

# Pre-Operations Report

**Operation Name:** Chicken Combo

**County:** Tillamook

**Management Basin:** Rogers

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

Area	Type of Operation	Gross Acres	Net Acres
1	Modified Clearcut	72	69
<b>Total</b>	<b>Regeneration Harvest</b>	<b>72</b>	<b>69</b>
2	Moderate Partial Cut	168	159
3	Moderate Partial Cut	70	63
<b>Total</b>	<b>Partial Cut Harvest</b>	<b>238</b>	<b>222</b>

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

The sale is located on a gentle ridgetop and moderate slopes in the headwaters of the South Fork of the Wilson River.

Slopes within the sale area are varied and range from 0% to 60% but are predominantly 0% to 30%. Elevations range from 1600 to 2160 feet. Grindstone, Killam, Jewel, and Rye are the major soil types of the sale area.

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

The sale area burned in the 1933, 1939, and 1945 Tillamook Burns. It was then seeded in 1949/1950 and again in 1959/1960. The sale area has had no other management.

Twenty –one percent of the sale area has been inventoried using the Stand Level Inventory (SLI) procedure and those stands have been classified as UDS. The current stand structure for the unmeasured stands has been estimated to be CSC, according to SLI expanded data. Field reconnaissance of the area, showed very similar characteristics to adjacent, measured stands. The current condition resembled that of an early UDS structure, and the decision was made to treat it as such. Stand classification plots will be taken prior to February 2008 to confirm that the unmeasured stand in the clearcut unit is not complex structure (LYR or OFS).

### **Areas 1 and 2:**

The stands are almost entirely Douglas-fir with minor amounts of hemlock, noble fir, redcedar, and alder scattered throughout the sale area. After field recon of the area evidence of *Phellinus weirii* was present and a survey will be conducted to analyze the extent of the disease. The understory is comprised primarily of vine maple, sword fern,

dwarf Oregon grape, huckleberry, and bracken fern. Based on SLI data, average ground cover throughout all areas is estimated to be 70-80%. The remaining 79% of the sale area not inventoried with SLI is considered to be very similar.

Snags in various states of decay are present throughout both sale areas. According to SLI data, there is an average of approximately 5 hard snags per acre ( $\geq 15$ " DBH, Decay Class 0-2). Approximately 120 ft<sup>3</sup> of class one and two DWD is present in portions of the stand inventoried by SLI. Significant amounts of class three, four, and five DWD averaging 3,500-5,000 ft<sup>3</sup> per acre are also present. Due to the presence of *Phellinus* in the area, it is anticipated that above average DWD will result from logging slash. This is due to higher levels of defect and modified bucking practices (administered during harvest activity, not contract mandated). In addition, the high quantity of pre-harvest existing snags will account for more DWD post harvest (due to felling for safety reasons). Levels of Class 1 and 2 DWD will be brought up to the range mandated by the FMP primarily through the two above mentioned processes, additional amounts of DWD recruitment will result post harvest through natural processes. Snag and DWD levels are unknown over the portion of the sale area not currently inventoried by SLI, but the area is considered to be very similar. SLI data for the Rogers Basin yields an average of 164 ft<sup>3</sup> of class one and two DWD, and 0.8 snags ( $\geq 15$ " DBH, Decay Class 0-2). This information in conjunction with information from adjacent stands will be used for planning purposes.

### **Area 3:**

There is evidence of *Phellinus weirii* and a survey will be conducted to determine level of infection in the area. This area again is almost entirely comprised of Douglas-fir with minor amounts of hemlock, noble fir, redcedar, and alder scattered throughout. The understory is comprised primarily of vine maple, sword fern, dwarf Oregon grape, huckleberry, and bracken fern.

Area 3 had an average of five snags per acre in Classes 1 and 2 (three of which in DBH class 8 and 2 in the 16 inch DBH class). More DWD recruitment is anticipated through timber harvest activity, felling of hazard trees/snags, and natural recruitment post harvest.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	MC <sup>3</sup>	7933	DF	45	19	147	73	35	7
		7941*	DF	44	17	215	136	53	62
		<i>Target</i> <sup>4</sup>	<i>REG</i>						
2	PC-M <sup>3</sup>	7949*	DF	44	17	215	136	53	41
		7950*	DF	44	17	215	136	53	108
		7962	RA, DF	37	14	173	163	46	10
		<i>Target</i> <sup>4</sup>			19	130	66	30	159
3	PC-M <sup>3</sup>	7936	DF	40	18	226	124	54	27
		7950*	DF	44	17	215	136	53	18
		7953	DF, RA	38	17	258	172	64	18
		<i>Target</i> <sup>4</sup>			21	140	58	32	63

<sup>1</sup> The source of stand inventory information is from SLI inventory grown forward to 2007. Stand ID's shown with a (\*) are unmeasured stands, and the source of inventory information for these stands is expanded SLI data.

<sup>2</sup> The acres are based on GIS and exclude existing and planned roads, stream buffers, non-thinnable areas, and green tree retention areas.

<sup>3</sup> MC is Modified Clearcut, PC-M is Moderate Partial Cut.

<sup>4</sup> The Target row for partial cut areas identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

### **III. DESIRED FUTURE CONDITION/VISION:**

According to the Forest Grove District's landscape design, the desired future condition (DFC) for Area 1 is 90% General and 10% LYR. The 14 acres designated as LYR by the DFC map was developed at a landscape-level scale with a 'broad-brush' approach. In contrast, the sale boundary was delineated at a site-specific scale, based on field and photo reconnaissance, and the location of the sale boundary reflects topographic and operational considerations. The difference in these scales sometimes results in slivers of DFC complex being included in clearcut prescriptions.

#### **Area 1:**

The DFC for Area 1 is designated primarily GEN (see above); the poor stocking level and high quantities of brush make it a good candidate for regeneration harvest. The harvest operation will convert these stands into REG structure in the short term. The area should be planted with a range of species to strengthen disease resistance, and promote stand level diversity. The future of this stand will focus on timber production.

#### **Areas 2 and 3:**

To promote growth, these stands will be moderately thinned. Both areas consist primarily of a DFC of OFS. About 48 acres of Area 2 has a DFC of LYR. By thinning

these stands, the added light and growing space will help accelerate the growth of new species in the understory of the stands. Growth of a second cohort is essential to guiding the stand towards layered or older forest structure. In addition, the dominant trees (of best form and vigor) will be releases.

All existing snags and down woody debris of all decay classes shall be retained as safety allows.

**Table 3. Stand Structure Information**

Area	Prescription	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
1	MC	7933	UDS	REG	LYR	7
		7941	CSC <sup>2</sup>	REG	GEN	62
2	PC-M	7949	CSC <sup>2</sup>	UDS	LYR	41
		7950	CSC <sup>2</sup>	UDS	LYR	7
					OFS	101
		7962	UDS	UDS	OFS	10
3	PC-M	7936	UDS	UDS	OFS	27
		7950	CSC <sup>2</sup>	UDS	OFS	18
		7953	UDS	UDS	OFS	18

<sup>1</sup> The stand is expected to develop into this condition in the five to ten years after this operation is completed.

<sup>2</sup> Current stand condition is based on expanded data; see discussion above.

#### **IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:**

##### **Area 1:**

This area will be a modified clearcut. The smaller-diameter post-harvest slash levels will be reduced by means of a low intensity broadcast burn. Green tree retention will be concentrated along the lower elevations, with several leave trees left in the higher elevations for snag creation via burn activity. Need for fire trailing will be analyzed post harvest, but is not expected due to existing breaks in the form of roads and trails; the exception being the western boundary of Area 1. Nine conifer trees per acre will be reserved, with two topped for snag creation. Existing snags will be left if it is safe to do so and all existing DWD will be left. More recruitment of snags and DWD is expected through the burn activity. It is anticipated that the newly established plantation will be scheduled for pre-commercial thinning at approximately age 15, and commercial thinning at approximately age 40 before the next modified clearcut harvest at age 60. The stand will develop through the REG, CSC, and UDS conditions between harvest intervals.

The burn activity will allow for the successful reforestation of Douglas-fir, and *Phellinus* resistant species in areas of concern. The regeneration will be composed of a mix of Douglas-fir, alder, and other conifer species which are resistant to *Phellinus weirii*.

Due to areas of *Phellinus* and a high quantity of pre-harvest existing snags, higher accumulations of logging slash are expected from harvest activity. Average estimated additions of down wood through normal logging slash accumulations will be approximately 400-500 ft<sup>3</sup> per acre. Additional DWD will be added over time through windthrow, post burn mortality, residual green trees, and recruitment from *Phellinus*. All of which will bring levels of class 1 and 2 DWD to those mandated by the FMP.

### **Areas 2 and 3:**

The prescription for these areas is a moderate partial cut. Douglas-fir, noble fir, and hemlock will be selected for harvest. All other species will be reserved. The stand will be thinned to a target basal area of 120-140 square feet (depending on whether *Phellinus* will be treated). The average DBH of the residual stand will be approximately 21 inches. There is potential for *Phellinus* treatment, creating small "patch-cuts" ¼ to 5 acres in size. All trees that show signs of having *Phellinus* and all "bridge trees" within 15 feet of infected trees will be cut. Residual trees will be the trees that have the largest DBH and height, and are of the best form and vigor.

The largest gaps created from treatment will be planted with alder. Remaining gaps will have western hemlock and other conifer underplanted or allowed to germinate naturally. The site contains a large quantity of salal and vine maple. Herbicidal application in the large openings will be considered and evaluated after harvest. Approximately 10-15 years after planting, the alder will be evaluated for pruning and the dense clumps of understory trees for pre-commercial thinning.

In areas designated as DFC-OFS/LYR, another entry 20-30 years post harvest will thin the overstory to promote the development of the understory trees and pockets of alder. Over time, Douglas-fir in the overstory will die and the thriving more shade tolerant conifer in the understory will capitalize on opportunities to reach the overstory. Approximately 20-30 years after the second entry the stands will be very close to a condition of complex structure.

By opening up disease pockets, and replanting with resistant species, both of the stands will develop into LYR and OFS. An entry at this time would help maintain a healthy understory and the continued vigor of the overstory. Another entry may be prudent 15-20 years later to keep the stands on their path towards LYR and OFS. Treatment of *Phellinus* should also be evaluated again in order to further strengthen the stand.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	6000		6000
Stumpage Value (\$/MBF)	\$325		
Estimated Gross Value	\$1,950,000		\$1,950,000
		Project Costs:	\$67,000
		Estimated Net Value:	\$1,883,000

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Beaver Dam and Chicken Roads, which are currently all weather, crushed-rock surface roads.

Approximately 1.6 miles of surfaced road will be constructed in order to provide access to landing locations, which will cost approximately \$64,000. See maps for specific road locations and conditions. New construction is limited to mostly ridgetops and gentle to moderate sideslopes.

The rock source will be the Brown's Camp Stockpile.

All haul roads will have high quality crushed rock or pit run surfacing. Roads will provide access to all timber within the sale area and allow for logging methods and hauling which will minimize impacts to soils, residual timber, streams, and riparian areas.

In addition, OHV trail clearing and possibly reconstruction work will have to be done on parts of Island Trail for a total of 0.5 miles. An estimated cost for this work is \$3,000. Consultation with the district recreation coordinator will be necessary during the sale preparation phase to determine whether trail relocation/reconstruction work will still be sought.

Total project costs are \$67,000.

The operation will be 40% cable yarding and 60% ground based yarding.

**Table 5. Transportation Management Summary (Miles)**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	1.6	0
Improvement	0	0	0	0
Maintenance	4.0	4.0	1.6	0
Closure/Vacation	0	0	0	0

**VII. AQUATIC RESOURCES AND WATER QUALITY:**

According to the most current stream information there are three Type F perennial streams within or adjacent to the sale area. The South Fork of the Wilson River is adjacent to the sale area, but will not be affected by harvest activity. One other Type N perennial stream is with the sale area, and there are several adjacent to the sale.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish usage or upon further analysis by a forester during sale layout.

Streams are tributary to the South Fork Wilson River. The timber sale area is not in a Salmon Anchor Habitat.

Riparian area stand types along these streams are a hardwood/conifer mix, and stream buffers within harvest unit boundaries will be managed according to FMP Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

This operation involves an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. The haul route crosses or is in close proximity to a stream with listed fish.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and seasonal restrictions on logging and hauling operations. Restrictions may include limiting the number of loads hauled per day, not hauling during periods of heavy moisture, or having an alternate haul route. Culvert installment and replacement in live streams will be conducted between July 1 and Aug. 31. Operations outside of this period will be reviewed with ODFW.

**VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:**

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist.

Surveys for northern spotted owls were conducted in 2007 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Chicken Combo was surveyed for spotted owls three times in 2007 with no responses, and the second year of survey will be completed in 2008. All surveys were/will be conducted in accordance with USFWS protocol.

Potentially suitable marbled murrelet habitat (two survey sites) adjacent to the sale area was surveyed for murrelets in 2007. The presence of murrelets was not detected during the 2007 surveys. The second year of survey will be completed in 2008. All surveys were/will be completed in accordance with PSG protocol.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records in the Land Management Classification System (LMCS). No listed plant records 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 Areas I and III. There are isolated high landslide hazard locations in Area II. The sale drains into the headwaters of the South Fork of the Wilson River. The risk of landslides delivering directly to the South Fork of the Wilson River from Areas I and III is low and from Area II is low to moderate (*per Northwest Oregon Area Geotechnical Specialist*).

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

#### **X. RECREATION RESOURCES:**

The sale area is designated as Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993).

Unauthorized OHV trails were identified within or adjacent to the sale areas. Trails will be evaluated by the District Recreation Coordinator to determine if the trails should be protected, rehabilitated, and/or blocked to access. Further assessment will likely occur at time of timber sale preparation.

Portions of the Island Trail are within and/or adjacent to the sale area. Short term closure of these trails and associated trailheads will occur to facilitate logging and public safety. Trail replacement and/or relocation in specific areas and slash removal will be in order for the OHV trail upon completion of the operation. A plan will be developed to advise the public when trails are closed due to harvest activity. Potential work may

include placing boulders and logs along the side of the road, creating drainage dips, new trail construction to re-route portions of the old trail as project work, etc.

**XI. CULTURAL RESOURCES:**

The sale area and proposed road construction right-of-way were checked against the Tillamook State Forest Cultural Resource Inventory Database (GIS format). No cultural resource records were identified within or adjacent\* to the operation areas. If any significant cultural resources are located during sale preparation, the Public Use Coordinator (ODF Salem Staff) will be consulted regarding potential protection measures.

*\*Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

**XII. SCENIC RESOURCES:**

The timber sale is in an area of low visual sensitivity.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

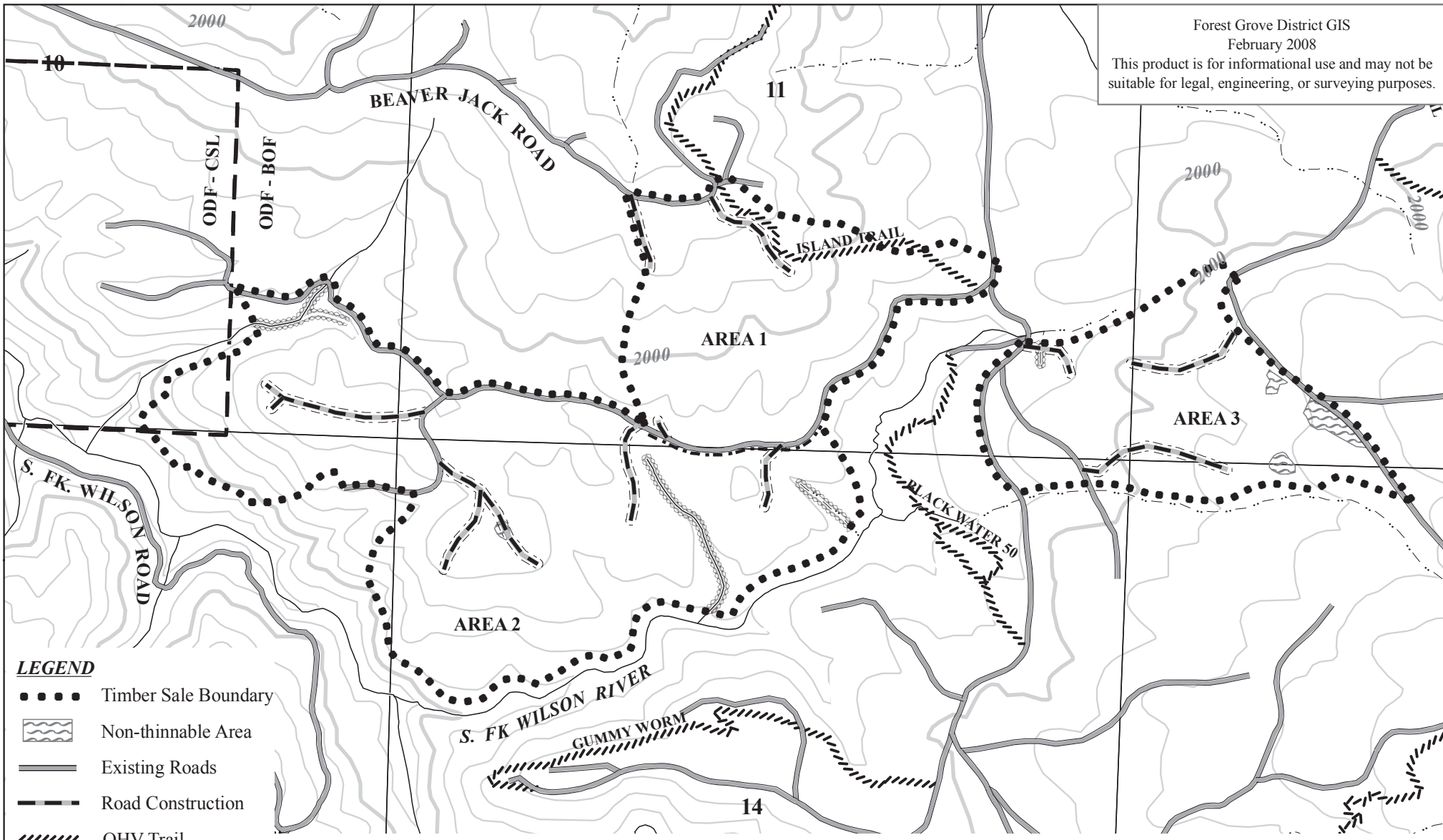
No property survey is needed.

No other resources of significance are involved.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

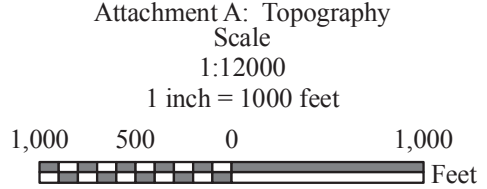
Areas 1, 2, and 3 contain Focused and Special Stewardship, Aquatic and Riparian Habitat Subclass. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized. All three sale areas are Focused Stewardship, Recreation Subclass. See Section X, Recreation Resources, for the strategies that will be implemented to minimize impacts to trail resources.

Forest Grove District GIS  
 February 2008  
 This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.

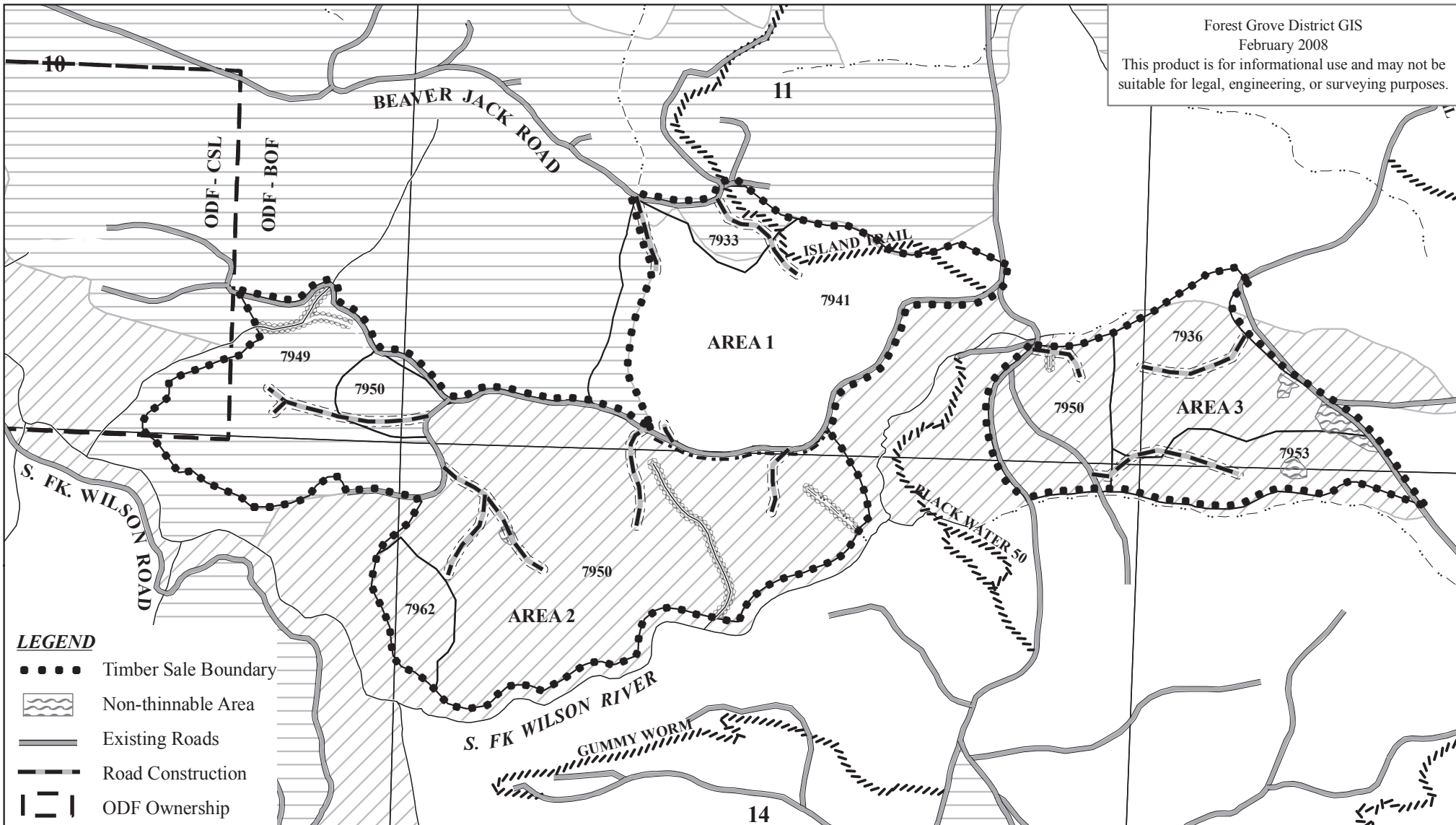


- LEGEND**
- ● ● ● Timber Sale Boundary
  - Non-thinnable Area
  - Existing Roads
  - Road Construction
  - OHV Trail
  - Road Construction Right-of-Way
  - Perennial Type F Stream
  - Perennial Type N Stream
  - Stream Buffer
  - ODF Ownership
  - 400' Contour Intervals
  - 80' Contour Lines

FY 2009  
 CHICKEN COMBO  
 PORTIONS OF SECTIONS 10, 11, 12, 13, 14, & 15, T01N, R06W, W.M.  
 TILLAMOOK COUNTY, OREGON



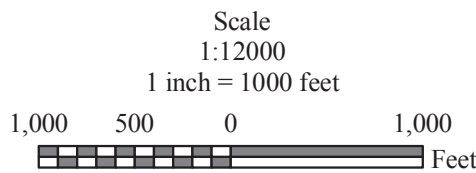
APPROXIMATE NET ACREAGE	
AREA 1	69 ACRES (MC)
AREA 2	159 ACRES (PC-M)
AREA 3	63 ACRES (PC-M)
<b>TOTAL</b>	<b>290 ACRES</b>



**LEGEND**

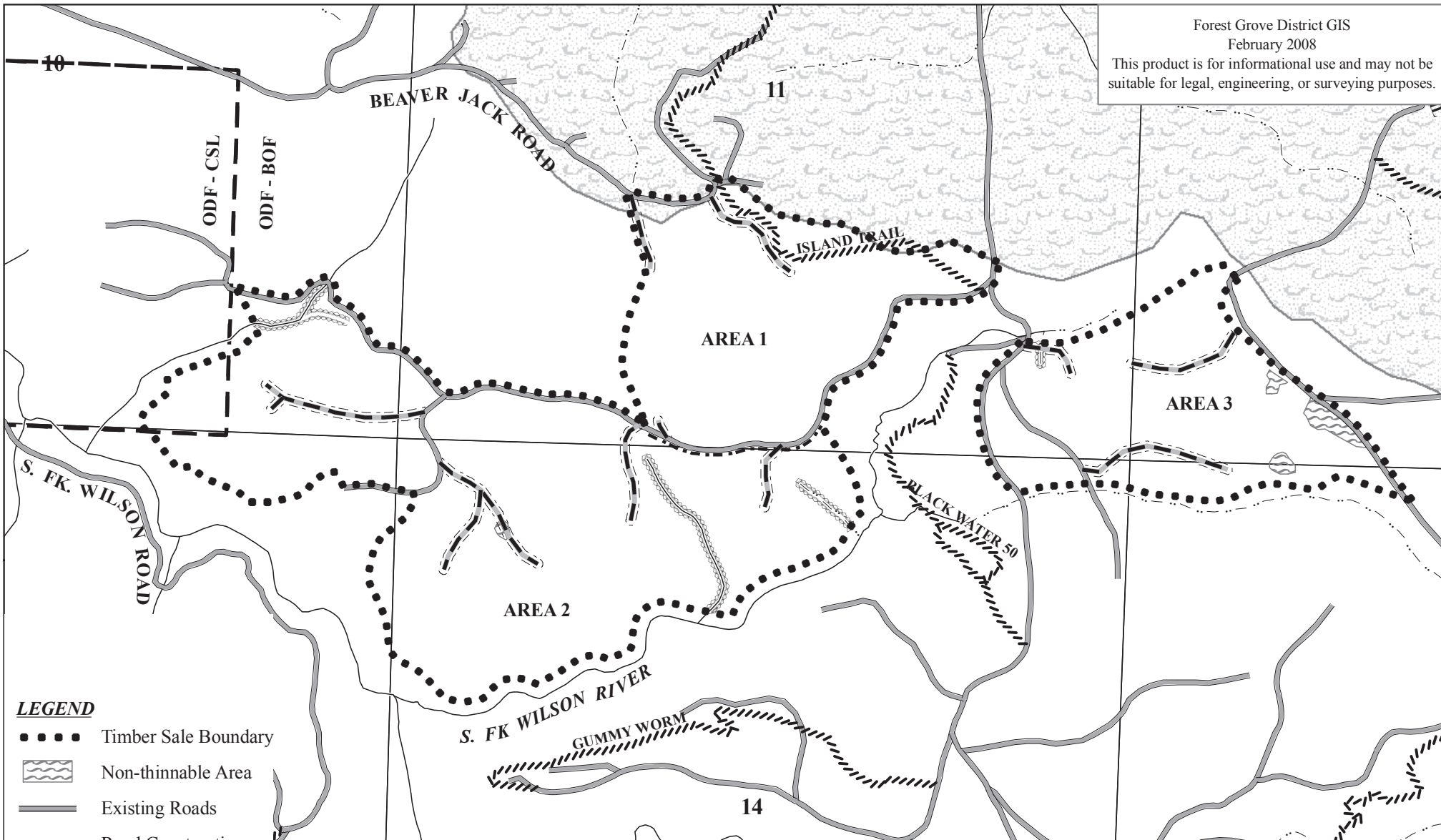
- ● ● ● Timber Sale Boundary
- Non-thinnable Area
- Existing Roads
- Road Construction
- ODF Ownership
- Road Construction Right-of-Way
- OHV Trail
- Perennial Type F Stream
- Perennial Type N Stream
- Stream Buffer
- SLI Polygons (Stand ID#)
- DFC Stand Type
- Layered
- Older Forest Structure

FY 2009  
CHICKEN COMBO  
PORTIONS OF SECTIONS 10, 11, 12, 13, 14, & 15, T01N, R06W, W.M.  
TILLAMOOK COUNTY, OREGON  
Attachment B: Desired Future Condition



APPROXIMATE NET ACREAGE

AREA 1	69 ACRES (MC)
AREA 2	159 ACRES (PC-M)
AREA 3	63 ACRES (PC-M)
<b>TOTAL</b>	<b>290 ACRES</b>



- LEGEND**
- Timber Sale Boundary
  - ▤ Non-thinnable Area
  - Existing Roads
  - - - Road Construction
  - - - - Road Construction Right-of-Way
  - ▤ ODF Ownership
  - ▨ OHV Trail
  - Perennial Type F Stream
  - · - · - Perennial Type N Stream
  - ▤ Stream Buffer
  - ▤ Salmon Anchor Habitat (SAH)

FY 2009  
CHICKEN COMBO  
PORTIONS OF SECTIONS 10, 11, 12, 13, 14, & 15, T01N, R06W, W.M.  
TILLAMOOK COUNTY, OREGON

Attachment C: Key Resources

(SAH)

Scale

1:12000

1 inch = 1000 feet



APPROXIMATE NET ACREAGE

AREA 1	69 ACRES (MC)
AREA 2	159 ACRES (PC-M)
AREA 3	63 ACRES (PC-M)
<b>TOTAL</b>	<b>290 ACRES</b>