to the South Fork of Cook Creek. Area 4 drains into McKenny Creek. The risk of landslides delivering directly from Areas 1 and 2 to McKenny Creek is high and to the other streams is moderate. The risk of landslides delivering directly from Area 3 to Starr Creek and an unnamed tributary to the South Fork of Cook Creek is moderate. The risk of landslides delivering directly from Area III to McKenny Creek is moderate. Portions of Area 3 appear to be located on a large, deep-seated landslide landform.

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

The sale areas have been identified as 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 100% Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. Recreational use common to this area includes hiking and hunting.

**XI. CULTURAL RESOURCES:**

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

**XII. SCENIC RESOURCES:**

Areas 1 and 2 have a visual classification of Level 2, moderate sensitivity and will be visible from Cook Creek Road. Areas 3 and 4 are classified as Level 3, low sensitivity.

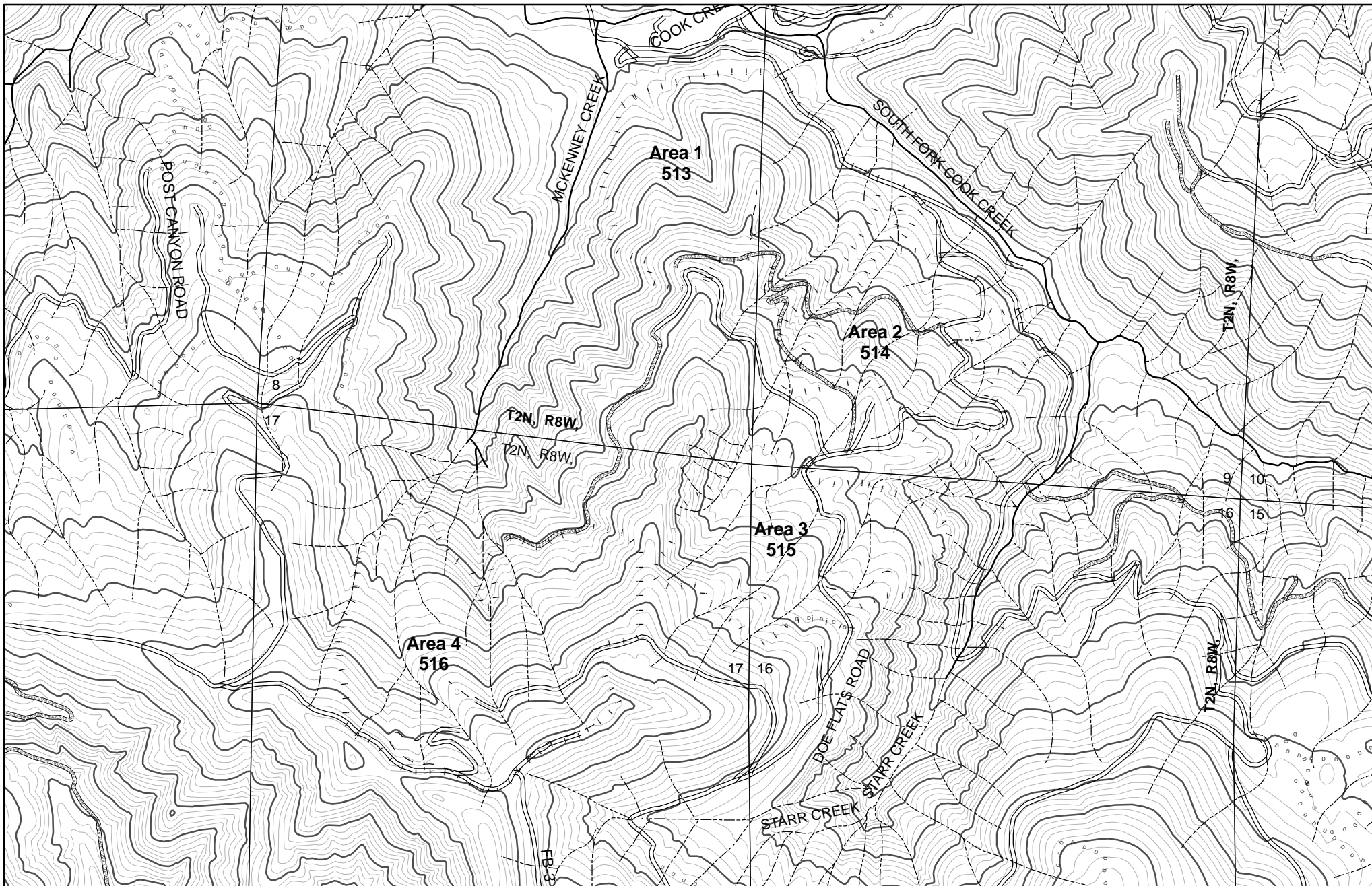
**XIII. OTHER RESOURCE CONSIDERATIONS:**

There is a Permanent inventory plot and reference point adjacent to the western boundary of Area 4. Permanent plot markings will be protected according to guidelines

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

The sale areas contain Focused and Special Stewardship, Aquatic and Riparian Habitat. See Section VII. for management guidelines.

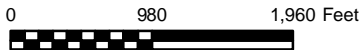
Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.



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
- ◻ ◻ Blocked road
- - Road construction
- County road
- ⋮ ⋮ Transmission line



**3**

**McKenny Flats  
-- Topography --  
2009 SALE PLAN  
TILLAMOOK DISTRICT**

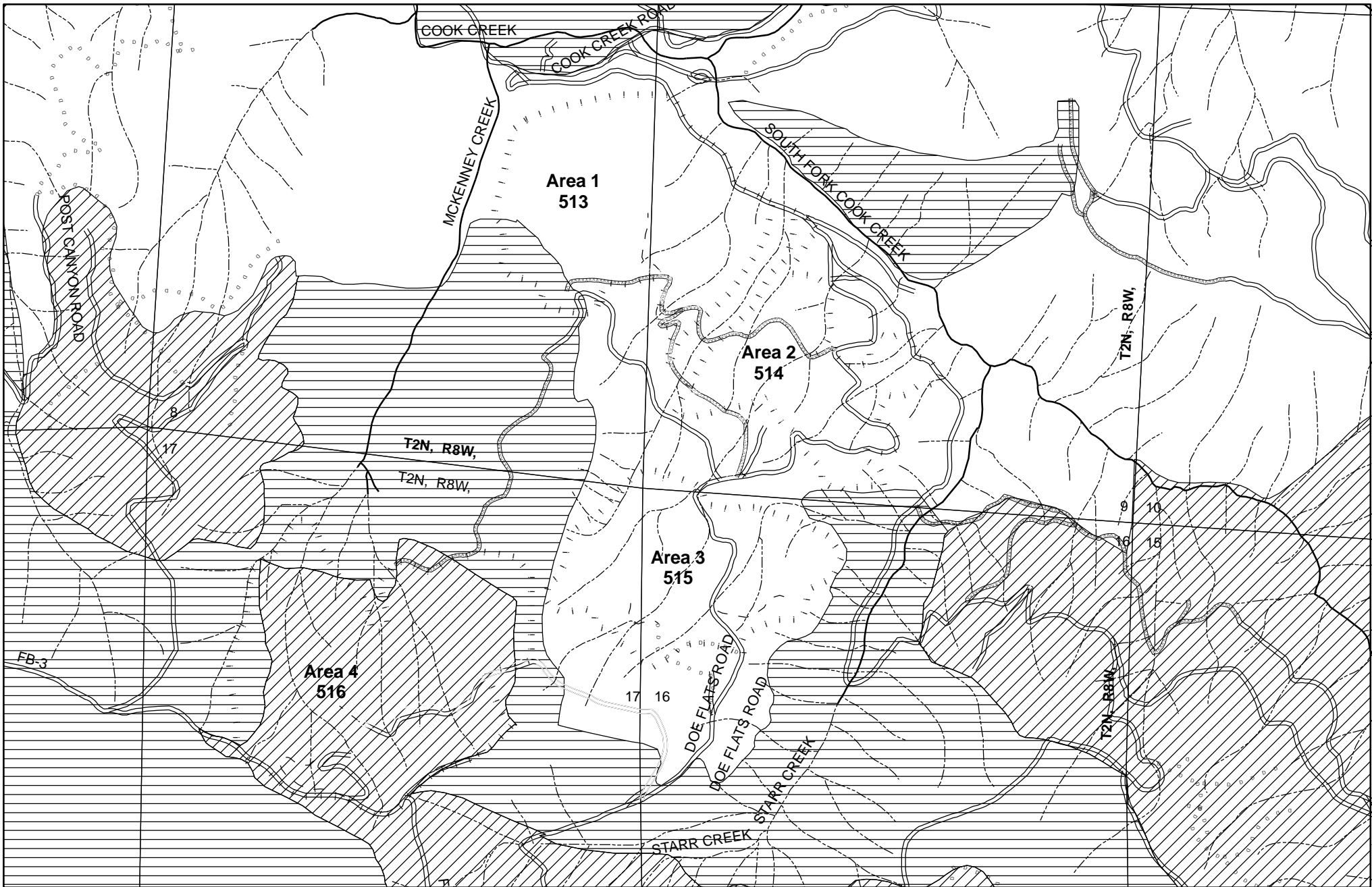
Portions of Sections 8, 9, 16 and 17  
T2N, R8W, W.M.,  
Tillamook County, Oregon

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

Tillamook District GIS  
10/24/2007

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Area	Type of Operation
1a	Modified Clearcut
1b	Partial Cut
2	Modified Clearcut
3	Partial Cut

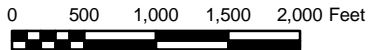


Desired future condition

- 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



**3**

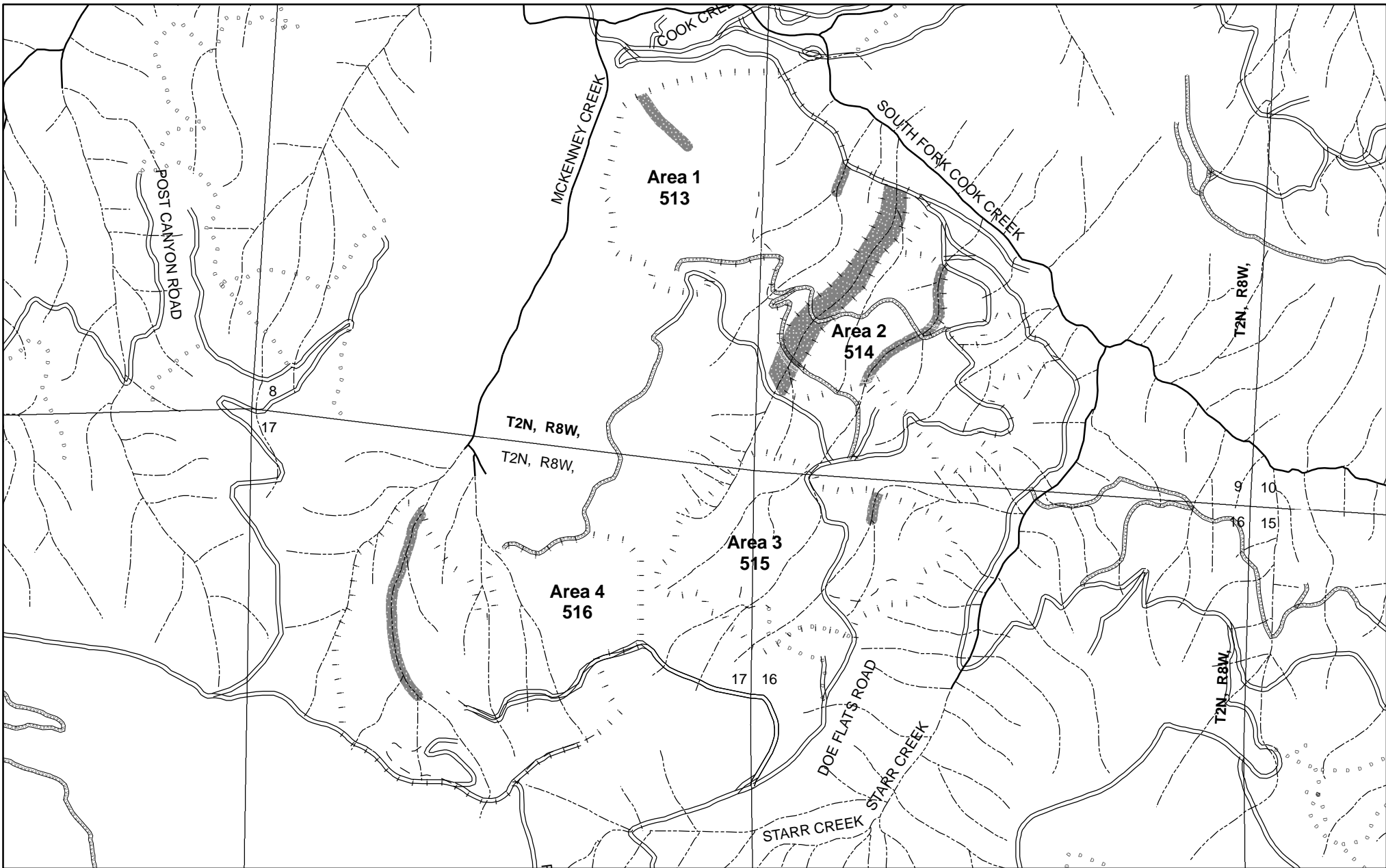
**McKenny Flats**  
**-- Current and Future Condition --**  
**2009 SALE PLAN**  
**TILLAMOOK DISTRICT**  
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















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

Tillamook District GIS  
01/08/2008

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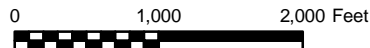
Area	Type of Operation
1	Modified Clearcut
1	Partial Cut
2	Modified Clearcut
3	Partial Cut



-  Buffer
-  Green Tree Retention
-  Non-required thinning
-  Area boundary
-  Sale boundary
-  Ownership boundary
-  Perennial Type-F stream\*
-  Perennial Type-N stream\*
-  Unsurfaced road
-  Surfaced road
-  State/Federal highway
-  Legacy road
-  Blocked road
-  Road construction
-  County road
-  Transmission line

**3**

**McKenny Flats**  
**-- Key Resources --**  
**2009 SALE PLAN**  
**TILLAMOOK DISTRICT**  
 Portions of Sections 8,9,16 and 17  
 T2N, R8W, W.M.,  
 Tillamook County, Oregon

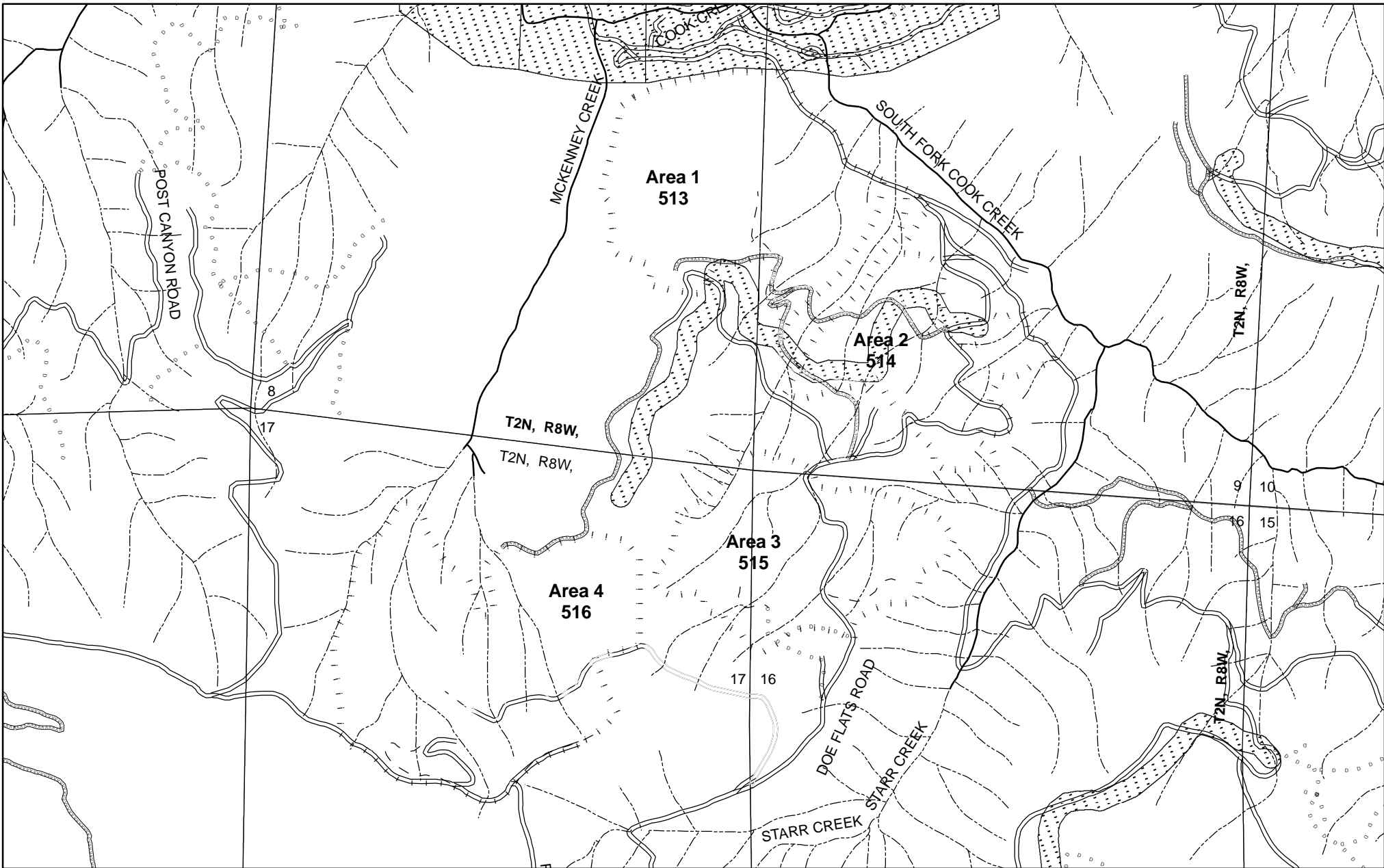


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Area	Type of Operation
1	Modified Clearcut
1	Partial Cut
2	Modified Clearcut
3	Partial Cut



- Administrative
- Boat Launch
- Campground
- Day Use
- Interpretive Site
- OHV Staging Area
- Trail Head
- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream\*
- Perennial Type-N stream\*
- Unsurfaced road
- Surfaced road
- State/Federal highway

- Legacy road
  - Blocked road
  - Road construction
  - County road
  - Transmission line
- 0 800 1,600 Feet
- 

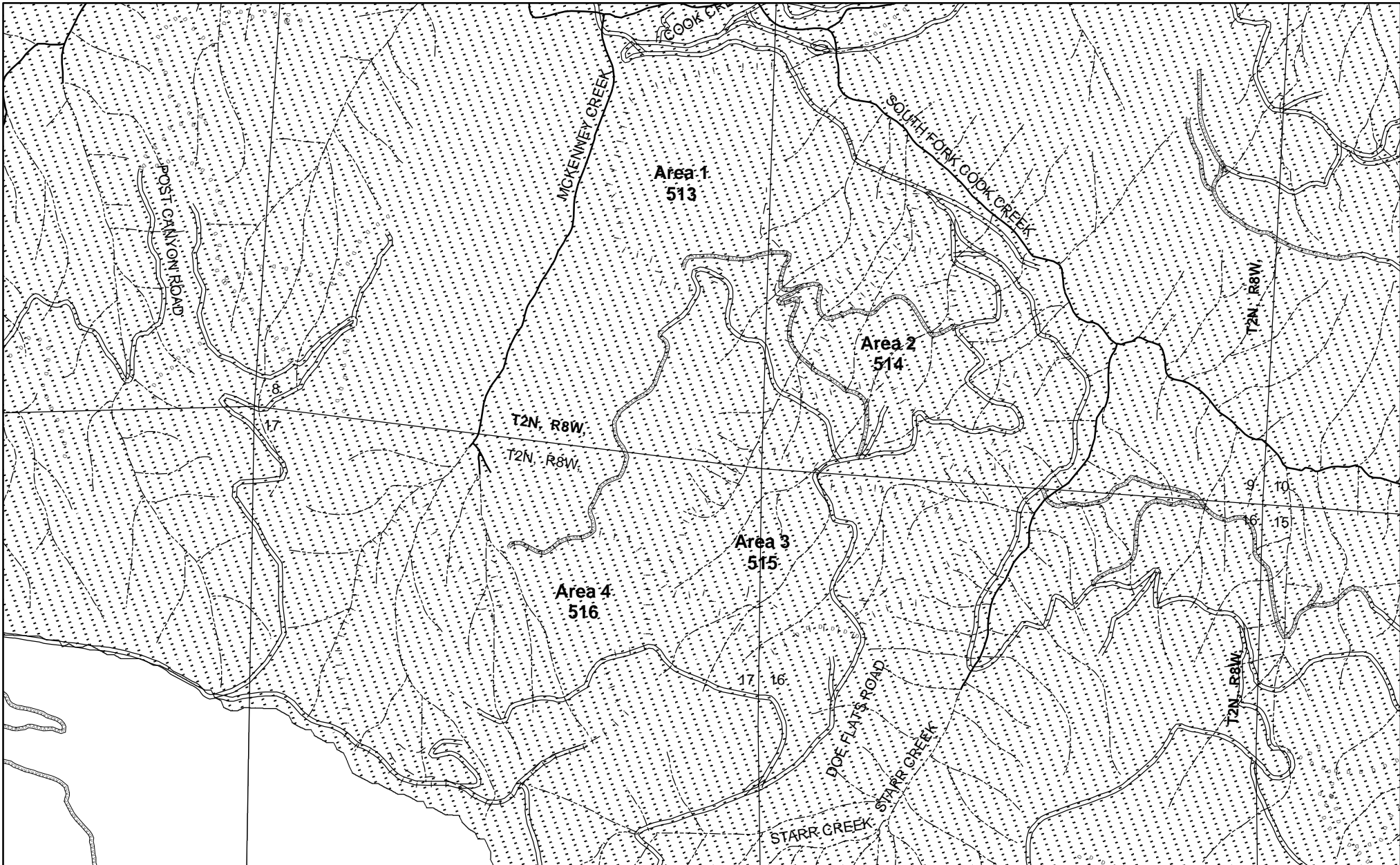
**3**

**Mckenny Flats**  
**-- Key Resources / Recreation--**  
**2009 SALE PLAN**  
**TILLAMOOK DISTRICT**  
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







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



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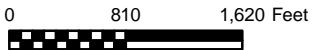


**Stewardship**

 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



# 3

## McKenny Flats -- Key Resources/Wildlife Habitat-- 2009 SALE PLAN TILLAMOOK DISTRICT

Portions of Sections 8,9,16 and 17  
T2N, R8W, W.M.,  
Tillamook County, Oregon

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