



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Millicoma Overlook
Sale 341-15-40

District: Coos

Date: July 07, 2014

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$88,381.00	\$3,130.36	\$91,511.36
		Project Work:	\$(11,769.00)
		Advertised Value:	\$79,742.36



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timber description

Location: Portions of Section 9, T24S, R11W, W.M., Coos County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	95
Alder (Red)	13	0	90
Maple	12	0	90

Volume by Grade	10" - 11"	12"+	2S	3S	4S	6" - 7"	8" - 9"	Total
Douglas - Fir	0	0	150	136	24	0	0	310
Alder (Red)	2	4	0	0	0	8	4	18
Maple	0	0	0	0	0	2	0	2
Total	2	4	150	136	24	10	4	330



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comments: Pond Values Used: 2nd Quarter Calendar Year 2014.

Pond Values used for RA, WH, and RC.
Local Pond Values used for DF and BM.

Regeneration harvest of one unit containing approximately 28 net acres of 50 year-old Douglas-fir with minor amounts of red alder and bigleaf maple.

Western Hemlock and Other Conifers Stumpage Price = #3 Sawlog Pond Value minus Conifer Logging Cost:
 $\$178.39/\text{MBF} = \$505/\text{MBF} - \$326.61/\text{MBF}$

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Conifer Logging Cost:
 $\$623.39/\text{MBF} = \$950/\text{MBF} - \$326.61/\text{MBF}$

Bigleaf Maple Pond Value = Local Pond Value

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.00/Gallon

HAULING COST ALLOWANCE
Hauling costs equivalent to \$780 daily truck cost.

Other Costs (with Profit & Risk to be added):
Brand & Paint Logs: 330 MBF @ \$1/MBF = \$330
Loader Time for Slash Piling: 4 hours @ \$75/hour = \$300
Cover Slash Piles w/sheeting: 3 piles @ \$50/pile = \$150
Additional Road Maintenance = \$400
Rig Lift Trees: 3 trees @ \$100/tree = \$300
TOTAL Other Costs (with Profit & Risk to be added) = \$1,480

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



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logging conditions

combination#: 1 Douglas - Fir 79.00%
 Alder (Red) 79.00%
 Maple 79.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 6.0 **bd. ft / load:** 3,600
cost / mbf: \$154.82

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

combination#: 2 Douglas - Fir 21.00%
 Alder (Red) 21.00%
 Maple 21.00%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 6.0 **bd. ft / load:** 3,600
cost / mbf: \$154.82

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



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logging costs

Operating Seasons:	1.00	Profit Risk:	20.00%
Project Costs:	\$11,769.00	Other Costs (P/R):	\$1,480.00
Slash Disposal:	\$0.00	Other Costs:	\$0.00

Miles of Road

Road Maintenance: \$0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
1.0	0.0	0.0	0.0

Hauling Costs

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

Local Pond Values

Date	Specie	Grade	Value
7/7/14	Douglas - Fir	2S	\$625.00
7/7/14	Douglas - Fir	3S	\$600.00
7/7/14	Douglas - Fir	4S	\$595.00
7/7/14	Maple	6" - 7"	\$400.00



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Date: July 07, 2014

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$154.82	\$0.63	\$13.29	\$94.79	\$4.48	\$53.60	\$0.00	\$5.00	\$0.00	\$326.61
Alder (Red)									
\$154.82	\$0.66	\$13.29	\$102.15	\$4.48	\$55.08	\$0.00	\$5.00	\$0.00	\$335.48
Maple									
\$154.82	\$0.66	\$13.29	\$102.15	\$4.48	\$55.08	\$0.00	\$5.00	\$0.00	\$335.48

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$611.71	\$285.10	\$0.00
Alder (Red)	\$0.00	\$502.22	\$166.74	\$0.00
Maple	\$0.00	\$400.00	\$64.52	\$0.00



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summary

Amortized

Specie	MBF	Value	Total
Douglas - 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	310	\$285.10	\$88,381.00
Alder (Red)	18	\$166.74	\$3,001.32
Maple	2	\$64.52	\$129.04

Gross Timber Sale Value

Recovery: \$91,511.36

Prepared by: Jon Haynes

Phone: 541-267-1758

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Millicoma Overlook

Additional "Other Cost" with additional profit and risk to be added:

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Yarding and Loading				
Brand and paint logs	MBF	330	\$ 1.00	\$ 330.00
Loader time for slash piling	Hours	4	\$ 75.00	\$ 300.00
Cover landing slash pile w/sheeting	pile	3	\$ 50.00	\$ 150.00
Miscellaneous Costs				
Additional Road Maintenance				\$ 400.00
Rig Lift Trees	tree	3	\$ 100.00	\$ 300.00
Total additional "Other Cost" with additional profit and risk to be added				\$ 1,480.00

SUMMARY OF CONSTRUCTION COST
Millicoma Overlook

Project 1A: Landing Construction

Points: B Length: n/a Type: n/a

Excavator	2	hrs at	\$140.00	per hour	\$280.00
Cat time	10	hrs at	\$140.00	per hour	\$1,400.00
Laborer	10	hrs at	\$38.00	per hour	\$380.00

Total Project 1A: \$2,060.00

Move-in

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Excavator	40	5	\$125.00	\$625.00
Cat	40	5	\$125.00	\$625.00
Grader	40	4	\$125.00	\$500.00

Total Move-in: \$1,750.00

Project 1 Total \$3,810.00

Project 2A: Road Improvement

Points: A to B Length: 3975' Type: 14' no ditch

Cat time	10	hrs at	\$140.00	per hour	\$1,400.00
Excavator - Cleanup trees and small slides	10	hrs at	\$140.00	per hour	\$1,400.00
Grader time	3	hrs at	\$85.00	per hour	\$255.00
Laborer	10	hrs at	\$38.00	per hour	\$380.00
18"x40' Culvert replacement at Pt B	40	feet at	\$17.00	per foot	\$680.00
Culvert Bands	1	band at	\$19.00	per band	\$19.00

Total Project 2A: \$4,134.00

Project 2B: Road and Landing Improvement

Points: B to C Length: 985' Type: 14' no ditch

Excavator - remove slough, small slides, clear landing area	10	hrs at	\$140.00	per hour	\$1,400.00
Cat time - spread material in road	10	hrs at	\$140.00	per hour	\$1,400.00
Grader time	1	hrs at	\$85.00	per hour	\$85.00
Laborer	10	hrs at	\$38.00	per hour	\$380.00

Total Project 2B: \$3,265.00

Project 2C: Road and Landing Improvement

Points: B to E Length: 820' Type: 14' no ditch

Cat time - clear road and landing area	2	hrs at	\$140.00	per hour	\$280.00
Excavator time - clear landing area	2	hrs at	\$140.00	per hour	\$280.00

Total Project 2C: \$560.00

Project 2 Total \$7,959.00

Total Project Costs \$11,769.00

TIMBER SALE SUMMARY

Millicoma Overlook

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

2. Boundary Lines: The timber sale boundary is marked on the ground with "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 sale is comprised of one unit totaling approximately 28 net acres. Sale acreage was determined from electronic digitizing using the Arc Map 10 GIS program and 2008 LIDAR (Light Detection and Ranging) layers. Existing roads, landings, and non-stocked areas were removed from the cruised acreage.

5. Volume by Species:

Species	Total Volume (MBF)	Volume (MBF) per Acre
Douglas-fir	310	11.0
Red alder	18	<1
Bigleaf maple	2	<1
Total	330	11.7

6. Grade: (by Percent, all areas)

Species	3 Peeler %	Spec. Mill %	2 Saw %	3 Saw %	Big 3 Saw %	4 Saw %
Douglas-fir			48%	44%		8%
			12"+	10-11"	8-9"	6-7"
Red alder			27%	9%	20%	44%
Bigleaf maple						100%

7. Grading System: All trees were graded according to the Southern Oregon Log Scaling and Grading Rules. Trees were graded to maximize grade (i.e. 20 foot 2 Saw), where possible. Timber sale volume was calculated by converting all logs to 40 foot lengths.

8. Cruise: The timber sale area was cruised using the nested Big Basal Area Factor (BAF) variable plot cruise method. The Big BAF method is a combination of count plots and individually measured trees. Full plots, spaced 100 feet apart on cruise lines 250 feet apart, with trees tallied at breast height with a 20 BAF were used to determine tree counts and to measure minor species. A total of 41 count plots were measured. Nested full plots using a 160 BAF at breast height were used to determine which Douglas-fir trees would be fully measured. A total of 24 Douglas-fir trees were measured for DBH, height, grade and defect. Cruising was completed in March 2013 by ODF foresters.

A. Summary data:

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
Breast Height	Total Height	Conifer: 4.5' Hardwood: 4.5'	Recorded for all cruised trees by estimate and measure	65.0	10.2

B. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
Douglas-fir	16	78	104.4	11.0
Red alder	13	11	10.7	<1
Bigleaf maple	12	2	2.0	<1

C. Green Tree Retention: Reserve areas consist of stream buffers, individually marked trees left along seasonal and perennial drainages, and a pod in the north end that is posted out of the sale area. Individually marked green trees are painted with red "W" and have been removed from the cruised volume. The table below summarizes the reserve trees whose volumes have been removed from the cruise. Stream buffers and GTR areas are mapped in Exhibit "A."

Sale Area	Douglas-fir MBF
1	6

9. Timber Description: Timber in the sale area is 50 year-old Douglas-fir with minor amounts of red alder and bigleaf maple. The average cruised Douglas-fir is 16 inches with a total height of 96 feet. Timber is average quality.

10. Topography: The sale area ranges from 50 to 80 percent slope on primarily south and east facing slopes. One main stream, a seasonal tributary of the West Fork Millicoma River, flows north to south through the center of the sale. Locations of stream buffers and green tree retention areas are indicated on Exhibit "A."

11. Logging Method: Approximately 79% of the sale area is designed to be uphill cable logged from three landings located along the 2090 and 2093 Roads. Uphill yarding distances range from 500 to 1,000 feet. The remaining 21% of the sale area is designed to be downhill cable logged to two landings on the 2090 and 2093 Roads. Downhill yarding distances are generally less than 400 feet. Immediately south of the timber sale area is a Logging Restricted Area where no cable logging operations can occur including locating tailholds or stringing of cables. This location is indicated on Exhibit "A" and Logging Plan maps. Lift trees may be needed to yard portions of the sale area. Final determination of landing locations and logging method must give priority to protection of stream buffers and green tree retention areas. Full suspension will be required when yarding over drainages and stream buffers, and single-end suspension will be required over the remainder of the sale areas. This sale is intended for dry season operation.

12. Access: From Coos Bay travel east on Coos River Highway approximately 14 miles to Allegany. Turn left on CR 47 and travel 5.3 miles to the 2000 Road. Proceed 3.5 miles up the 2000 Road to Project Point A, at the junction of the 2000 and 2090 Roads. Walk or ATV in the 2090 road for .6 miles to the sale area.

13. Projects:

Project 1: Landing Construction

Project 2: Road and Landing Improvement

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Millicoma Overlook
LEGAL LOCATION: T24S, R11W Sec. 9

DATE: 01/10/2014
BY: J. Goldsby / J. Haynes

GROSS VOLUME MBF

SPECIES>>> AREA	Doug-fir	Hemlock	Red Cedar	Red Alder	Maple	TOTAL
1	358	0	0	20	2	380
Less GTR Vol.	6	0	0	0	0	6
Less DWD Vol.	0	0	0	0	0	0
TOTAL	352	0	0	20	2	374

DEFECT AND BREAKAGE

Species	Doug-fir	Hemlock	Red Cedar	Red Alder	Maple
Hidden cull	0.05	0.00	0.00	0.04	0.04
Field cull	0.03	0.00	0.00	0.03	0.03
Breakage	0.04	0.00	0.00	0.03	0.03
Total	0.12	0.00	0.00	0.10	0.10

NET VOLUME BY MBF

SPECIES AREA	Doug-fir	Hemlock	Red Cedar	Red Alder	Maple	TOTALS
1	310	0	0	18	2	330
TOTALS	310	0	0	18	2	330

NET VOLUME BY GRADE AND MBF *

Grade >>>>>>>>>>	2 PEE	3 PEE	SM	2SAW(12"+)	(RA) 3SAW(12"+)	(RA) 3SAW(10-11")	(RA) 4SAW(8-9")	(RA) (6-7")
Species								
Doug-Fir	0	0	0	150	0	136	24	0
Maple	0	0	0	0	0	0	0	2
Red Cedar	0	0	0	0	0	0	0	0
Hemlock	0	0	0	0	0	0	0	0
Red Alder	0	0	0	0	4	2	4	8

GRADE DISTRIBUTION BY PERCENT

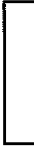
Grade >>>>>>>>>>	2 PEE	3 PEE	SM	2SAW(12"+)	3SAW(12"+)	3SAW(10-11")	4SAW(8-9")	(6-7")
Species								
Doug-fir	0%	0%	0%	48%	0%	44%	8%	0%
Maple	0%	0%	0%	0%	0%	0%	0%	100%
Red Cedar	0%	0%	0%	0%	0%	0%	0%	0%
Hemlock	0%	0%	0%	0%	0%	0%	0%	0%
Red Alder	0%	0%	0%	0%	27%	9%	20%	44%


**Operating Periods Restrictions Matrix for
Millicoma Overlook
341-15-40**

	January		February		March		April		May		June		July		August		September		October		November		December	
						1st		1st		15th	16th		7th	8th	5th	6th	15th	16th	14th	15th				
Harvesting																								
Ground-based Yarding																								
Cable Yarding on Unsurfaced Roads																								
Logging activity in Logging Restricted Area																								


	January		February		March		April		May		June		July		August		September		October		November		December	
						1st		1st		15th	16th				5th	6th	15th	16th	15th					
Hauling																								
Log Hauling on Unsurfaced Roads																								

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

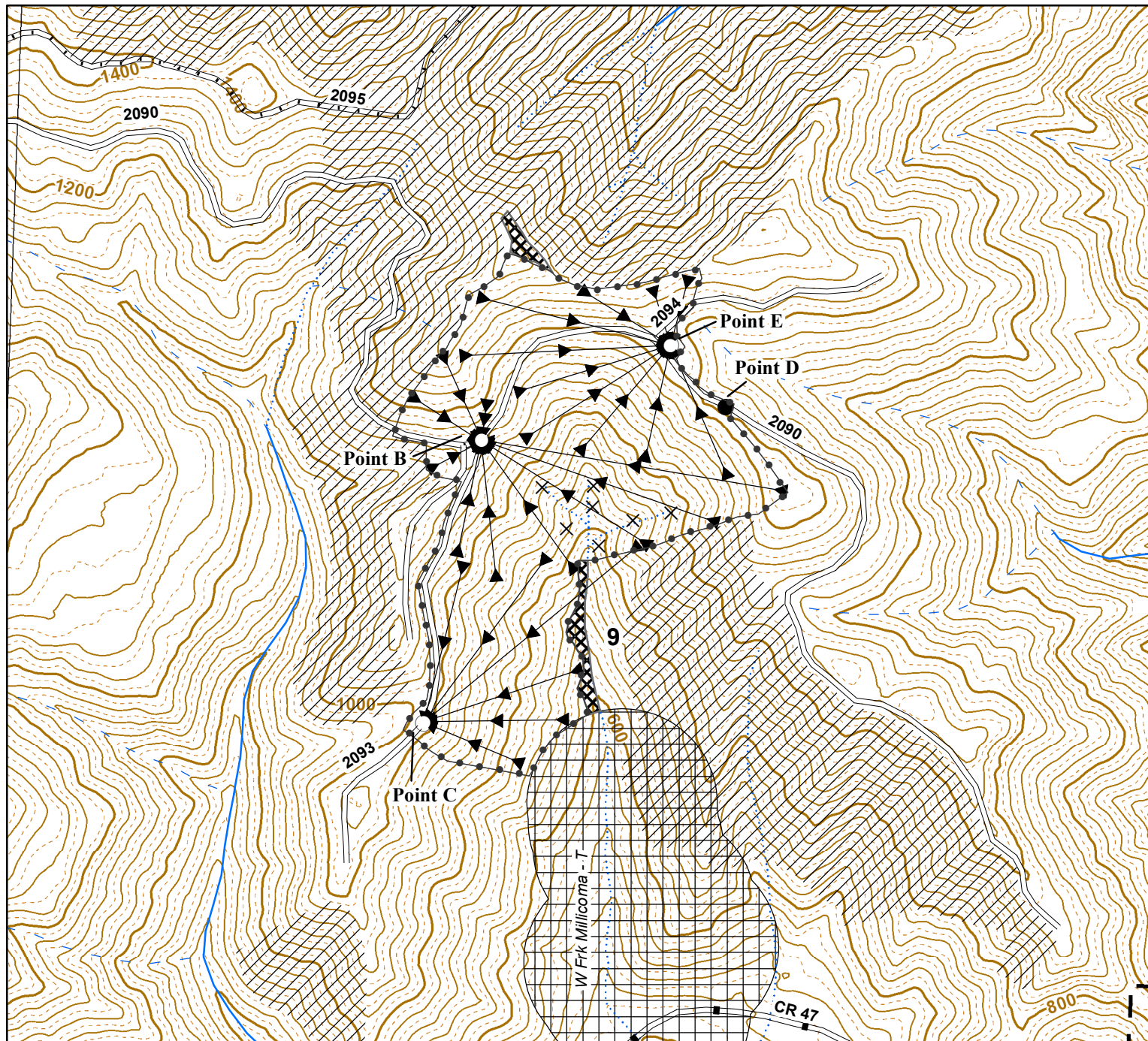
 Operations Allowed

 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.



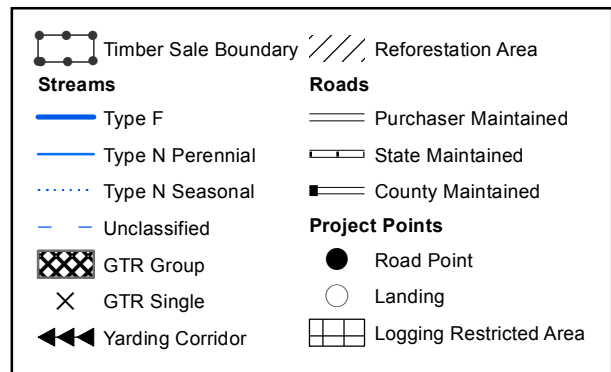
LOGGING PLAN Sale No. 341-15-40 Millicoma Overlook

Portions of Section 9
T24S, R11W, W.M.
Coos County, Oregon
Regulated Use Area CS-2
100% CSL



Acreage

Gross	30 Acres
Net	28 Acres



The information shown on this map 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.



1:6,000 1 inch = 500 feet