

Pre-Operations Report

Operation Name: Sprague's Stump
County: Clatsop
Management Basin: Northrup

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	PC-M	348	305
2	MC	102	97
3	MC	54	46
Total	Modified Clearcut	156	143
Total	Partial Cut	348	305

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are located in the Northrup Basin. They are in the western hemlock vegetation zone, and are characterized by Douglas-fir stands, with some western hemlock, western redcedar, and red alder. The soil series are Keasey on steeper slopes, with Tillamook or Bradwood on most slopes. Site Index is highest (average 125) on the Tillamook Soil Series and lowest on Keasey (average 110) with Bradwood intermediate (120). The landform consists of Cow Ridge and a portion of its side slopes. Areas 1-3 drain into Cow Creek and then into Northrup Creek.

The sale is underlain by sedimentary rocks of the informal Sager Creek formation, informal Northrup Creek formation, and the Pittsburg Bluff Formation, all mudstones and sandstones. Slopes in the operation area range from gentle mountain slopes (5-20%) to precipitous mountain slopes (over 65%), with primarily eastern aspects. Elevations range from 750 to 1,450 feet.

II. CURRENT STAND CONDITION:

Area 1 - The current stands are approximately 59 years old, and are composed primarily of small to moderate sized Douglas-fir (~19" DBH). The stands are categorized as an Understory structure (UDS) with a stand density index of 60.

Areas 2 - The current stands are primarily composed of 46 year old, small to large sized, Douglas-fir with conifer and hardwood species mixed throughout the stand. The stand is categorized as UDS with a stand density index of 40.

Areas 3 - The current stands are primarily composed of 60-70 year old, small to large sized, Douglas-fir with conifer and hardwood species mixed throughout the stand. The stand is categorized as UDS with a stand density index ranging from 40-70.

Understory development for all sale areas consists primarily of sword fern, vine maple, huckleberry, and salmonberry.

The existing amount of snags and large woody debris is not known at this time. Evaluation of existing snags and large woody debris will be conducted during actual sale layout.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age ²	DBH	BA	TPA	SDI	Acres ³
1	PC - M	23688	DF	59	20	234	112	55	67
	PC - M	23663	DF	58	19	270	145	65	197
	PC - M	23698	DF	46	17	162	103	40	41
		Target ⁴				140-160		25-35	305
2	MC	23698	DF	46	17	162	103	40	97
		Target ⁴	DF, WH						97
3	MC	23735	DF	59	18	291	167	71	46
		Target ⁴	DF, WH						46

1 The source of stand inventory information is SLI.

2 Age shown is as of 2007.

3 The acres are based on GIS and exclude roads, streams buffers, reserve areas, etc.

4The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED FUTURE CONDITION/VISION:

Area 1 has a desired future condition of Layered (LYR). This area will be thinned to a level that will develop the existing UDS condition into a Layered (LYR) condition throughout these stands. It is anticipated that this entry will increase individual tree growth and allow further development of tree crowns and understory development. It was anticipated that a heavier thin will prevent having to come in during a relatively short period to open the stand again. Vertical layers of tree crowns and shrubs will be essential in creating a Layered stand.

Areas 2 and 3 do not have a designated complex desired future condition. The desired conditions of these stands are healthy vigorous stands of mixed conifer and hardwoods. By harvesting in these stands and planting a mix of conifer species, future opportunities will be increased for management decisions. Five

to seven of the largest conifer trees per acre will be left to provide a source for natural regeneration and future downed wood and snags. A precommercial thinning is anticipated at 12-17 years when crowns close followed by a commercial thinning at 30-40 years of age to ensure continued growth. At age 45-50 the stand will be evaluated for either additional thinning or regeneration harvest.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	23688	UDS	UDS	LYR	67
	23663	UDS	UDS	LYR	197
	23698	UDS	UDS	GEN	41
2	23698	UDS	REGEN	GEN	97
3	23735	UDS	REGEN	GEN	46

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

IV. PROPOSED MANAGEMENT PRESCRIPTION:

Area 1 - The sale is designed to commercially thin from below to a stand density index (SDI) of 25 to 35. An effort will be made to retain minor tree species. Trees less than 8" DBH will be reserved.

Areas 2 and 3 - These areas are planned for a modified clearcut that will be replanted with a mixture of conifer species. Minor species found will be reserved from cutting.

Snags: During all harvesting activities, all existing snags will be retained unless deemed to be safety hazards. Where fewer than two hard snags per acre are found to exist during sale layout, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels (FMP, "Landscape Management Strategy 3c. Snags", pages 4-53 and 4-54). This will not be feasible in Area 1 due to the low number of large retained conifers

Green Trees: A combination of methods will be implemented to achieve the green tree retention requirements such as green tree retention areas, stream buffers, and trees scattered across the sale areas (FMP, page 4-53, Paragraph 2).

Downed Wood: For all harvesting activities, all existing down woody debris will be retained. Efforts will be made to leave as much downed wood that is created from the harvest activities within the unit. This will be accomplished through topping trees and bucking out cull sections within the unit. It is also anticipated that natural snag and down wood recruitment will occur post harvest over time due to natural occurrences. These strategies will be used to meet the landscape

targets for down woody debris as prescribed in the FMP (FMP, "Landscape Management Strategy 3d. Down Wood." pages 4-54 and 4-55).

Some site preparation will be provided during cable and ground based harvesting. The current reforestation plan calls for planting at 300 trees per acre with the following species mixture: 50% Douglas-fir, 45% western hemlock, 5% western red cedar. Animal browse is a challenge in this geographic location. Tree protection measure will include: paper bud caps on the Douglas-fir, and tubes on the Western Red Cedar. Mountain beaver trapping will occur prior to initial planting.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	X
Planned Quarter		Alternate	

	Conifer	Hardwood	Total
Net Volume (MBF)	10,000	900	10,900
Stumpage Value (\$/MBF)	\$275	\$400	
Estimated Gross Value	\$2,750,000	\$360,000	\$3,110,000
		Project Cost:	\$281,700
		Estimated Net Value:	\$2,828,300

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to the harvest site will be Highway 202 to Northrup Creek Road to Cow Ridge Road

There are currently good quality forest roads accessing all of the sale areas. The proposed new roads are composed of collector spurs and relatively short dirt and/or rocked spurs from existing rocked roads. Road improvement will be needed on the existing spur road in Area 1. New road construction in Areas 1 and 2 will be surfaced spurs. Currently, the waterbarred and blocked dirt spur accessing Area 3 is being used as part of the horse trail. At the conclusion of harvesting activities this dirt spur will be restored to useable trail condition. Approximately 1,500 feet of new road construction into Areas 1 and 2 will be constructed on existing horse trail off Cow Ridge Road. Brushing needs will be considered at the time of sale layout.

The sale will have cable-yarding settings as well as ground yarding areas. These areas were determined from analysis of the terrain and landing locations. Existing roads will be utilized as much as possible for logging the sale areas.

The road rock needed will be crushed at the Northrup Quarry.

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0.0	0.0	2.6	0.5
Improvement	0.0	0.0	0.3	0.8
Maintenance	0.0	4.3	2.9	0.0
Close/Block	0.0	0.0	0.0	1.3
Vacating	0.0	0.0	0.0	0.0

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F and Domestic Use Streams: Cow Creek, a Type F stream, is located adjacent to the western boundary of all sale areas. In Area 1 an unknown fish presence tributary of Cow Creek runs the western boundary for 1,700 feet. It then turns into an assumed fish tributary of Cow Creek for an additional 2,600 feet before confluencing with Cow Creek. Cow creek runs an additional 1,700 feet along the southwestern boundary. The western boundary of Area 2 is adjacent to Cow Creek for a distance of 2,000 feet. The western boundary of Areas 3 is adjacent to Cow Creek for approximately 300 feet. An unknown fish tributary of Cow Creek runs adjacent to the northwest boundary of Area 3 for approximately 900 feet.

There are no known domestic water systems associated with this sale. This sale does not contain any streams with federally listed fish species.

Type N Streams: There are small perennial Type N streams within all sale areas.

In addition, all streams will be examined to determine stream type and classification during sale layout, and then the specific riparian management area strategies required in the FMP will be implemented. The FMP riparian management area strategies that will be implemented are found in the FMP, Appendix J, "Management Standards for Aquatic and Riparian Areas", pages J-1 through J-16.

There may be an opportunity to perform stream enhancement work in Cow Creek. Further assessment and collaboration will be done with ODFW biologists and the Jewell Unit Forester. If any in-stream work is done with this sale, then it will be conducted during in-stream periods established by ODFW.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

This sale was surveyed for Northern Spotted Owls in 2007 with no responses and will be surveyed in 2008.

The ODF Northwest Area Biologist determined that none of the sale areas contained suitable habitat for Marbled Murrelets.

The sale area was checked against district knowledge for any listed plant location. The sale area was also checked against the Oregon Natural Heritage Program (OHNP) database of known listed plant locations. No listed plant records were identified within the sale area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based off of USGS 1:24,000 topographic maps and available geologic maps. There are no high landslide hazard locations in Area III and there are a few isolated high landslide hazard locations in Areas I and II. Areas I and II drain into Cow Creek. Area III drains into Cow Creek and an unnamed tributary to Northrup Creek. The risk of landslides delivering directly to Cow Creek or the unnamed tributary to Northrup Creek from the sale area is low. Areas I and II 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.

X. RECREATION RESOURCES:

This area is seeing increasing recreation use as the Northrup Creek Horse Camp trails exist in the sale area. The Northrup Creek loop trail that was reviewed with the Jewell Unit Forester in December 2003 passes through sale areas 1 and 3. Bridge structures exist in sale area 1 on the old grade. The road into area 3 should remain dirt if possible to allow future equestrian use. Coordination between the unit forester and the district recreation coordinator will be important when laying out the timber sale to protect the structures and minimize user conflicts.

XI. CULTURAL RESOURCES:

No known cultural resources are within or adjacent to the operation.

XII. SCENIC RESOURCES:

The sale area is in a landscape of low visual sensitivity (Level 3).

XIII. OTHER RESOURCE CONSIDERATIONS:

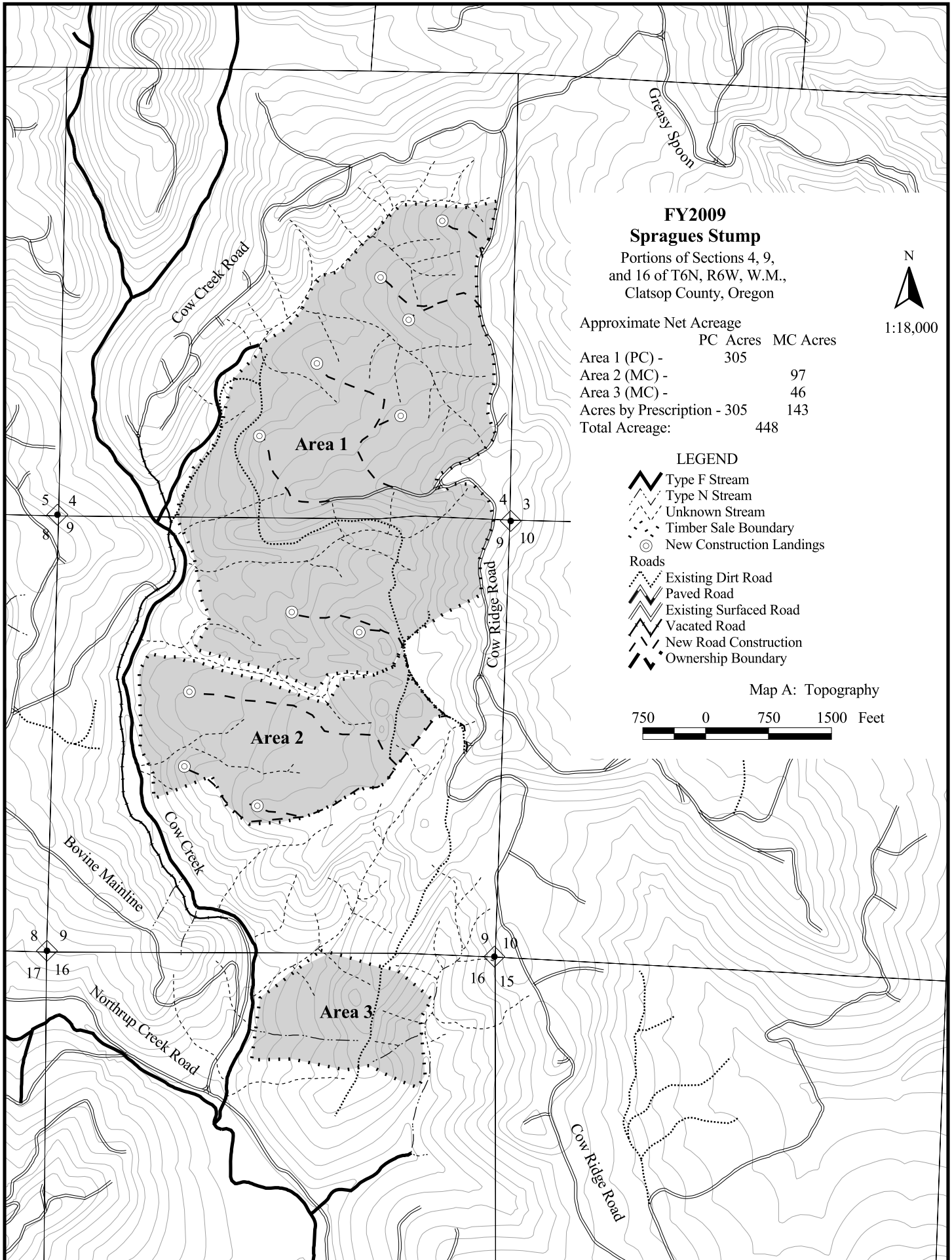
Area 1 - No survey work required. Protect ¼ corner to Sections 4 and 9. Rewitnessed, Metcalf, 1993.

Areas 2 and 3 - No survey work required. No corners to protect.

Corners Requiring Rewitnessing In Area: Section corner to Sections 4, 5, 8 & 9, T6N, R6W

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

All acres in Areas 1-3 are classified as “general management.”



FY2009

Spragues Stump

Portions of Sections 4, 9,
and 16 of T6N, R6W, W.M.,
Clatsop County, Oregon



1:18,000

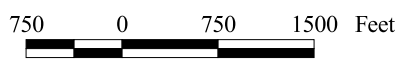
Approximate Net Acreage

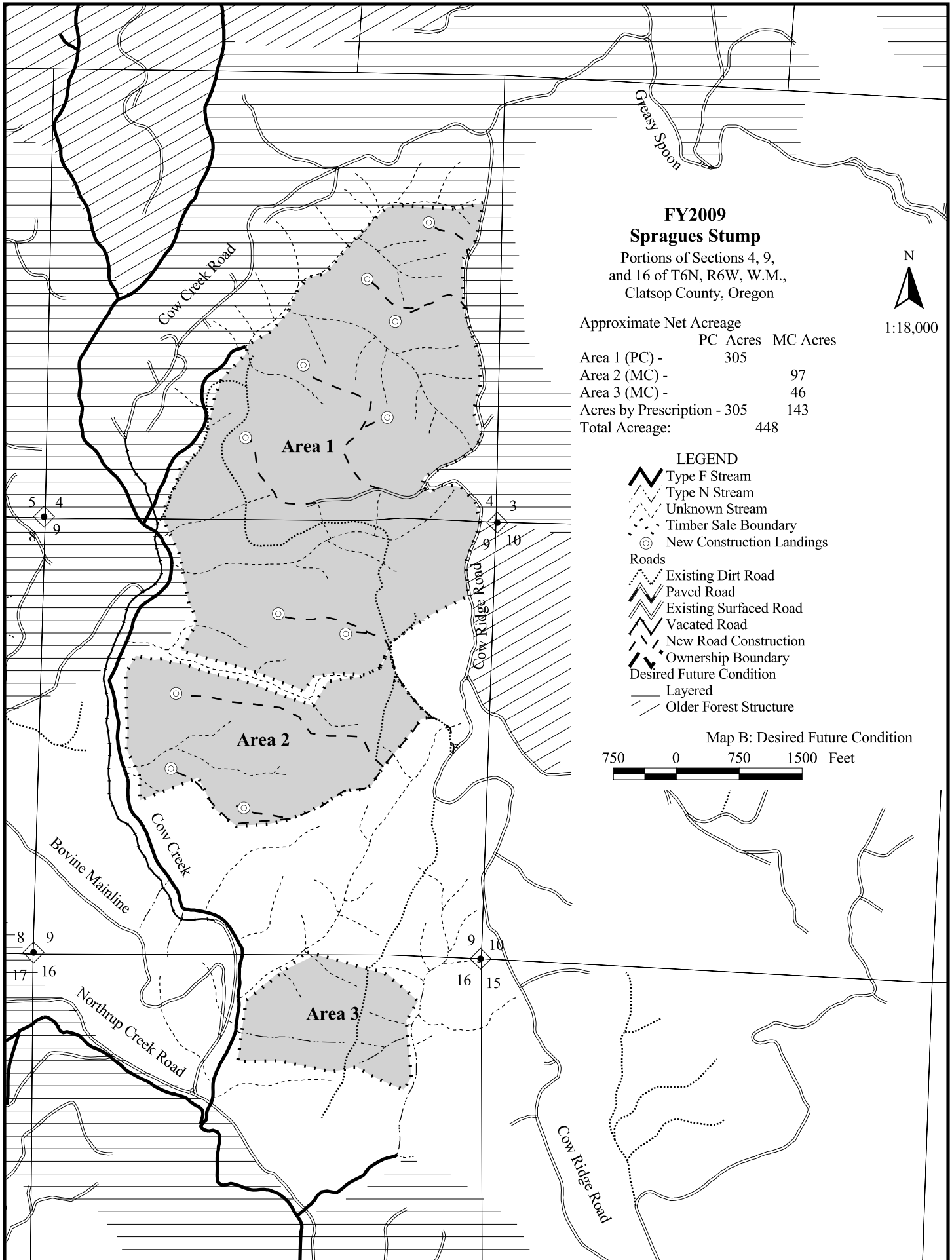
	PC Acres	MC Acres
Area 1 (PC) -	305	
Area 2 (MC) -		97
Area 3 (MC) -		46
Acres by Prescription -	305	143
Total Acreage:		448

LEGEND

- Type F Stream
- Type N Stream
- Unknown Stream
- Timber Sale Boundary
- New Construction Landings
- Roads**
- Existing Dirt Road
- Paved Road
- Existing Surfaced Road
- Vacated Road
- New Road Construction
- Ownership Boundary

Map A: Topography





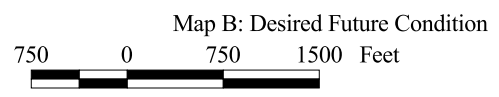
**FY2009
Spragues Stump**
Portions of Sections 4, 9,
and 16 of T6N, R6W, W.M.,
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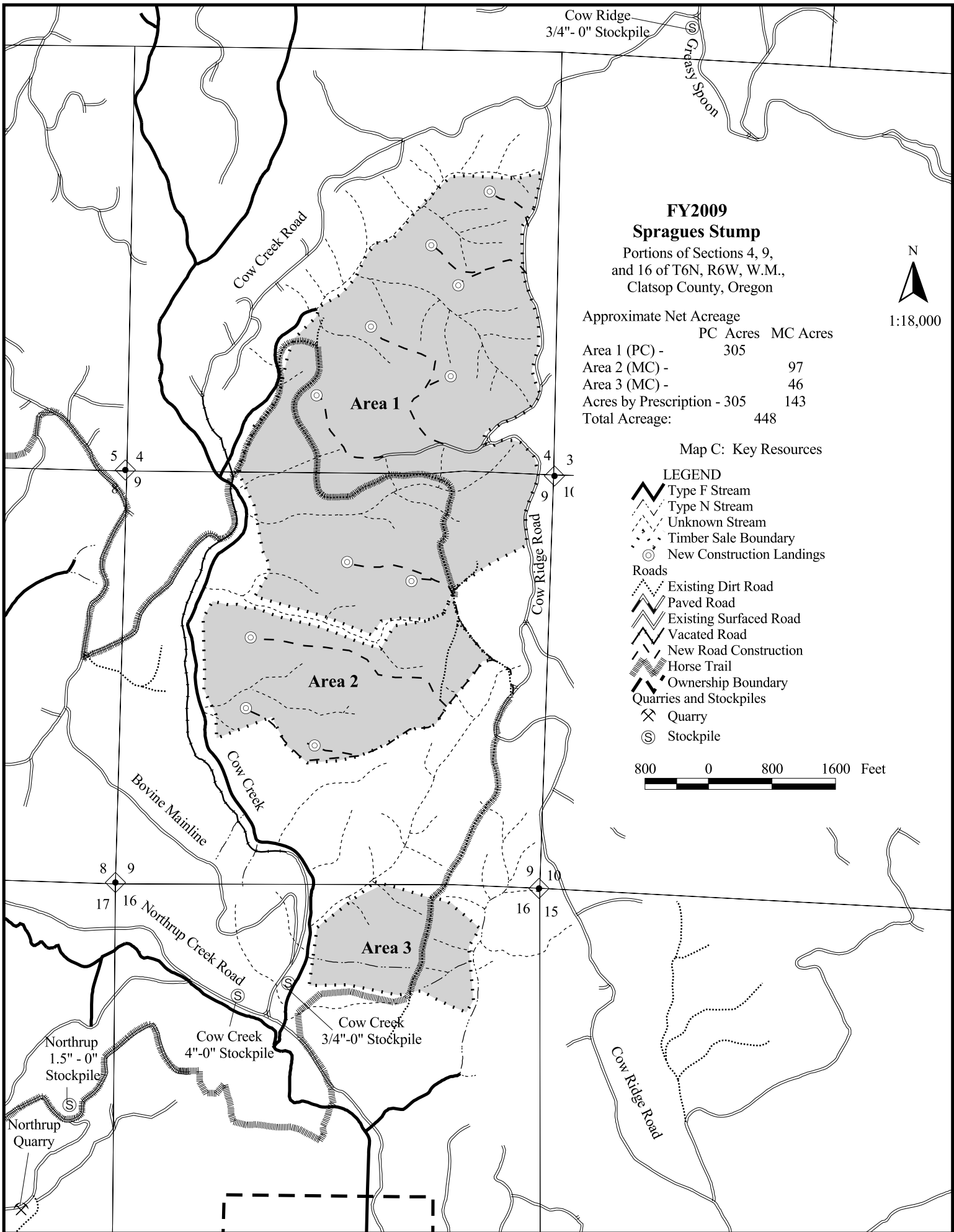


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 - Roads**
 - Existing Dirt Road
 - Paved Road
 - Existing Surfaced Road
 - Vacated Road
 - New Road Construction
 - Ownership Boundary
 - Desired Future Condition
 - Layered
 - Older Forest Structure





**FY2009
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Map C: Key Resources

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- Type N Stream
- Unknown Stream
- Timber Sale Boundary
- New Construction Landings
- Roads**
- Existing Dirt Road
- Paved Road
- Existing Surfaced Road
- Vacated Road
- New Road Construction
- Horse Trail
- Ownership Boundary
- Quarries and Stockpiles**
- Quarry
- Stockpile

800 0 800 1600 Feet