

Pre-Operations Report

Operation Name: Jones Flat
Legal: Section 4 and 9, T1N, R7W
County: Tillamook
Management Basin: Wilson
SAH Status: Cedar Creek
FDF: 100% CSL: 0%

Table 1. Operation Areas, Types and Acres

| Area | Type of Operation | Gross Acres | Net Acres ¹ |
|-------|-------------------|-------------|------------------------|
| 1 | RC | 3 | 3 |
| 2 | MC | 2 | 2 |
| 3 | PC | 2 | 2 |
| 4 | RC | 28 | 20 |
| 5 | PC | 6 | 6 |
| 6 | PC | 1 | 1 |
| Total | | 44 | 34 |

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

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes in the sale areas range from 5% to 35%, except for a few acres on the east boundary of Area 5 and 6, which are approximately 65%. The aspect of the sale is mostly south and southwest. Elevations range from 550 to 850 feet. The major soil types are Enright and Cochran.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

| Area | Prescription | Stand ID ¹ | Species | Age | DBH | BA | TPA | SDI | Net Acres ² |
|------|--------------|-----------------------|------------|-----|-----|-----|-----|-----|------------------------|
| 1 | RC | 601 | DF,RA,WH | 51 | 14 | 250 | 250 | 69 | 3 |
| 1 | RC | Target ³ | DF | 51 | 22 | 70 | 30 | 15 | 3 |
| 2 | MC | 602 | DF, RA | 41 | 14 | 226 | 196 | 59 | 2 |
| 3 | PC | 603 | DF | 41 | 14 | 250 | 250 | 69 | 2 |
| 3 | PC | Target ³ | DF | 41 | 19 | 90 | 40 | 25 | 2 |
| 4 | RC | 604 | DF, RA | 41 | 14 | 250 | 250 | 69 | 20 |
| 4 | RC | Target ³ | DF, WH, RC | 41 | 22 | 70 | 30 | 15 | 20 |
| 5 | PC | 605 | DF | 41 | 14 | 250 | 250 | 69 | 6 |
| 5 | PC | Target ³ | DF | 41 | 19 | 90 | 40 | 25 | 6 |
| 6 | PC | 606 | DF | 41 | 14 | 250 | 250 | 69 | 1 |
| 6 | PC | Target ³ | DF | 41 | 19 | 90 | 40 | 25 | 1 |
| | | | | | | | | | |

1. The source of stand inventory information is from field reconnaissance cruise plots taken in 2007.

2. The net acres are based on orthophotos and GIS and exclude roads.

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 Fire and the 1939 Saddle Mountain Fire. Area 1 was planted in 1955-56. Areas 2, 3, 4, 5 and 6 were planted in 1965-66. All areas were planted with Douglas-fir. An area of approximately 1 to 2 acres in the northern portion of Area 4, adjacent to North Fork Wilson Road, was planted by scouts in 1963-64. The alder and the occasional hemlock and cedar naturally regenerated.

The Douglas-fir has symptoms of Swiss needle cast. The alder in this area was not sprayed in the 1970's and has good form. An area of blow down and broken timber in the conifer portion of Area 4, approximately ¼ acre, has root disease (*Phellinus weirii*).

The sale area is classified as 100% CSC according to the District stand summary information (1999).

Area 1 and 4: These areas are comprised primarily of simple, singled storied, densely stocked stands of predominately alder or Douglas-fir with other species scattered within the stand. A few maple and hemlock are scattered within them as well. The hardwoods in both areas are mature and of good wood quality. Recent growth analysis in the eastern portion of the Wilson basin has indicated

that the dominant and co-dominant Douglas-fir is growing at acceptable levels. The live crown and height-diameter ratios are poor on the smaller Douglas-fir, which has reduced their diameter growth, vigor and wind firmness.

The understory in densely stocked alder areas is comprised of a mix of dense vegetation, including, vine maple, sword fern, ocean spray, trailing blackberry, salmonberry and various forbs and herbs. The understory in the densely stocked conifer areas is comprised of primarily sword fern.

Area 2: This area is comprised of primarily dense mature alder and scattered Douglas-fir, big leaf maple and hemlock. Understory vegetation is comprised of primarily salmonberry, vine maple, ocean spray, sword fern and forbs and herbs.

Area 3, 5 and 6: These areas are comprised of primarily dense, single storied Douglas-fir that is in the stem exclusion stage, which has led to diameter increment, live crown ratio and wind firmness losses and some tree mortality. The understory vegetation is primarily sword fern.

See Table 2 for additional stand data.

There are some large snags in various states of decay and/or some hard snags created from wind, snow, and/or bear damage in all of the areas above. Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some recently wind thrown and broken trees in decay classes 1 and 2. There is no SLI information for snags and down wood available at this time.

III. DESIRED STAND CONDITION and VISION:

Table 3. Stand Structure Information

| Area | Stand ID | Current | Post Harvest ¹ | Desired Future ² | Net Acres |
|------|----------|---------|---------------------------|-----------------------------|-----------|
| 1 | 601 | CSC | REG | LYR | 3 |
| 2 | 602 | CSC | REG | LYR | 2 |
| 3 | 603 | CSC | UDS | LYR | 2 |
| 4 | 604 | CSC | REG | LYR | 20 |
| 5 | 605 | CSC | UDS | LYR | 6 |
| 6 | 606 | CSC | UDS | LYR | 1 |

- 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.*
- 2. Each sale area is comprised of very small acres at a scale that is not tracked for structure characteristics. Instead, all sale areas combined will be managed for DFC of Layered conditions over time.*

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 goals.

Wilson River and Jones Creek Sub-Basin

This sale is located in the middle of the Wilson River drainage and within the Jones Creek Sub-basin. This area is primarily State Forest ownership that is intermixed with small tracts of residential ownership along the Wilson River Highway. There are also large and small tracks of private forest ownership within this area. The area is currently dominated by Douglas-fir stands, of which some have been thinned. Modified clearcuts have recently been completed and are scattered throughout the area. The area has many future opportunities for partial cut and regeneration harvest.

All Sale Areas:

The DFC for all of the sale areas is currently LYR. The short term vision for these sale areas is unique because of their proximity to the Tillamook Forest Center. This sale will be used as part demonstration and part interpretation of forest operations. The areas adjacent to the sale area are currently being used for interpretation and education.

Since the individual sale areas are small, the DFC is being considered for the operation as a whole and not classified on the individual 1-2 acres patches. The long term vision is that these harvest types will accelerate the pathway to complex forest structures. In all of the harvest areas natural regeneration of alder is expected. Areas 1 and 2 will be planted, but because of their small acreage, planting may be done by volunteers as part of the Tillamook Forest Center educational program. Area 4 will be part of the district's reforestation program.

The variable density retention cut in Areas 1 and 4 was chosen because it will likely achieve a complex forest structure sooner than the partial cut prescription.

Area 1, 2, and 4: The short term vision is to harvest the merchantable alder and suppressed and intermediate Douglas-fir trees to provide openings for sunlight to reach the forest floor to promote successful reforestation of a new cohort. The residual overstory conifer will have variable densities and will range in diameter between 19 to 34 inches DBH and there will be openings of various sizes. Reforestation in these areas will consist of a mixture of conifer species (western hemlock, SNC tolerant Douglas-fir, and western red cedar).

The long term vision for these areas is to have a wide distribution of tree size classes that will provide at least two layers of trees heights, a variety of understory vegetation, vertical and horizontal diversity and down logs and snags in various decay classes.

Area 3, 5 and 6: The short term vision is to managed stand density, vigor and growth and capture natural mortality due to competition for light and nutrients. Thinning from below will remove Douglas-fir trees with crown ratios less than 35%, and will result in a heavy thinning.

The long term vision of the residual stand is that they will improve in vigor and growth. These stands are expected to be UDS within a few years after harvesting. The complexity of the understory vegetation is expected to increase. Natural regeneration of hardwoods and conifer normally occurs after a heavy thinning and will create horizontal and vertical diversity. Additional harvesting will need to be done to continue to move these stands to complex forest structures. Density, stand health, and landscape and forest interpretation goals will determine the future management prescriptions for these areas.

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.**

PRESCRIPTIONS:

Conifer other than DF and hardwoods other than alder will be reserved in all of the sale areas.

Regeneration Harvest:

Area 1 and 4: The harvest will remove merchantable Douglas-fir and mature alder. A diameter limit will be used to leave the largest Douglas-fir trees, averaging approximately 30 trees per acre (approx. 20 inches DBH) and all other conifer species will be reserved. Residual conifer density will be varied, from clumps and scattered trees in the alder stocked portions to a more even distribution in the densely stocked conifer portions of these areas.

Area 2: The merchantable red alder will be harvested. Douglas-fir that has poor crown and height diameter ratios and reduced diameter growth will also be harvested. Selection of Douglas-fir will be done through a diameter limit.

Partial Cut:

Area 3, 5 and 6: A partial cut will thin the Douglas-fir to a basal area of 80 ft² to 100 ft². A heavy partial cut prescription is planned to reduce the potential for windthrow and to remove Douglas-fir with crown ratios less than 35%. The resulting stand will have a stand density index of approximately 25%, which is relatively open, but it will retain trees with vigor that will develop into large wind firm trees for the future.

Green Tree: In Areas 1 and 4 a diameter limit will reserve approximately 30 of the largest Douglas-fir trees per acre (approximately 20 inches DBH and greater) for green tree retention.

In Area 2, a diameter limit will reserve approximately 6 to 9 of the largest Douglas-fir trees per acre (approximately 20 inches DBH and greater) for green tree retention.

Snags: In Areas 2 and 4, one or two snags will be created per acre, in or adjacent to these harvest areas, to achieve an average of approximately two snags per acre over time. Snags created in these areas should be at least a tree-length distance from roads.

In Area 3, 5 and 6, snags are not planned to be created in these areas. It is anticipated that snags will be created from defects in residual trees.

Down wood: Down wood will be created at a rate of two down logs per acre in approximately half of the sale areas where it is determined to be deficient.

Pathway:

In addition to the harvest prescriptions above, these areas will likely require future stand manipulations to move them on to a complex forest structure. Additional treatments may include brush release for conifer regeneration, precommercial and commercial thinning to reduce the stocking of the second cohort and possibly some patch cutting (gaps) to introduce a third and fourth cohort. Additional overstory trees or adjacent trees to the harvest areas may need to be made into snags or felled for down wood to accomplish the desired objective for the Jones Creek sub-basin.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

| Ownership | | Sale Type | |
|------------------|-----|-----------|----------|
| BOF | CSL | Cash | Recovery |
| 100% | 0% | | X |
| Planned Quarter: | | 1 | |

| | Conifer | Hardwood | Total |
|-------------------------|----------|----------------------|-----------|
| Net Volume (MBF) | 400 | 300 | 700 |
| Stumpage Value (\$/MBF) | \$150 | \$200 | |
| Estimated Gross Value | \$60,000 | \$60,000 | \$120,000 |
| | | Project Costs: | \$15,000 |
| | | Estimated Net Value: | \$105,000 |

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale is approximately 50% ground and 50% cable yarding.

The sale areas are accessed via the Wilson River Highway and North Fork Wilson Road which is an all-weather crushed rock road. An existing pit run surfaced power line road will also be used to access the sale areas from the south. A temporary easement will be obtained from Stimson Lumber Company for use of the power line road and an easement exchange with Reeher's Inc. is in progress for access to the east side of Area 4 and 5. Several short roads off of the power line road will be built to access the harvest units. Access will require 0.1 miles of rocked spur roads and 0.29 miles of dirt spur roads to be constructed and 0.38 miles of road improvement. See exhibits for specific road locations and conditions.

Tillamook Public Utility District and Bonneville Power Administration will also need to be contacted during sale preparation to discuss the planned forest operation and ensure all possible safety awareness items in regards to working adjacent to the power lines have been considered.

A temporary road will be constructed to log Area 4 and 5. Construction of this road is also needed to move operations off of North Fork Wilson Road to avoid surface contamination and transportation conflicts. The first 500 feet will be surfaced to avoid North Fork Wilson Road surface contamination.

The property line with private landowners will need to be established during sale preparation with the district survey forester. Roads requiring construction will be closed following harvest activities.

Table 5. Transportation Planning Summary (Miles)⁴

| Activity | Mainline | Collector | Rocked Spur ¹ | Dirt Spur ¹ |
|--------------------------|----------|-----------|--------------------------|------------------------|
| Construct | | | 0.1 | 0.29 |
| Improve | | | 0.38 | |
| Maintain ² | | 0.8 | | 0.4 |
| Close/Block ³ | | | 0.1 | 0.4 |
| Vacate ³ | | | 150 feet* | |

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.*
5. **Via district road crew.*

VII. AQUATIC RESOURCES AND WATER QUALITY:

There are unnamed Type N streams adjacent to the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain.

Oregon Department of Fish and Wildlife (ODFW) reviewed the streams adjacent to the sale area and have classified portions of two streams as perennial. Both of these streams go sub-surface prior to connecting to the Wilson River. Since most of these streams have been determined to have sub-surface flow prior to reaching the Wilson River, the department Riparian Specialist should be consulted during sale preparation.

Stream buffers adjacent to harvest unit boundaries are predominantly hardwood and have a few conifers within them. The understory is primarily salmonberry. No operations are planned in the stream buffer locations. These areas will be managed according to *Forest Management Plan* Riparian Strategies.

This sale is within the Jones Creek sub-basin. This sub-basin is within the Cedar Creek Salmon Anchor Habitat (SAH) Basin and the most current SAH Basin Strategies will be used at the time of contract development.

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:

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

There are no high landslide hazard locations in the sale. The sale drains into unnamed tributaries of the Wilson River. The risk of landslides delivering directly from the sale to these streams is low. Portions of the sale appear to be located on large, deep-seated landslide landforms.

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

X. RECREATION RESOURCES:

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). There are no OHV trails within the sale areas. The Wilson River Hiking Trail is located north of Areas 1, 2 and 3. A no harvest buffer of approximately 100 feet will be between the sale areas and the trail. Short term closure of this trail may occur to facilitate logging and public safety. Disturbance to the trail logging operations is not expected.

This sale has been reviewed and developed with the assistance of the District Recreation Unit and Tillamook Forest Center (TFC) staff. Continued coordination to develop a public safety plan during the harvest operations will occur throughout sale preparation. Seasonal operating restrictions may be utilized to minimize disturbance to the TFC interpretive program and the public.

There is a large amount of public recreation in this area that includes the Jones Creek Campground, the Tillamook Forest Center, Smith Day Use Area and Diamond Mill OHV area.

XI. CULTURAL RESOURCES:

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

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 1, high sensitivity. A portion of Areas 4 and 5 will be visible from Jones Creek Day Use Parking Area. The sale has been reviewed by the Tillamook Recreation and Tillamook Forest Center staff to determine methods to minimize visual impact. The use of variable retention harvest and partial cut prescriptions are planned for these areas to reduce visual resource disturbances.

A portion of the modified clearcut and retention cut areas will be visible from North Fork Wilson Road and are expected to have a visual impact until green up occurs. The individual sale areas are comprised of small acreage which will further reduce the visual impact.

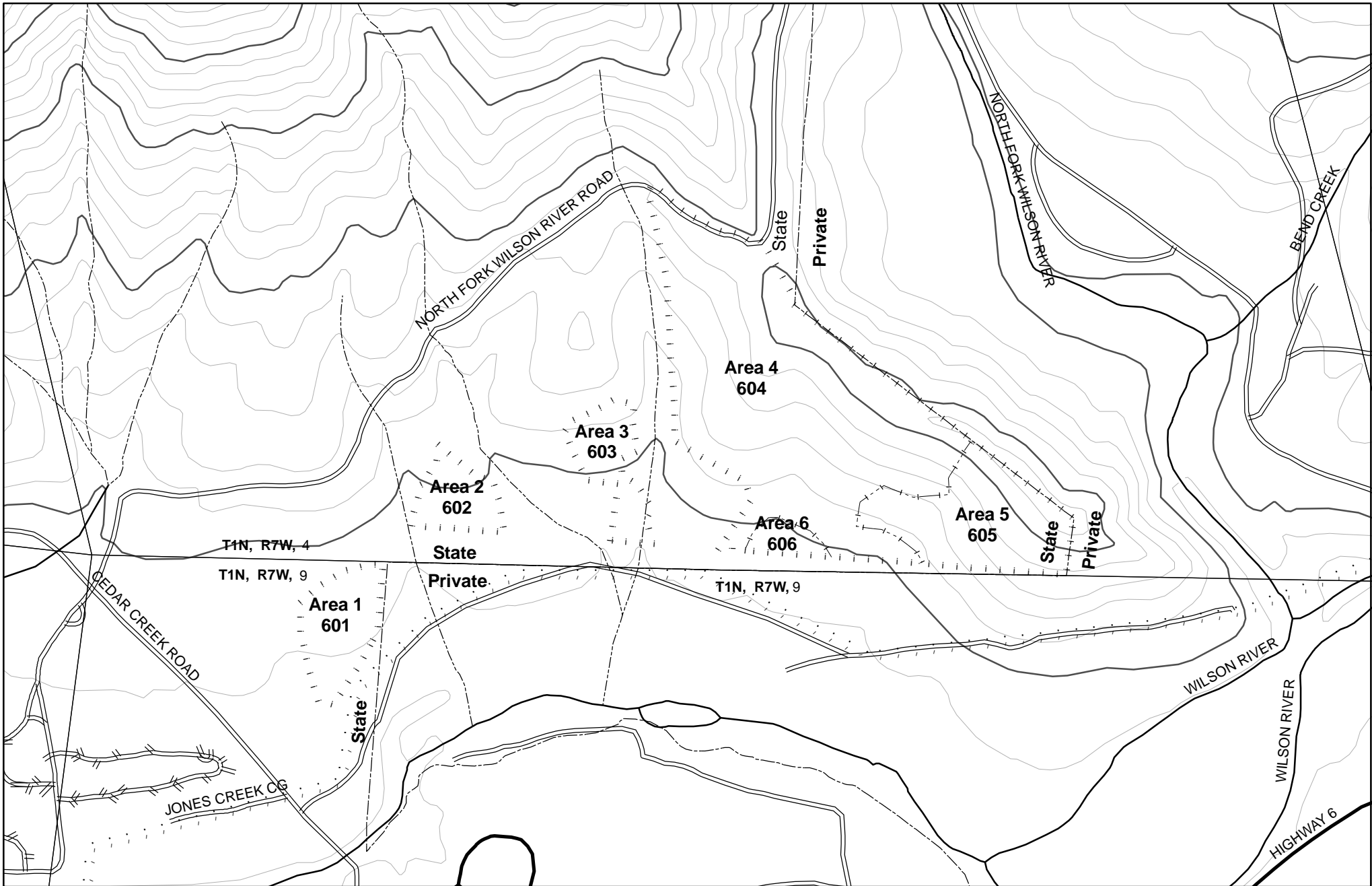
XIII. OTHER RESOURCE CONSIDERATIONS:

Property lines adjacent to Stimson Timber Company to the south and Reeher's Inc. to the east will need to be established. Road use agreements will also be required from both private land owners to facilitate access needs.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale areas contain Focused and Special Stewardship, Aquatic and Riparian Habitat. The sale areas contain Focused, Wildlife for the portions in the Cedar Creek Salmon Anchor Habitat Basin. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized. The sale area contains Focused Recreation. See Section X. Recreation Resources. The sale areas also contain Focused Visual. See Section XII, Scenic Resources.

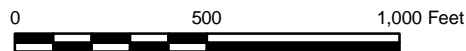
Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.



Contour Interval 40'

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

- ▬ Legacy road
- □ □ Blocked road
- - - Road construction
- County road
- ⋮ Transmission line



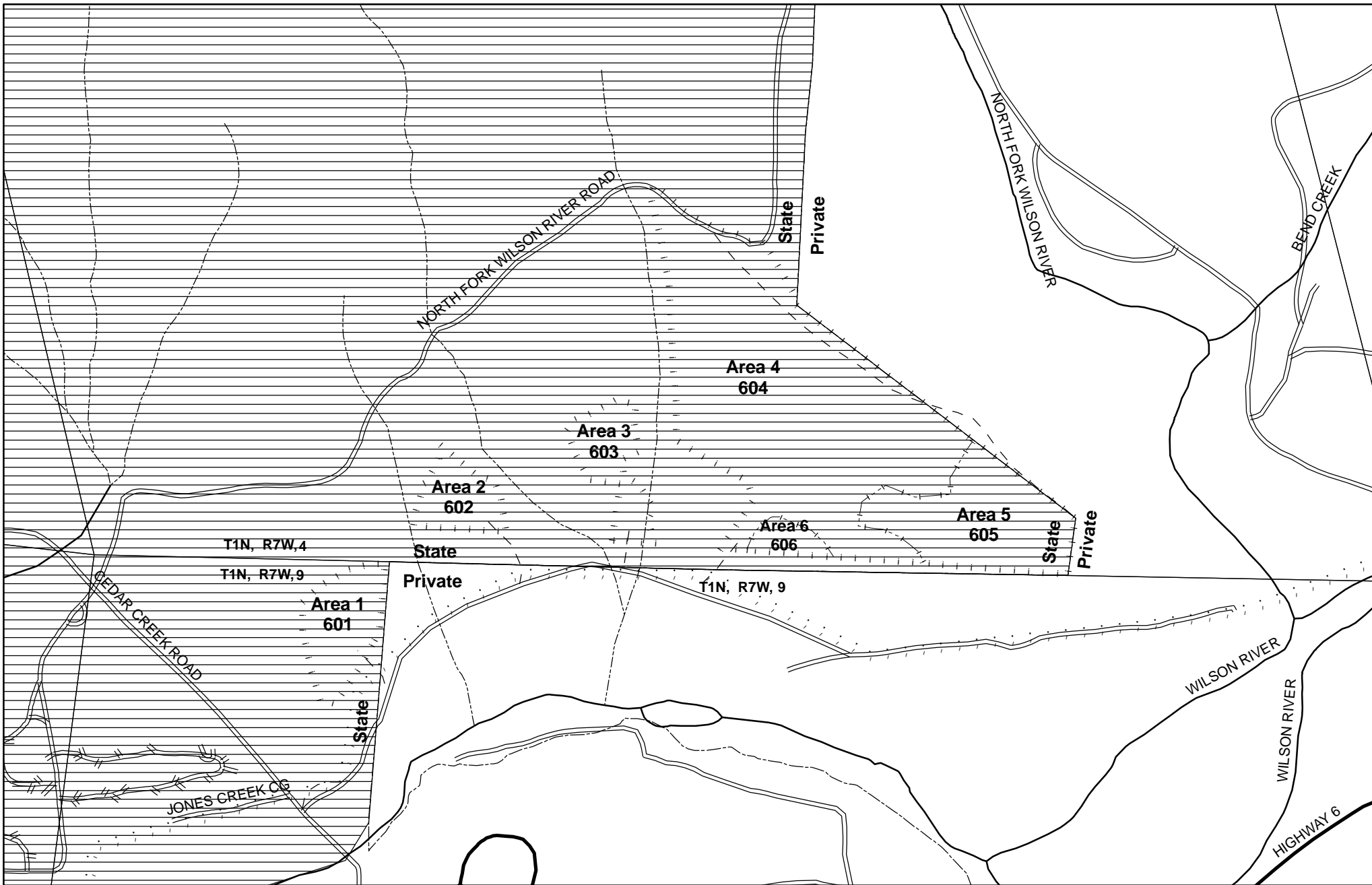
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**Jones Flat
-- Topography --
2009 SALE PLAN
TILLAMOOK DISTRICT**
Portions of Sections 4 and 9
T1N, R7W, W.M.,
Tillamook County, Oregon

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

Tillamook District GIS
10/24/2007
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| Area | Type of Operation |
|------|-------------------|
| 1 | Retention Cut |
| 2 | Partial Cut |
| 3 | Modified Clearcut |
| 4 | Retention Cut |
| 5 | Partial Cut |
| 6 | Partial Cut |



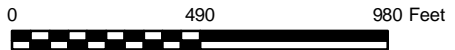
Desired future condition

- 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

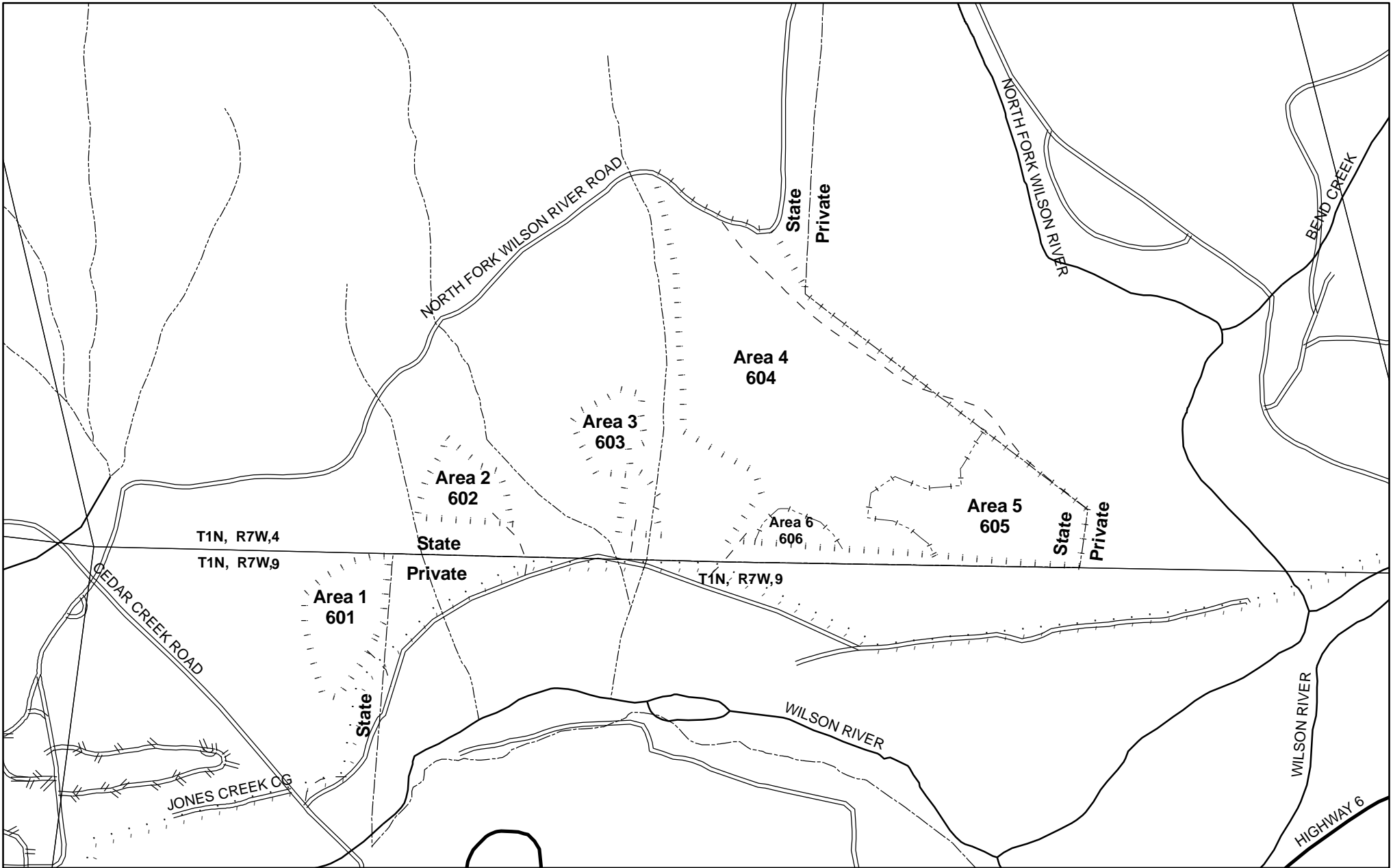













Jones Flat
-- Current and Future Condition --
2009 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 4 and 9
 T1N, R7W, W.M.,
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




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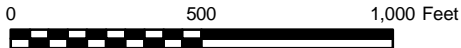
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-  Buffer
-  Green Tree Retention
-  Non-required thinning
-  Area boundary
-  Sale boundary
-  Ownership boundary
-  Perennial Type-F stream*
-  Perennial Type-N stream*
-  Unsurfaced road
-  Surfaced road
-  State/Federal highway

-  Legacy road
-  Blocked road
-  Road construction
-  County road
-  Transmission line

3



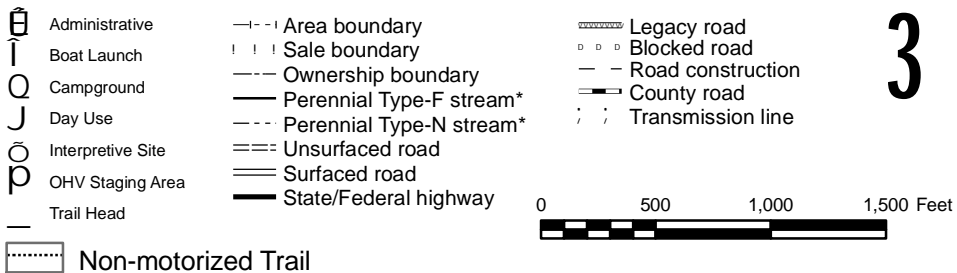
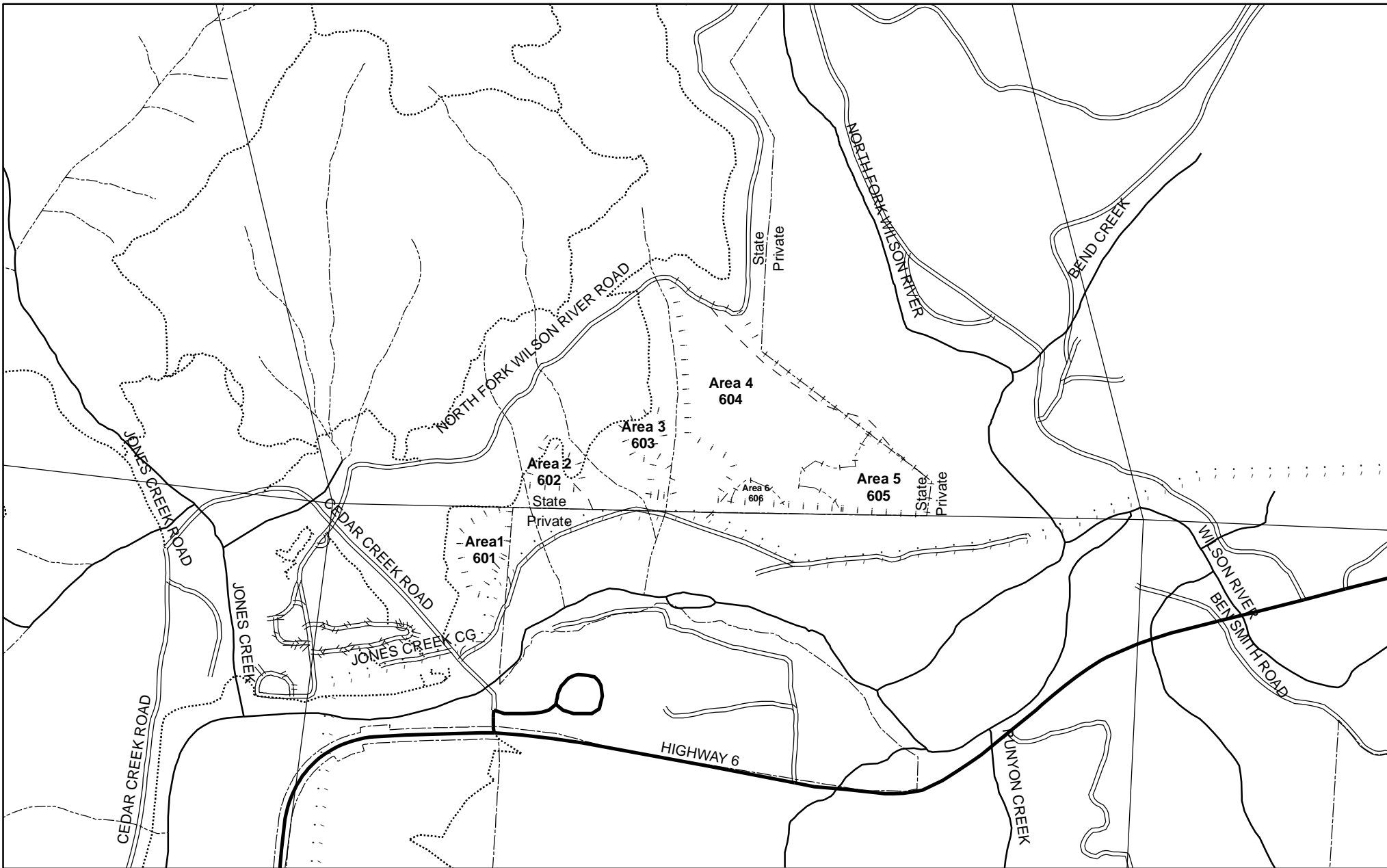
Jones Flat
-- Key Resources --
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TILLAMOOK DISTRICT
 Portions of Sections 4 and 9
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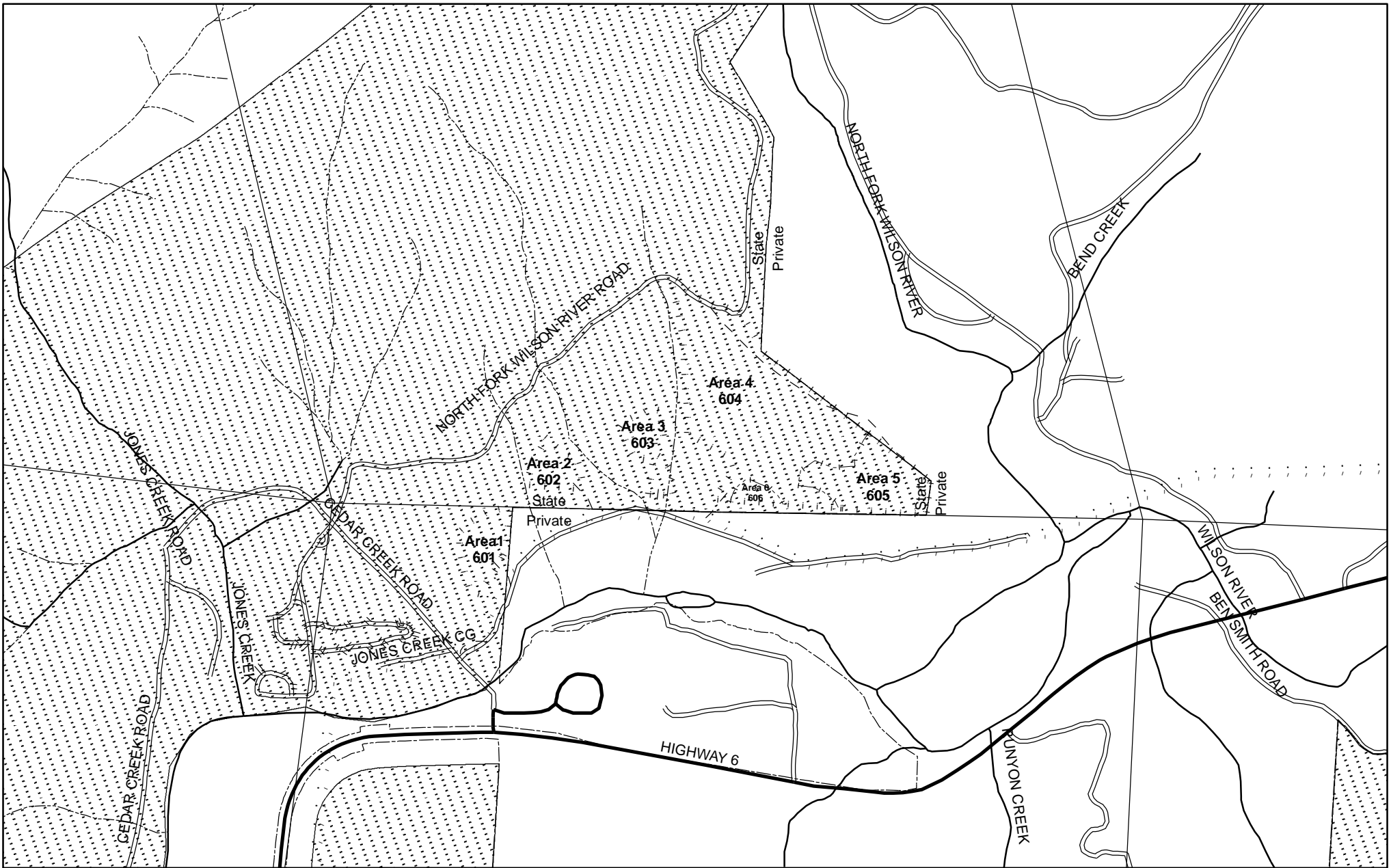
Jones Flat
-- Key Resources / Recreation --
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TILLAMOOK DISTRICT
 Portions of Sections 4 and 9
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Stewardship



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

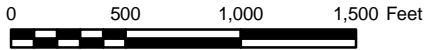
Blocked road

Road construction

County road

Transmission line

3



Jones Flat
-- Key Resources / Recreation --
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TILLAMOOK DISTRICT
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