



"STAND FOR THE FOREST"

Timber Sale Appraisal Lower West Glenn

Sale CS-341-2016-13-

District: Coos

Date: October 08, 2015

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$647,497.89	\$28,966.71	\$676,464.60
		Project Work:	(\$23,702.00)
		Advertised Value:	\$652,762.60



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Sale CS-341-2016-13-

District: Coos

Date: October 08, 2015

Timber Description

Location: Portions of Section 32, T23S, R10W, W.M., Coos County, Oregon.

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	95
Western Hemlock / Fir	15	0	95
Alder (Red)	14	0	90
Maple	13	0	90

Volume by Grade	2S	3S	4S	8" - 9"	10" - 11"	6" - 7"	Total
Douglas - Fir	897	949	63	0	0	0	1,909
Western Hemlock / Fir	152	68	0	0	0	0	220
Alder (Red)	0	0	0	30	39	54	123
Maple	0	0	0	0	36	24	60
Total	1,049	1,017	63	30	75	78	2,312

Comments: Pond Values Used: 3rd Quarter Calendar Year 2015.
Local Pond Values used for Bigleaf Maple.

101 acres of regeneration harvest containing approximately 2,312 mbf of 45-51 year old third growth Douglas-fir and western hemlock sawtimber.

Western redcedar and other Cedars stumpage price = Pond value minus Logging Cost:
 $\$833.29 = \$1,150/\text{MBF} - \$316.71/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$3.00/GALLON

HAULING COST ALLOWANCE:
Hauling costs equivalent to \$780 per day truck cost.

Other Costs (with Profit & Risk to be added):

YARDING AND LOADING:

Brand and Paint Logs: $\$1/\text{MBF} \times 2,312 \text{ MBF} = \$2,312$

Cull Sorting/Slash Piling: $\$125/\text{landing} \times 8 \text{ landings} = \$1,000$

Rig Tail/Lift Trees: $\$150/\text{lift tree} \times 6 \text{ lift trees} = \900

Artificial Guy Anchors (dozer/skidder): $\$500/\text{anchor} \times 2 \text{ anchors} = \$1,000$

Cover Landing Slash Piles with Sheeting: $\$50/\text{landing} \times 8 \text{ landings} = \400

Dump Truck Move-in for Transporting Firewood: $\$100/\text{hour} \times 4 \text{ hours} = \400

Firewood Transport Time: $\$85/\text{hour} \times 8 \text{ hours} = \680

Equipment Wash for Ground Operations: $\$65/\text{hour} \times 6 \text{ hours} = \390

TOTAL Other Costs (with Profit & Risk to be added) = \$7,082

Other Costs (No Profit & Risk added): None.



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Logging Conditions

Combination#: 1

Douglas - Fir	73.00%
Western Hemlock / Fir	73.00%
Alder (Red)	73.00%
Maple	73.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 10 **bd. ft / load:** 3800

cost / mbf: \$157.90

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	4.00%
Western Hemlock / Fir	4.00%
Alder (Red)	4.00%
Maple	4.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber

yarding distance: Short (400 ft) **downhill yarding:** Yes

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 10 **bd. ft / load:** 3800

cost / mbf: \$197.37

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

Combination#: 3

Douglas - Fir	23.00%
Western Hemlock / Fir	23.00%
Alder (Red)	23.00%
Maple	23.00%

Logging System: Shovel **Process:** Stroke Delimber

yarding distance: Short (400 ft) **downhill yarding:** No

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 12 **bd. ft / load:** 3800

cost / mbf: \$69.56

machines: Stroke Delimber (B)



Timber Sale Appraisal Lower West Glenn

Sale CS-341-2016-13-

District: Coos

Date: October 08, 2015

Logging Costs

Operating Seasons: 1.00	Profit Risk: 20%
Project Costs: \$23,702.00	Other Costs (P/R): \$7,082.00
Slash Disposal: \$0.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
3.0	0.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.6
Western Hemlock / Fir	\$0.00	2.0	3.5
Alder (Red)	\$103.33	2.0	3.0
Maple	\$103.33	2.0	3.0

Local Pond Values

Date	Specie	Grade	Value
10/08/2015	Maple	10" - 11"	\$445.00
10/08/2015	Maple	6" - 7"	\$250.00



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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$139.16	\$1.89	\$1.90	\$113.75	\$3.06	\$51.95	\$0.00	\$5.00	\$0.00	\$316.71
Western Hemlock / Fir									
\$139.16	\$1.89	\$1.90	\$117.00	\$3.06	\$52.60	\$0.00	\$5.00	\$0.00	\$320.61
Alder (Red)									
\$139.16	\$1.98	\$1.90	\$113.66	\$3.06	\$51.95	\$0.00	\$5.00	\$0.00	\$316.71
Maple									
\$139.16	\$1.98	\$1.90	\$113.66	\$3.06	\$51.95	\$0.00	\$5.00	\$0.00	\$316.71

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$640.32	\$323.61	\$0.00
Western Hemlock / Fir	\$0.00	\$455.73	\$135.12	\$0.00
Alder (Red)	\$0.00	\$527.68	\$210.97	\$0.00
Maple	\$0.00	\$367.00	\$50.29	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00
Maple	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,909	\$323.61	\$617,771.49
Western Hemlock / Fir	220	\$135.12	\$29,726.40
Alder (Red)	123	\$210.97	\$25,949.31
Maple	60	\$50.29	\$3,017.40

Gross Timber Sale Value

Recovery: \$676,464.60

Prepared By: Jon Haynes

Phone: 541-267-1758

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Lower West Glenn

Yarding and Loading

Brand and paint logs	MBF	2312	\$	1.00	\$	2,312.00
Cull sorting/slash piling on landings	landing	8	\$	125.00	\$	1,000.00
Rig tail/lift trees	lift tree	6	\$	150.00	\$	900.00
Artificial guy anchors(dozer, skidder)	anchor	2	\$	500.00	\$	1,000.00
Cover landing slash pile w/sheeting	pile	8	\$	50.00	\$	400.00
Dump truck move-in for transporting firewood	hrs	4	\$	100.00	\$	400.00
Firewood transport time	hrs	8	\$	85.00	\$	680.00
Equipment wash for ground operations	hrs	6	\$	65.00	\$	390.00

Total additional "Other Cost" with additional profit and risk to be added

\$ 7,082.00

Additional "Other Cost" with no additional profit and Risk

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Non-required road construction	Stations			\$ -
Non-required road rocking	Cubic Yards			\$ -
Stream clearance	Feet			\$ -
Scaling (high piece count)	MBF		\$ 2.00	\$ -
				\$ -

Total additional "Other Cost" with no additional profit and Risk

\$ -

SUMMARY OF CONSTRUCTION COST
Lower West Glenn

Project 1A: Road construction

Points: B to C Length: 240'

Type: 14' no ditch

Excavator	<u>3</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$420</u>
Cat time	<u>4</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$560</u>
Laborer	<u>3</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$420</u>
Grader	<u>3</u>	hrs at	<u>\$38.00</u>	per hour	<u>\$114</u>

Total Project 1A: \$1,514

Project 1B: Road and Landing Construction

Points: H to J Length: 320'

Type: 14' no ditch

Excavator time	<u>8</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$1,120</u>
Cat time	<u>6</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$840</u>
Laborer	<u>2</u>	hrs at	<u>\$38.00</u>	per hour	<u>\$76</u>
Grader time	<u>2</u>	hrs at	<u>\$85.00</u>	per hour	<u>\$170</u>

Total Project 1B: \$2,206

Project 1C: Road and Landing Construction

Points: I to K Length: 200'

Type: 14' no ditch

Excavator	<u>3</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$420</u>
Cat time	<u>2</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$280</u>
Laborer	<u>2</u>	hrs at	<u>\$38.00</u>	per hour	<u>\$76</u>
Grader	<u>1</u>	hrs at	<u>\$85.00</u>	per hour	<u>\$85</u>

Total Project 1C: \$861

Project 1D: Road and Landing Construction

Points: M to O Length: 820'

Type: 14' no ditch

Excavator	<u>20</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$2,800</u>
Cat time	<u>15</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$2,100</u>
Laborer	<u>8</u>	hrs at	<u>\$38.00</u>	per hour	<u>\$304</u>
Dump Truck	<u>16</u>	hrs at	<u>\$85.00</u>	per hour	<u>\$1,360</u>
Grader	<u>4</u>	hrs at	<u>\$85.00</u>	per hour	<u>\$340</u>

Total Project 1D: \$6,904

Project 1E: Landing Construction

Points: P, Q, F, E, and G

Excavator	<u>8</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$1,120</u>
Cat time	<u>7</u>	hrs at	<u>\$140.00</u>	per hour	<u>\$980</u>
Laborer	<u>3</u>	hrs at	<u>\$38.00</u>	per hour	<u>\$114</u>
Grader	<u>4</u>	hrs at	<u>\$85.00</u>	per hour	<u>\$340</u>

Total Project 1E: \$2,554

SUMMARY OF CONSTRUCTION COST
Lower West Glenn

Move-in

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Excavator	40	5	\$100.00	\$500.00
Cat	40	5	\$100.00	\$500.00
Grader	40	4	\$100.00	\$400.00
Dump Truck	40	4	\$100.00	\$400.00

Total Move-in: \$1,800

Total Project 1: \$15,839

Project 2A: Road improvement

Points: A to Q Length: 4790' Type: 14' no ditch

Excavator	14	hrs at	\$ 140.00	per hour	\$ 1,960
Cat time	14	hrs at	\$ 140.00	per hour	\$ 1,960
Laborer	12	hrs at	\$ 38.00	per hour	\$ 456
Grader	6	hrs at	\$ 85.00	per hour	\$ 510

Total Project 2A: \$ 4,886

Project 2B: Road improvement

Points: D to F Length: 750' Type: 14' no ditch

Excavator	4	hrs at	\$140.00	per hour	\$560
Cat time	3	hrs at	\$140.00	per hour	\$420
Laborer	2	hrs at	\$38.00	per hour	\$76
Grader	1	hrs at	\$85.00	per hour	\$85

Total Project 2B: \$1,141

Project 2C: Road Improvement

Points: E to G Length: 310' Type: 14' no ditch

Excavator	2	hrs at	\$140.00	per hour	\$280
Cat time	1	hrs at	\$140.00	per hour	\$140
Laborer	1	hrs at	\$38.00	per hour	\$38
Grader	1	hrs at	\$85.00	per hour	\$85

Total Project 2C: \$543

Project 2D: Road improvement

Points: L to N Length: 370' Type: 14' no ditch

Excavator	3	hrs at	\$140.00	per hour	\$420
Cat time	4	hrs at	\$140.00	per hour	\$560
Laborer	6	hrs at	\$38.00	per hour	\$228
Grader	1	hrs at	\$85.00	per hour	\$85

Total Project 2D: \$1,293

Total Project 2: \$7,863

Total Project Costs: \$23,702

TIMBER SALE SUMMARY

Lower West Glenn

1. Type of Sale: Final Harvest, Recovery, Sealed Bid

2. Boundary Lines: Timber sale boundaries are marked on the ground with white "Timber Sale Boundary" posters, red flagging, and red paint at locations shown on the Exhibit "A".

3. Revenue Distribution: 100% CSL; 100% Coos County

4. Sale Acreage: The total sale area is approximately 101 acres divided into 2 areas. Acreage was determined from LIDAR imagery using electronic digitizing with the ArcMap 10.2 GIS program. The cruise expansion acres include only the timbered acres and not unstocked areas nor existing interior roads or landings.

	Posted Acres	Interior Roads/Landings	Non-Stocked Acres	Net Cruise Acres	Net Harvest Acres
Area 1	97.18	3.54	2.12	91.52	93.64
Area 2	7.73	.24	0	7.49	7.49
Total Sale	104.91	3.78	2.12	99.01	101.13

5. Volume by Species

Species	Total Volume (MBF)	Volume (MBF) per Acre
Douglas-fir	1,909	18.9
Hemlock	220	2.2
Red Alder	123	1.2
Bigleaf Maple	60	.6
Total	2,312	22.9

6. Grade: (by Percent,)

Species	3 Peeler %	Special Mill %	2 Saw (12"+) %	3 Saw % (10" – 11") %	Big 3 Saw %	4 Saw % (8" – 9") %	6" – 7" % Hardwood
Douglas-fir			47 %	50 %		3 %	
Hemlock			69 %	31 %			
Red Alder			32 %			25 %	43 %
Big Leaf Maple				60 %			40 %

7. Cruise: The sale areas were variable plot cruised using a nested Big BAF plot method. The Big BAF method is a combination of count plots and individually measured trees. Plots were spaced 125 feet apart on cruise lines spaced 400 feet apart. A 40 BAF full plot was used to determine tree counts for all species. Trees were sighted in at DBH and a total of 86 count plots were installed. A 250 BAF full plot at DBH was taken on every plot to determine which Douglas-fir trees would be fully measured. A total of 34 Douglas-fir trees were measured for DBH, height, grade, and defect. Minor species were measured on every third plot with a 40 BAF at DBH. A total of 9 western hemlock, 9 red alder, and 2 bigleaf maple trees were fully measured. Cruise data was compiled using Superace. Cruising was done by ODF Coos District staff R. Mickey, C. Hall, and E. Hamner in January and February 2015.

8. Grading: All trees were graded according to the Official Bureau Log Scaling and Grading Rules. Trees were graded to maximize grade where possible and field net volume was calculated by converting all logs to 40 feet lengths. Additional deductions were made for hidden defect and for breakage (Table B).

A. Summary data:

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
DBH	5" DIB Conifer 6" DIB Hardwood	All species: DBH	Recorded for all cruised trees by estimate and measure	76 %	9.3 %

B. Defect and Breakage Summary:

BY PERCENT

SPECIES	CRUISED	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	0	5	5	10
HEMLOCK	0	5	5	10
RED ALDER	0	8	7	15
BIGLEAF MAPLE	0	8	7	15

C. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	17"	88	142	18.9
HEMLOCK	15"	17	22	2.2
RED ALDER	14"	14	15	1.2
BIGLEAF MAPLE	13"	6	6	.6

D. Green Tree Retention: There are five (5) green tree reserve areas associated with this sale that are reserved from cutting. These areas consist of a Type F buffer extension, several Type N perennial stream buffers, and several Type N seasonal potential debris flow stream buffers. The majority of green tree retention is posted outside of the sale areas and was not included in the timber cruise. Additional green tree retention is located in Area 2 and the in the southern portion of Area 1. This additional green tree retention is painted with yellow paint and has been removed from the timber cruise. A total of 739 GTR are distributed across the sale areas for an average of 7.3 GTR per acre. The FPA requirement for this sale is 220 trees. The table on the next page summarizes the green tree retention areas, tree counts, and volume removed.

GTR Area	D-fir Count	D-fir Vol Removed	Hemlock Cedar Spruce Count	Hemlock Cedar Spruce Vol Removed	Alder Maple Myrtle Count
Type F Perennial Stream Buffer Extension	118	4.3 mbf	19	--	11
Type N Perennial Stream Buffers	196	1.1 mbf	19	.9 mbf	122
Seasonal Potential Debris Flow Buffers	88	.5 mbf	31	.5 mbf	135
TOTALS	402	5.9 mbf	69	1.4 mbf	268

E. Down Wood: The down woody debris requirement of this sale is to leave 60 – 120 cubic feet per acre of hard logs across the sale areas. This will be achieved by retaining hard logs containing a minimum of 20 cubic feet for any individual piece. Existing down wood can be used to achieve this target provided they meet the definition of a hard log (sound wood in decay class 1 or 2 indicated by intact bark and original wood color).

9. Timber Description: Areas 1 and 2 consist of 44 to 50 year-old moderately stocked Douglas-fir that was commercially thinned in the late 90's or early 2000's. There is considerable hardwood within the Type F stream buffer dividing Area 1 and Area 2. Timber quality across the sale areas is generally good.

10. Topography: Area 1 has predominately easterly aspects with 70 to 80 percent slopes. There is some gentler terrain in the western and southern portions of Area 1. Area 2 in predominately southwest facing with slopes 40 to 60 percent. West Fork Glenn Creek, a medium Type F stream, flows between Area 1 and Area 2. Area 2 is bisected by two Type N perennial streams. Area 1 has multiple Perennial and Seasonal Type N streams which originate within Area 1; several are classified as Seasonal Potential Debris Flow streams and have posted buffers on them.

11. Logging Method: The sale area is designed to be uphill cable logged from existing landings at Points C, E, F, K, J, P, O, and Q. Portions of Area 1 in the west and south may be approved for ground based systems. Area 2 east of West Fork Glenn Creek is designed for cable yarding from landings in Area 1. There is a Logging Restricted Area of mature timber located north of Area 2 which is off limits for stringing lines or location of tailholds. In addition there is a 100 meter wide Chain Saw Restricted Area surrounding the Logging Restricted Area. The 1700 road east of West Fork Glenn Creek may be utilized for dozer tailholds. The sale area abuts private timberland along the south and eastern boundaries. Any tailholds or guyline anchors located on adjacent private land will require approval from adjacent landowner. Full suspension will be required while yarding over the posted stream buffers shown on Exhibit A. Single end suspension will be maintained over the remainder of the sale areas. In unit lift/tail trees and dozer tailhold/guyline anchors have been costed for in the appraisal. Ground based logging equipment will be required to be washed prior to entering the Elliott State Forest. Both Areas 1 and 2 are designed for dry season operation. Culls suitable for firewood will be transported to 1000 road prior to closing dirt spurs and has been costed for in appraisal.

12. Access: (All miles approximate). To access the timber sale area from Coos Bay, take the Coos River Highway 13.7 miles to Allegany. Turn left on Marlow Creek Road (1000 Rd.) and continue for 12.9 miles to Point "A". Walk or ATV for .25 miles into Area 1. To access Area 2 continue on the 1000 road for another 2.0 miles to the 1700 road. Walk or ATV for 1.2 miles down the 1700 road to Area 2. Log hauling south on the 1000 road will require a signed access agreement with Weyco.

13. Projects: See attached "Project Cost Summary Sheet"

Project No. 1: Road and Landing Construction

Project No. 2: Road and Landing Improvement

CRUISE VOLUME COMPUTATION REPORT

SALE NAME:	Lower West Glenn	DATE:	08/25/2015
LEGAL LOCATION:	Sec 32 T23S R10W	BY:	J.Haynes
	WM. Coos County OR		

FIELD CULL PERCENTAGE

Sale Area

Species	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple
Field cull	0%	0	0%	0	0%	0

NET FIELD VOLUME MBF (Gross vol. less field cull)

SPECIES>>>>>	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple	TOTAL
Sale Area	2127	0	0	245	145	70	2587
less GTR vol	6	0	0	1	0	0	7
TOTAL	2121	0	0	244	145	70	2580

HIDDEN DEFECT AND BREAKAGE

Species	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple
Hidden cull	0.05	0	0	0.05	0.08	0.08
Breakage	0.05	0	0	0.05	0.07	0.07
TOTAL	0.10	0.00	0.00	0.10	0.15	0.15

NET VOLUME BY MBF BY AREA

SPECIES>>>>>	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple	TOTALS
Sale Area	1909	0	0	220	123	60	2312
TOTALS	1909	0	0	220	123	60	2312

NET VOLUME BY GRADE AND MBF

Grade >>>>>>>>>>>>	2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
Areas 1 - 2								
Doug-Fir	0	0	0	897	949	0	63	0
Hemlock	0	0	0	152	68	0	0	0
Red Alder	0	0	0	0	39	0	30	54
Cedar	0	0	0	0	0	0	0	0
Maple	0	0	0	0	36	0	0	24

GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>>>>	2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
Areas 1 - 2								
Doug-fir	0%	0%	0%	47%	50%	0%	3%	0%
Hemlock	0%	0%	0%	69%	31%	0%	0%	0%
Red Alder	0%	0%	0%	0%	32%	0%	25%	43%
Cedar	0%	0%	0%	0%	0%	0%	0%	0%
Maple	0%	0%	0%	0%	60%	0%	0%	40%

**Operating Periods Restrictions Matrix for
Eleven Creek Headwaters
341-16-16**

Harvesting	January	February	March	April	May	June	July	August		September		October		November		December	
								5th	6th	15th	16th	14th	15th				
Ground-based Yarding Roads																	
Chain Saw use in MMMA - Buffer																	
Occupied Habitat (includes guylines and tailholds)																	

Hauling	January	February	March	April	May	June	July	August		September		October		November		December	
												14th	15th				
Log Hauling on Unsurfaced Roads																	
Log and Rock Haul adjacent to Type F streams, 1000 Rd, 9000 Rd																	

Project Work	January	February	March	April	May	June	July	August		September		October		November		December	
								5th	6th	15th	16th	14th	15th				
Projects 1 & 2																	
Non-project Roads and Landings																	
Non-project Roads in MMMA																	



Operations Allowed



Activity Restricted 2 hours before
sunset through 2 hours after sunrise

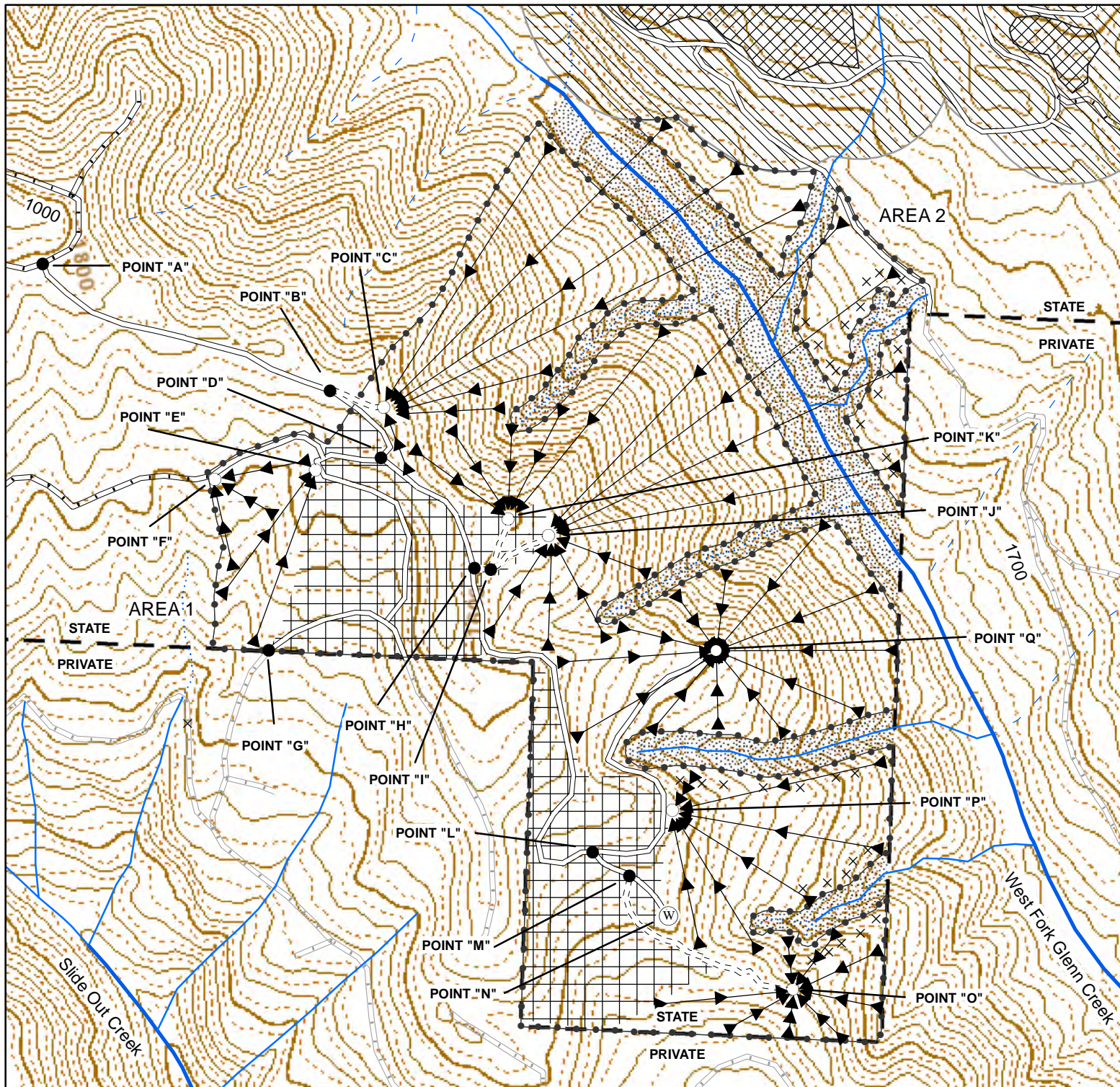


Operations Prohibited - T & E



Operations Prohibited for weather conditions: unless otherwise
approved in writing by STATE

Operating Matrix represents the seasonal restrictions contained within the body of the timber sale contract. See Section 2455 for further information on seasonal restrictions. MMMA is the Trout Mouth Marbled Murrelet Management Area.



Timber Sale Boundary

Project Points

- Landing
- Road Point
- Waste Area

Roads

- Existing Roads - STATE Maintained
- Existing Roads - Purchaser Maintained
- Existing Roads - Private
- New Construction

- Logging Restricted Area
- Chain Saw Restricted Area

- Cable Yarding
- Ground-based Operations

Streams

- Type F Stream
- Perennial Type N Stream
- Seasonal Type N Stream
- Unclassified
- Streambuffers / Green Tree Retention Areas
- Individual Green Tree Retention

LOGGING PLAN Sale No. 341-16-13 Lower West Glenn

Portions of Section 32
T23S, R10W, W.M.
Coos County, Oregon
Regulated Use Area CS-2
100% CSL



Area 1: 94 Acres
Area 2: 7 Acres

Total 101 Net
Harvest Acres

500 250 0 500
 Feet
1:6,000 1 inch = 500 feet

The information shown on Exhibit "A" map(s) are approximate locations.
Exact locations of features represented by map symbols will be determined on site and shall depend upon the conditions that exist on site.
Activities shall be conducted based upon features determined on site rather than features shown on maps.

