

Pre-Operations Report

Operation Name: Progeny Split
County: Clatsop
Management Basin: North Fork

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	57	51
2	MC	56	50
3	PC-M	21	19
4	PC-M	133	120
5	MC	33	30
Total	Modified Clearcut	146	131
Total	Partial Cut	154	139
Total		300	270

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

This sale is located within the southern portion of the North Fork Basin. The sale areas are located ¼ mile north of the North Fork Nehalem River and 2½ miles East of Highway 53. The sale areas are composed of mixed conifer stands with inclusions of hardwoods. The understory vegetation consists of vine maple, huckleberry and ferns, with some salmonberry in the hardwood pockets. Well maintained mainline roads and secondary rocked roads on ODF property provide primary access to all of the sale areas.

Soil types in these sale areas are mostly Tillamook, Neddona, and Humbug and are deep, well-drained, moderately fine to course textured, with site index ranging from 120 to 140 feet for Douglas-fir, and averaging 105 feet for hemlock. Elevations range from 360 to 1,040 feet.

The sale is located on gentle to very steep slopes on the divide between Fall Creek and an unnamed tributary of the North Fork Nehalem River. There are very steep slopes associated with the western flank of Fall Creek in Areas 1 and 3. Additionally there are bands of steep slopes in Areas 2 and 5. Areas 1, 2, and the north portion of Area 5 of the sale are underlain by sedimentary rocks of the Keasey Formation and Areas 2 and 3 and the south portion of Area 5 are underlain by igneous origin rocks of the informal Coal Mountain Basalt Formation.

II. CURRENT STAND CONDITION:

Areas 1, 2, and 5 – The current stands are generally 46 to 82 years old, and are Douglas-fir stands with scattered hemlock and some patches of alder. There is a higher component of western red cedar in Area 2. The understory vegetation is variable, and is composed of sword ferns and huckleberry. Salmonberry is the primary understory vegetation in the hardwood portions.

Areas 1, 2, and 5 are currently typed as Closed Single Canopy (CSC) and Understory (UDS) with OSCUR Stand 2002. Field reconnaissance indicates that these areas have a current condition of UDS. Areas 1, 2, and 5 will be further evaluated (as defined by draft memo 3/23/2004 “*Planned Sale Inventory Requirements – Alternative to Full Stand Level Inventory*”).

Area 3 – These stands are approximately 66 to 76 years old, mixed hardwood and conifer. The conifer patches are composed of Douglas-fir and hemlock, and are relatively dense and have a minimal understory. The hardwood portions have both bigleaf maple and red alder, which provides some additional horizontal and vertical diversity. Understory vegetation is primarily associated with the hardwood portions of the sale area and are mostly ferns, salmonberry, vine maple and huckleberry.

Area 4 - The current stands are approximately 65 to 82 years old, and are Douglas-fir stands with some hemlock and some stringers of alder in the draws. In general, these stands are fairly uniform, and have an SDI range of 51 to 79. There are patches of smaller diameter trees scattered amongst the larger trees. The understory vegetation is minimal, and is composed primarily of sword ferns, huckleberry, and some vinemaple.

Area 4 is currently typed as CSC with OSCUR Stand 2002. Field reconnaissance indicates that this area has a current condition of UDS.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	MC	23407	DF, RA	69	18	276	153	66	23
	MC	23408	DF	81	20	266	121	61	24
	MC	23409	RA	46	14	128	128	46	4
	MC	Target ³	DF, WH, WRC				5-8		51
2	MC	23397	DF, WRC	73	19	227	110	53	37
	MC	23398	DF, WH	63	20	321	144	74	12
	MC	23409	RA	46	14	128	128	46	1
	MC	Target ³	DF, WH, WRC				5-8		50
3	PC-M	23395	WH	66	18	168	92	40	1
	PC-M	23396	RA, BLM	76	17	172	107	56	16
	PC-M	23409	RA	46	14	128	128	46	2
	PC-M	Target ³	WH, RA, BLM, DF		20	150	70	30	19
4	PC-M	23403	DF	72	21	224	95	51	41
	PC-M	23404	DF	66	19	287	143	67	34
	PC-M	23405	DF	65	18	325	175	78	19
	PC-M	23406	DF, WH	82	18	332	182	79	26
	PC-M	Target ³	DF, WH		23	170	60	30-35	120
5	MC	23388	RA	61	18	141	84	46	7
	MC	23402	WH, DF	78	21	224	95	51	14
	MC	23430	WH, DF	68	17	251	164	62	9
			Target ³	DF, WH, WRC				5-8	

1 The source of stand inventory information is OSCUR Stand 2002. Stand ages shown are as of 2006.

2 The acres are based on (orthophotos, traverse, GIS, GPS, etc) and exclude roads, streams buffers, reserve areas, etc.

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

III. DESIRED STAND CONDITION:

Areas 3 and 4 have a Desired Future Condition (DFC) of complex, with Area 3 targeted for Older Forest Structure (OFS) and Layered (LYR) for Area 4. Areas 1, 2 and 5 are not planned to have a complex Desired Future Condition on the landscape.

Table 3.

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	23407	CSC	REG	General	23
1	23408	CSC	REG	General	24
1	23409	UDS	REG	General	4
2	23397	UDS	REG	General	37
2	23398	CSC	REG	General	12
2	23409	UDS	REG	General	1
3	23395	LYR	OFS	OFS	1
3	23396	UDS	OFS	OFS	16
3	23409	UDS	OFS	OFS	2
4	23403	CSC	LYR	LYR	41
4	23404	CSC	LYR	LYR	34
4	23405	CSC	LYR	LYR	19
4	23406	CSC	LYR	LYR	26
5	23388	UDS	REG	General	7
5	23402	UDS	REG	General	14
5	23430	CSC	REG	General	9

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/VISION:

Areas 1, 2, and 5 - are planned for modified clearcut and will be replanted with a mixture of conifer species, including Douglas-fir, western hemlock, and some western red cedar. It is anticipated that red alder and bigleaf maple will naturally seed in portions of exposed to mineral soil.

Area 3 – is beginning to develop many of the components necessary for an OFS stand. The existing stocking levels vary significantly across the sale area. The application of a general basal area thinning prescription of stand density 30 to 35% to only the conifer portions should maintain or enhance this variability of stand densities. Within the conifer portions, non-merchantable understory trees will be retained. A requirement for retaining a minimum number of smaller diameter conifer per acre may be utilized to ensure retention of different diameter ranges. In order to maintain the existing horizontal and vertical diversity, all hardwoods will be retained. It is anticipated that this prescription will develop tree diameter size and increase structural diversity within the stand, and reach an OFS condition shortly after harvesting.

Area 4 – The existing stocking levels vary somewhat across the sale area. The application of a general basal area thinning prescription of stand density 30 to 35% should maintain or enhance this variability of stand densities. There is a small component of younger merchantable conifer through portions of the sale area, primarily intermediate hemlock and a few cedar. In order to preserve some of the existing species diversity, the “biggest and best” trees will be retained, regardless of species, including alder. Non-merchantable understory trees will

be retained. A requirement for retaining a minimum number of smaller diameter conifer per acre may be utilized to ensure retention of different diameter ranges. It is anticipated that this prescription will develop tree diameter size and increase structural diversity within the stand, and reach a Layered condition shortly after harvesting.

Snags: In all areas, all existing snags will be retained unless deemed to be safety hazards. In MC areas, if pre-sale activities determine that fewer than two hard snags per acre exist, opportunities for snag creation or leaving additional live green trees will be implemented to supplement landscape snag levels as defined by the Forest Management Plan. In Area 4, it is anticipated that additional snags will develop during yarding activities by leaving, topping, or girdling damaged rub trees, tail trees, lift trees, and/or intermediate support trees. In Area 3, if pre-sale activities determine that fewer than two hard snags per acre 24 inches in DBH or greater exist, opportunities for snag creation will be implemented.

Green Trees: In MC Areas 1, 2, and 5, an average of five to seven green trees per acre will be scattered and/or clumped throughout the areas, and not solely located in riparian areas. Non-merchantable understory trees will be retained. In addition, non-merchantable alder and bigleaf maple may be left in operationally feasible areas to provide short term snag recruitment for cavity nesting birds. In all sale areas minor species such as red cedar may be reserved from cutting, and any existing larger remnant trees will be reserved from cutting.

Downed Wood: For all harvesting activities, all existing downed woody debris will be retained. In MC Areas 1, 2, and 5, additional conifer trees and/or conifer logs will be retained to meet the landscape targets for down wood as prescribed in the FMP and Implementation Plan. Obvious defect in conifer logs will be bucked out in the unit to enhance downed wood levels. In Areas 1, 2, and 5, an average of 800 cubic feet per acre of large down wood may be left to make up for deficiencies in another proposed timber sale in the North Fork Basin, Area 4 of Summit Stone, in order to meet the landscape-level targets (FMP, page 4-54). In partial cut areas, to increase down wood levels, operations will be required to top trees prior to yarding and to yard only merchantable log segments to roadsides.

Site Preparation treatments for Areas 1, 2, and 5 will be further evaluated with the reforestation forester during sale layout. Site preparation for Areas 1, 2, and 5 will be accomplished through cable yarding operations, ground based harvesting, and mechanical manipulation of slash concentrations. These sale areas will be replanted with Douglas-fir, western hemlock, and western red cedar. Animal damage through big game browse is anticipated to be high. Mountain beaver trapping will focus on draw areas and sword fern and alder type within the stand. Tree protection will be prescribed for newly planted conifer species, Douglas-fir will receive paper bud caps, cedar will receive tubes at initial planting.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		✓
Planned Quarter:		3 rd	

	Conifer	Hardwood	Total
Net Volume (MBF)	7,800	2,100	9,900
Stumpage Value (\$/MBF)	\$400	\$400	
Estimated Gross Value	\$3,120,000	\$840,000	\$3,960,000
		Project Costs:	\$456,000
		Estimated Net Value:	\$3,502,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

There are currently good quality forest roads accessing the general vicinity of the sale areas. All of the sale areas can be accessed by extending road systems from the Progeny Ridge Road and North Fork Road networks and utilizing multi-span cable yarding (long line) systems from the existing roads.

The proposed new roads are composed of collector spurs and relatively short dirt and/or rocked spurs from existing rocked roads. The roads are designed to reach ridge-tops to facilitate cable yarding. Roads into Area 1 will be evaluated for use of temporary dirt roads. It is anticipated that some portion of the spurs needed to access these modified-clearcut areas will be vacated upon completion of harvesting activities. These plans will be further explored and evaluated during the field layout process. The new rocked roads into the partial cut areas will be needed for future harvesting entries, and will remain open upon completion of harvesting activities.

Approximately 7.50 miles of road improvement is needed on sale access spurs, North Fork Road and Fall Creek Road.

The road rock needed for road construction and improvement will be obtained from Cole Mountain stockpiles and will be crushed at the Munce Quarry.

On Fall Creek Road a stream crossing on Fall Creek will be evaluated for fish passage improvements.

The project work for this sale is estimated to cost approximately \$456,000.

Multi-span cable yarding (long line) systems from the existing roads and helicopter yarding were also analyzed. These alternative harvesting strategies

were determined to be economically unfeasible and provided minimal additional resource protection.

Approximately 75% of the sale area will be cable logged, as the slopes are moderate to steep. Ground based harvesting systems will be utilized on the more gentle slopes. Cable yarding can be done with medium size yarders. Tractor logging can be done with shovel loggers, track or wheel skidders.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	1.0	0.0
Improve	5.0	1.5	1.0	0.0
Maintain	9.0	2.3	2.5	0.0
Close/Block	0.0	0.0	0.0	0.0
Vacate	0.0	0.0	0.0	0.0

VII. AQUATIC RESOURCES AND WATER QUALITY:

Type F Streams: North Fork Nehalem River (large, Type F stream) flows along the south boundary of Area 5.
 Fall Creek (medium, Type F stream) flows along the west boundary of Area 1 and 3.

There are no Type F streams within areas 1 through 5.

Type N Streams: There are small perennial Type N streams in all sale areas. NW Oregon Forest Plan stream riparian strategies will be employed along these streams. The current riparian vegetation is composed of a patchwork of conifer and hardwood overstories. The understory in the conifer dominated reaches is similar to the headlands, with mostly ferns, salal, and some wild rose. The understory within the alder reaches is mostly salmonberry.

All streams will be examined during sale layout to determine stream type and classification. Then, the specific RMA strategies required in the FMP will be implemented. These strategies are found in Appendix J, pages J-1 through J-16.

The sale areas are within proximity of streams in which listed fish are present.

Streams associated with the sale have a LMCS Aquatic and Riparian classification of focused. Areas 1, 2, and 3 are located within the North Fork Nehalem Salmon Anchor Habitat area (SAH). The sale shall receive all resource

protection measures necessary to mitigate any slope stability hazards in accordance with the standards contained in the SAH strategies.

Stream Enhancement Opportunities: Preliminary sale review by ODFW Fish Habitat Biologist indicates that there are options for stream enhancement projects near Area 3 of this sale. Further assessment and collaboration will be done with ODFW biologists and the Sunset Unit Forester.

Aquatic Resource Protection: For all areas, full log suspension is required when cable yarding over streams. No ground-based logging equipment operation is allowed within the stream bank zone. Adequate RMA buffers will be left where required on all streams per the FMP standards. To protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods range from use of hay bales in road ditches, to “ditch-outs” away from streams, to complete shutdown of logging and hauling operations during times of heavy rainfall. There are no known high risk sites within the sale area. Any high-risk sites found will require at least one-end log suspension and cable logging. If any in-stream work is required with the sale, then the in-stream work will be conducted during in-stream periods established by ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas were surveyed to protocol for Northern Spotted Owls in 2006. A single unknown sex response was observed within 1.5 miles of Area 1. This response was determined to be a pair of Barred Owls which were observed during follow up surveys. The sale areas are scheduled to be resurveyed in 2007.

The sale areas were surveyed for Marbled Murrelets in 2006, which resulted in two detections, in the form of a “flyover,” but no “occupied behavior.” The sale areas are scheduled to be resurveyed in 2007.

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

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There are bands of very steep slopes on the topographic map in all of the sale areas. The initial risk assessment by the geotechnical specialist is high. The geotechnical specialist will be consulted during sale layout to determine if a field visit is needed.

X. RECREATION RESOURCES:

This area receives little use, most likely hunting and dispersed camping. The Clatsop State Forest Recreation Plan does not list any specific activities for this portion of the basin. Area 3 is located near the North Fork Nehalem Fish and Wildlife bridge. There may be some dispersed sites in the area along the river.

XI. CULTURAL RESOURCES:

None.

XII. SCENIC RESOURCES:

The sale areas are not visible from any county or state highway. All forest roads accessing the sale areas are Level 3 classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

Property Lines and Corners (See Survey Plan)

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Areas 1, 2, and 3 are classified as Focused – Wildlife for the Upper North Fork Nehalem Salmon Anchor Habitat area. The remaining lands in this timber sale are all classified “general” management.

FY2008

Progeny Split

Portions of Sections 17, 18, 19, and 20,
T4N, R8W, W.M., Clatsop County, Oregon.

Map A - Topography

APPROXIMATE NET ACREAGE:

	MC Acres	PC Acres
Area 1	51	
Area 2	50	
Area 3		19
Area 4		120
Area 5	30	
Totals	131	139
Total Sale Acreage = 270		

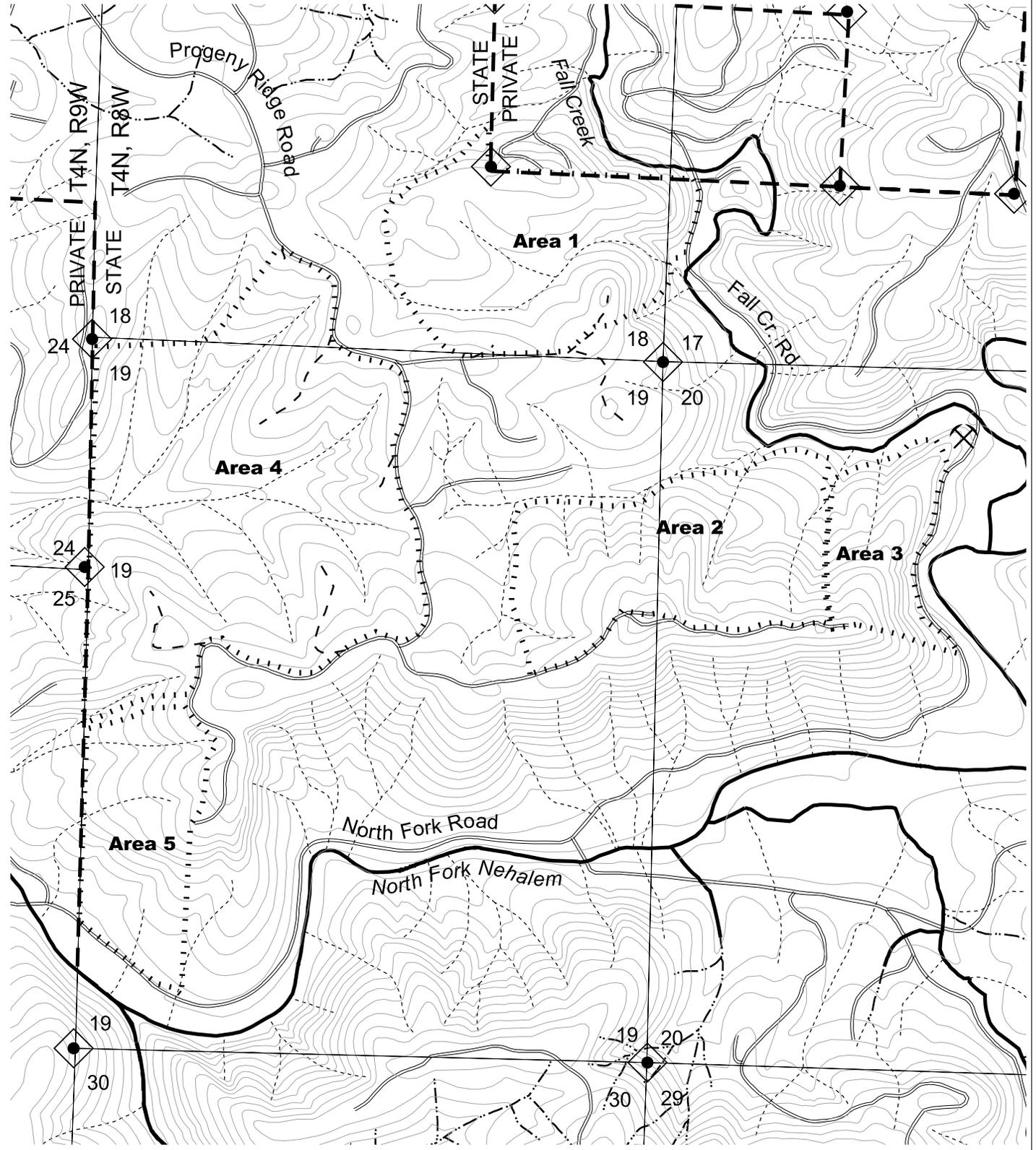
LEGEND

- Timber Sale Boundary
- Ownership Boundary
- New Road Construction
- Roads
- Streams
- Fish
- Nonfish
- Unknown



600 0 600 1200 Feet

1:12000



LEGEND

- Timber Sale Boundary
- Ownership Boundary
- New Road Construction
- Roads
- Streams
- Fish
- Nonfish
- Unknown
- DFC
- LYR
- OFS



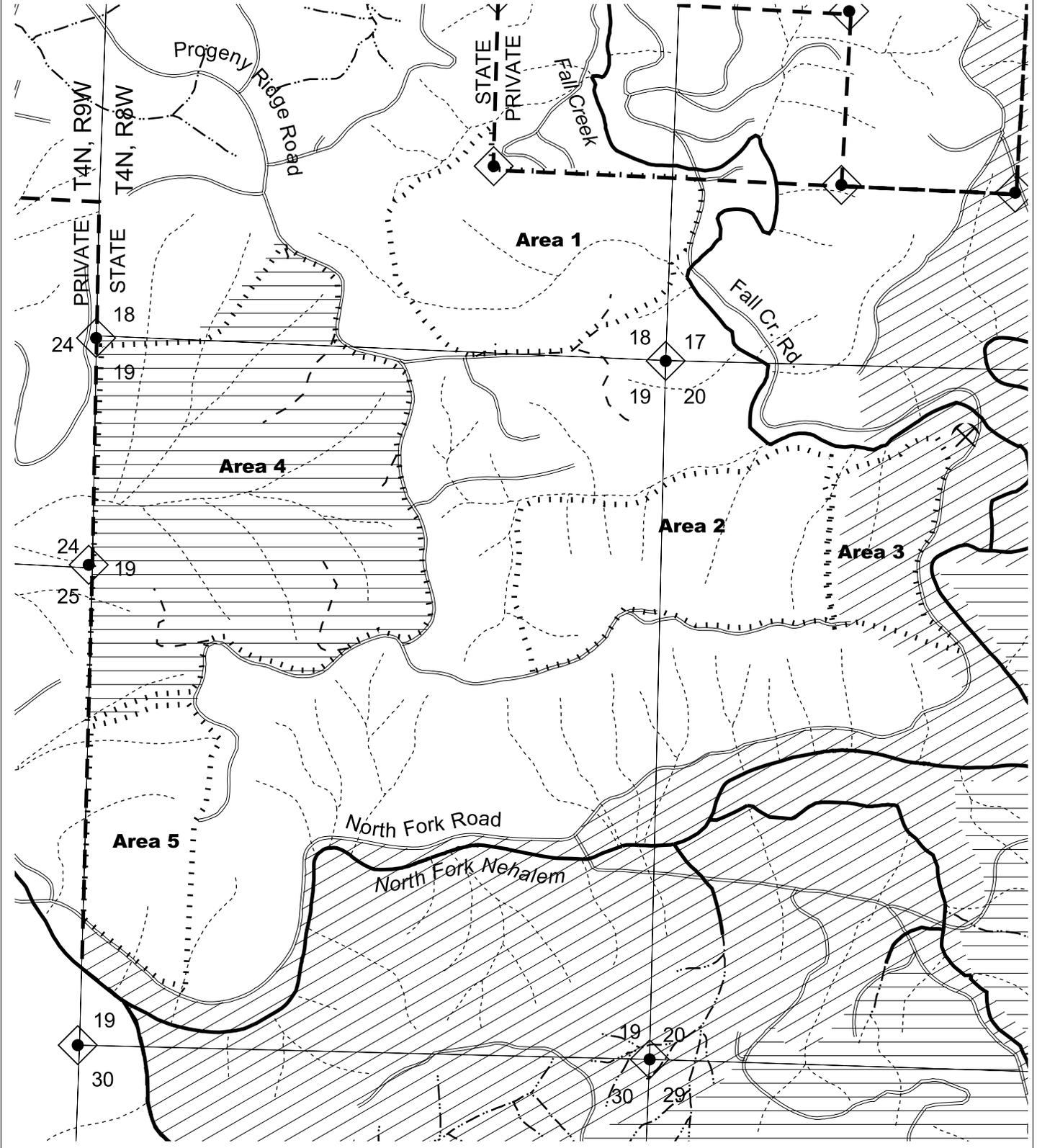
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Progeny Split
 Portions of Sections 17, 18, 19, and 20,
 T4N, R8W, W.M., Clatsop County, Oregon.

Map B - Desired Future Condition

APPROXIMATE NET ACREAGE:

	MC Acres	PC Acres
Area 1	51	
Area 2	50	
Area 3		19
Area 4		120
Area 5	30	
Totals	131	139
Total Sale Acreage = 270		

600 0 600 1200 Feet 1:12000



LEGEND

-  Timber Sale Boundary
-  Ownership Boundary
-  New Road Construction
-  Roads
-  Streams
-  Fish
-  Nonfish
-  Unknown
-  Salmon Anchor Habitat



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Map C - Key Resources

APPROXIMATE NET ACREAGE:

	MC Acres	PC Acres
Area 1	51	
Area 2	50	
Area 3		19
Area 4		120
Area 5	30	
Totals	131	139
Total Sale Acreage = 270		

