

Pre-Operations Report

Operation Name: Leonard Elk
County: Clatsop
Management Basin: Klaskanine

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	MC	47	42
2	MC	69	62
3	MC	83	75
Total	Modified Clearcut	199	179
Total		199	179

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

These sale areas are located within the Klaskanine Basin, about 15 miles southeast of Astoria along Highway 202, and then between two to four miles east into the basin. The Klaskanine Basin drains northwesterly into the multiple forks of the North Fork of the Klaskanine River and then into Youngs Bay and the Columbia River. It is in the "hemlock zone" and is generally composed of Douglas-fir, western hemlock and red alder with a mix of other conifers and an understory of ferns, huckleberry and salmonberry.

The landforms are gentle rolling slopes and steeper headwaters of North Fork Klaskanine River and the Middle Fork of the North Fork. The underlying rocks are sedimentary origin rocks of the informal Northrup Creek and Smuggler Cove Members of the Astoria Formation.

II. CURRENT STAND CONDITION:

Area 1 - This stand is composed of hemlock and other mixed conifer with larger patches of alder, and is approximately 57 to 70 years old. The understory is primarily sword fern with patches of salmonberry and Devil's club. It is classified as mostly a LYR stand with a portion of the sale in a CSC classification.

Area 2 - This stand is very dense, with recent SLI indicating the SDI is approximately 86% of maximum. This hemlock dominated, mixed conifer stand is approximately 68 years old and is classified as a LYR stand. There is minimal understory in these stands. Currently, there are no snags 24 inches in DBH or greater and only about 270 cubic feet per acre of down wood in decay classes 1 and 2 on site on site. There is 6,000 cubic feet of down wood in all decay classes.

Area 3 - This stand is also very dense, with recent SLI indicating the SDI is approximately 85% of maximum. This hemlock dominated, mixed conifer stand is approximately 71 years old and is classified as a LYR stand. There is slightly more understory in this stand compared to Area 2. Currently, there are 1.6 snags per acre 24 inches in DBH or greater and about 570 cubic feet per acre of down wood in decay classes 1 and 2 on site. This stand is on southwest exposure with a high potential of wind throw, with blow down occurring along the eastern boundary adjacent to the property line.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	MC	23567	WH, RA	57	15	251	207	65	34
		23519	RA,WH,SS	70	19	237	124	56	8
		Target ³	DF, WH, WRC				5		42
2	MC	23501	WH, SS, DF	68	19	365	187	86	62
		Target ³	DF, WH, WRC				5		62
3	MC	23558	WH, SS	71	16	335	241	85	75
		Target ³	DF, WH, WRC				5		75

1 The source of stand inventory information is SLI from 2002 and 2003 and from Stand 02(23519). Stand ages shown are as of 2008.

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 FUTURE CONDITION/VISION:

The Desired Future Condition for Areas 1, 2, and 3 are not planned to have a complex desired future condition on the landscape.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres
1	23567	LYR	REG	General	34
1	23519	CSC	REG	General	8
2	23501	LYR	REG	General	62
3	23558	LYR	REG	General	75

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:

Areas 1, 2, and 3 – are planned for regeneration harvest (modified clearcut) and will be replanted with a mixture of conifer species.

Snags: In all areas, all existing snags will be retained unless deemed to be safety hazards. In MC areas, several strategies will be employed to obtain the landscape goal of two hard snags per acre, including: retaining additional green trees.

Green Trees: In Areas 1, 2, and 3 approximately five to eight green trees per acre will be scattered and/or clumped throughout the areas, and not solely located in riparian areas. In addition, individual and small clumps of non-merchantable conifer and alder may be left in operationally feasible areas to provide short term snag recruitment for cavity nesting birds. 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 Areas 1, 2, and 3 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. Area 1 has approximately 1,350 cubic feet of down wood per acre in decay classes 1 and 2. Area 2 has approximately 270 cubic feet per acre of down wood in decay classes 1 and 2. And Area 3 has approximately 570 cubic feet per acre of down wood in decay classes 1 and 2. Obvious defect in conifer logs will be bucked out in the unit to enhance downed wood levels.

Site preparation treatments for Areas 1, 2, and 3 will be accomplished through cable yarding operations, ground based harvesting, and mechanical manipulation of slash concentrations. Ground and aerial applied herbicides may be prescribed to sale areas if competing vegetation poses a threat to stand establishment. These sale areas will be replanted with Douglas-fir, western hemlock, and western red cedar. Mountain beaver trapping is anticipated in most portions of the entire sale area. Animal damage through big game browse is expected to be heavy. Timing of planting will be critical to minimize big game browse to hemlock. Tree protection will be prescribed to newly planted conifer species, Douglas-fir may receive paper bud caps, cedar will receive tubes at initial planting.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

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

	Conifer	Hardwood	Total
Net Volume (MBF)	7,400	420	7,820
Stumpage Value (\$/MBF)	\$150	\$250	
Estimated Gross Value	\$1,110,000	\$105,000	\$1,215,000
		Project Costs:	\$212,000
		Estimated Net Value:	\$1,003,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

There are currently good quality forest roads accessing the general vicinity of the sale areas. Currently, the South Fork Road is inaccessible due to the removal of the fill near the junction with California Barrel Road, which accesses Area 1. Reestablishing the crossing previously vacated will require the installation of a bridge. These road plans will be further explored and evaluated during the field layout process.

Access into Area 2 will require one Type N stream crossing. These plans will be further explored and evaluated during the field layout process.

Area 3 can be accessed with existing roads and short access spurs. Access from the East to Area 3 is secured through an existing easement with Port Blakely Tree Farms (311.04089 – Noyes Hayes Agreement) and the construction of approximately 400 feet of road on their ownership. Access from the North will require an easement from an adjacent landowner, Agency Creek Management, for the use of an existing unnamed rock road off of the Coon Creek Road and the construction of approximately 200 feet of road on their ownership. These easements will allow construction of the needed ridge top roads.

The road rock needed for road construction and improvement will be obtained from Elk Mountain stockpiles and the Elk Mountain Quarry.

The project work for this sale is estimated to cost approximately \$212,000.

Approximately 50% of the sale area will be cable logged, as the slopes are Gentle to moderate with some steep areas. 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 Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	1.2	0.0
Improve	0.0	0.5	4.5	0.0
Maintain	0.0	6.0	2.1	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:

The South Fork of the North Fork Klaskanine (medium, Type F stream) flows along the northern boundary of Area 1, and an unnamed tributary of the South Fork of the North Fork Klaskanine flows along the southern boundary.

Two unnamed tributaries of the North Fork of the North Fork Klaskanine (medium, Type F stream) flow along the northern and southern boundaries of Area 2. There are no Type F streams within or adjacent to Area 3. All of the streams flow in a westerly direction into the Klaskanine River drainage towards the Columbia River.

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.

None of the sale areas are within proximity of streams in which known listed fish are present.

Stream Enhancement Opportunities: Preliminary sale review by ODFW Fish Habitat Biologist indicates that there are options for stream enhancement projects associated with 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. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

The sale areas were surveyed for Northern Spotted Owls in 2004, 2005, 2006, 2007, and 2008 with no responses and will not be resurveyed for Northern Spotted owls again in 2009.

The sale area was surveyed for Marbled Murrelets in 2004, 2005, 2006, 2007 and 2008, with one audio detection in 2008 adjacent to Area 1. The sale areas will not be surveyed for Marbled Murrelets in 2009.

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:

Very few High Landslide Hazard Locations appear on the topography as mapped in the operation. The initial assessment from the geotechnical specialist is low. If High Landslide Hazard Locations are located during field work the geotechnical consultant will be consulted.

X. RECREATION RESOURCES:

This area receives dispersed recreation, which includes hunting, camping, target shooting, and driving forest roads. This sale is located in the motorized recreation portion of the Clatsop State Forest; however inventories of existing trails have not yet been conducted for this area.

XI. CULTURAL RESOURCES:

None.

XII. SCENIC RESOURCES:

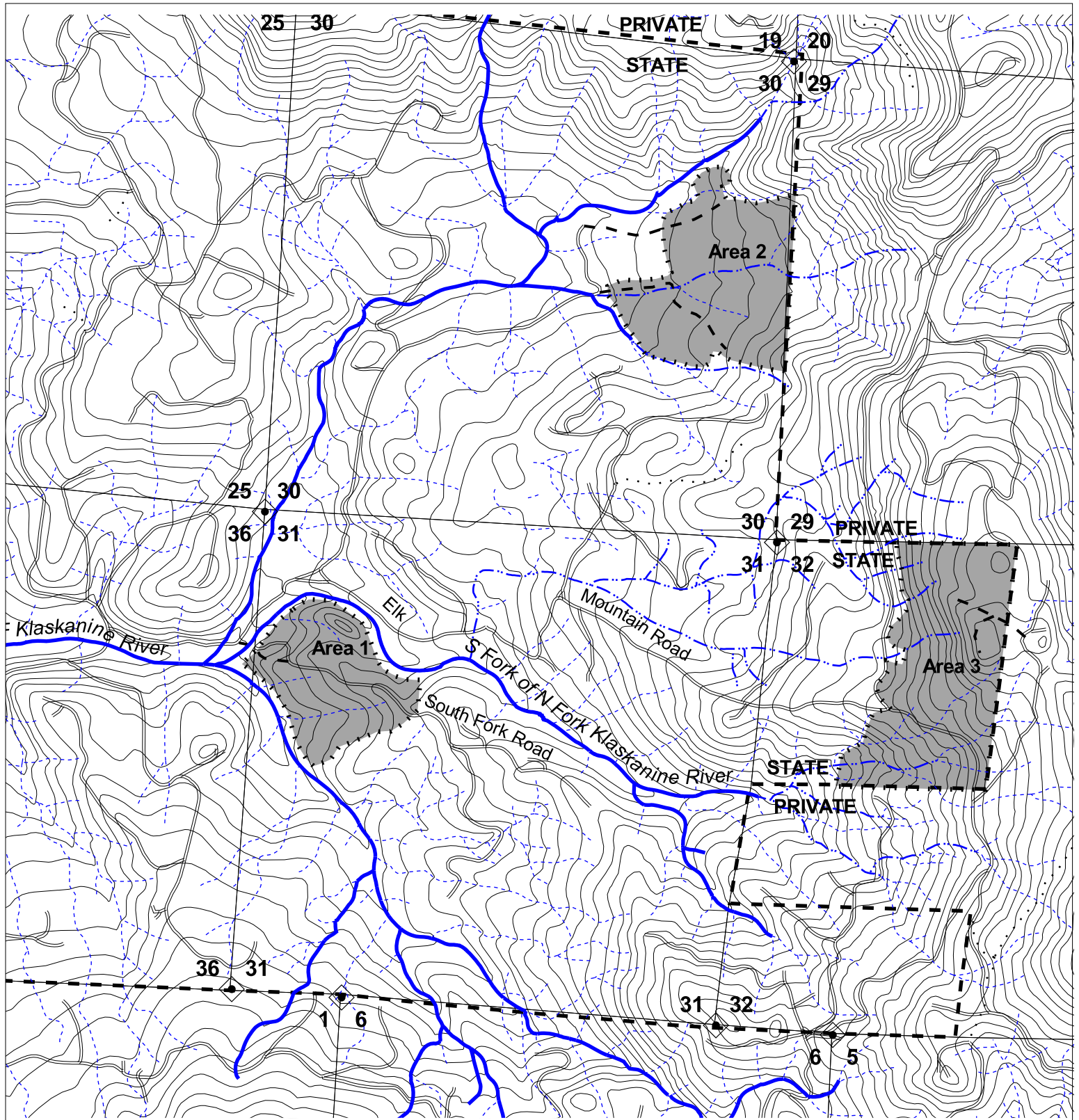
The sale areas are not visible from any county or state highway. All forest roads accessing the sale areas are Level 3 classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

Locate and remark blazes, protect survey corners. (Survey Plan available on District).

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The lands in this timber sale are all classified "general" stewardship.



APPROXIMATE NET ACREAGE:

	MC Acres
Area 1(MC)	42
Area 2(MC)	62
Area 3(MC)	75
TOTALS =	179
Total Sale Acreage =	179

FY2010
 Leonard Elk
 Portions of Sections 30, 31, and 32, T7N, R7W,
 W.M., Clatsop County, Oregon.

Map A - Topography

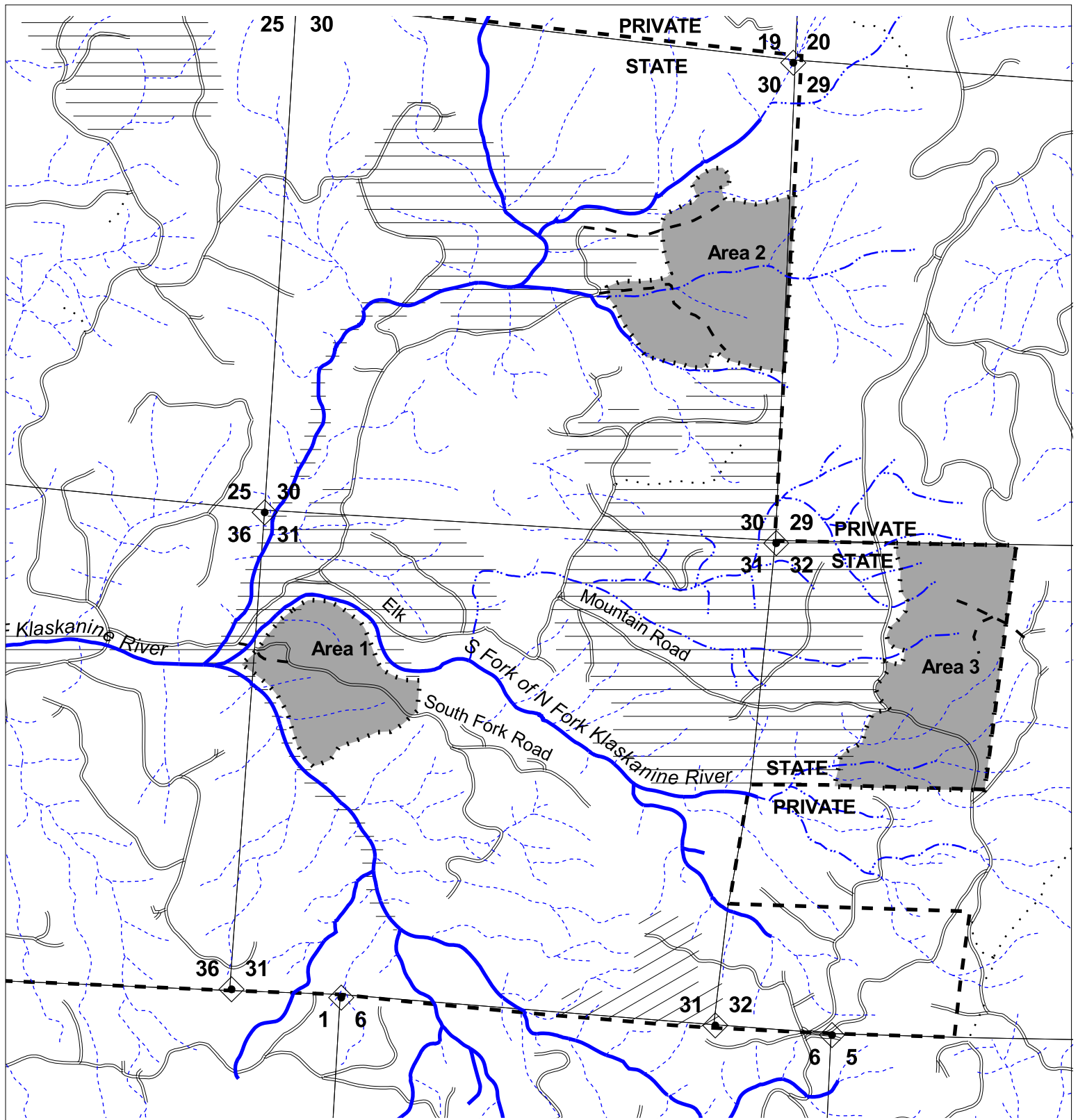
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LEGEND

- Timber Sale Boundary
- Streams
- Fish
- Nonfish
- Unknown
- New Roads
- Ownership
- Roads
- Dirt
- Paved
- Rocked





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Map B- Desired Future Condition

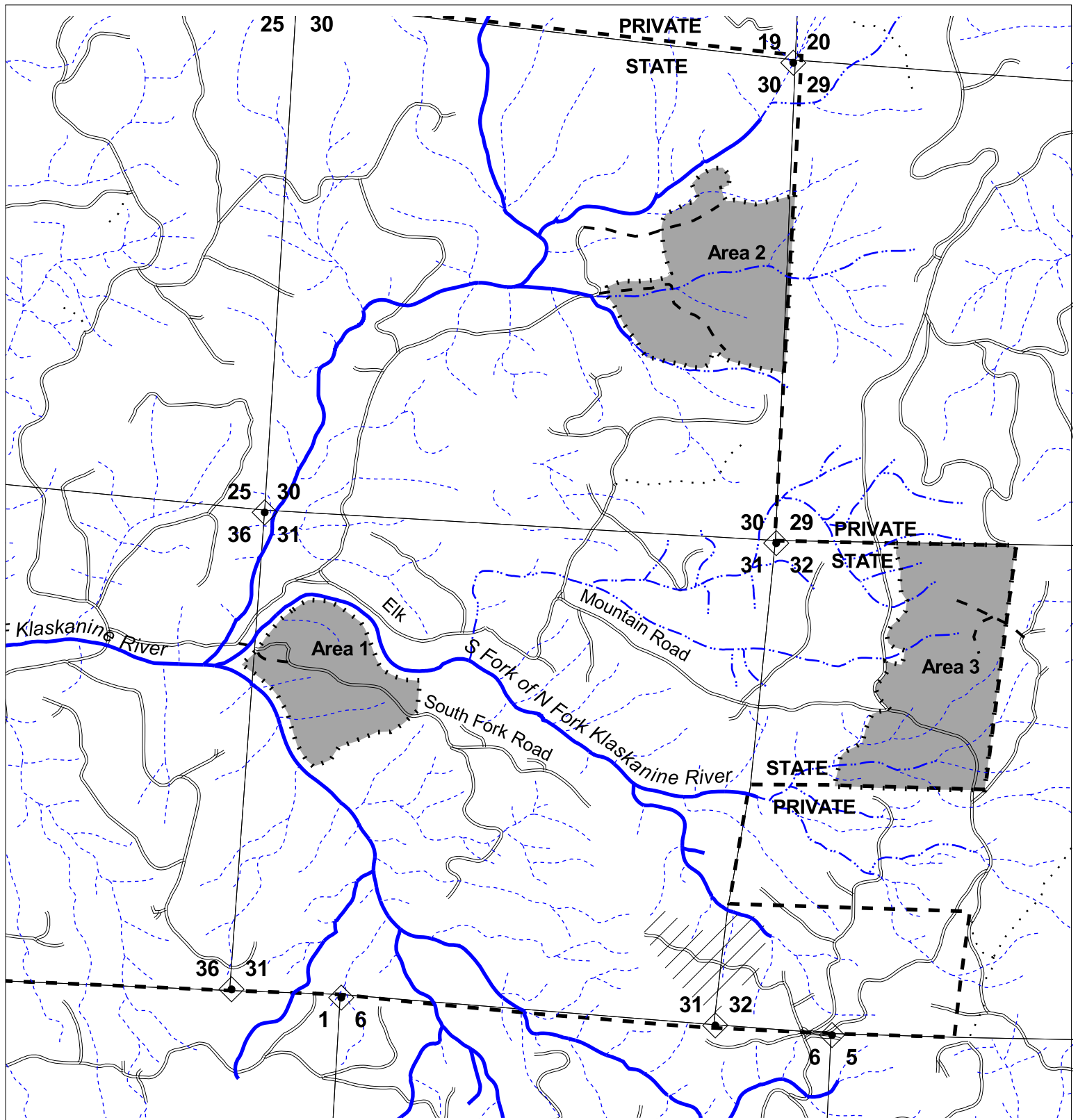
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LEGEND

- Timber Sale Boundary
- Streams
- Fish
- Nonfish
- Unknown
- New Roads
- Ownership
- Roads
- Dirt
- Paved
- Rocked
- Desired Future Condition
- LYR
- OFS





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Map C - Key Resources

1:18000



LEGEND

- Timber Sale Boundary
- Streams
 - Fish
 - Nonfish
 - Unknown
- New Roads
- Ownership
- Roads
 - Dirt
 - Paved
 - Rocked
 - FLMC
 - Special

