



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary East Fork Millicoma Sale 341-05-03

District: Coos

Date: 4/7/05

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,036,948.23	\$23,419.20	\$1,060,367.43
		Project Work	(\$25,462.00)
		Advertised Value	\$1,034,905.43



Timber Sale Appraisal Timber Description East Fork Millicoma Sale 341-05-03

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of Sections 27, 28, 33 & 34,
T24S, R11W, W.M., Coos County, Oregon.

Date: 4/7/05

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	24	0	95
Western Hemlock / Fir	27	0	95
Red Cedar	23	0	95
Alder (Red)	15	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Red Cedar	Alder (Red)	Total
SM	130	0	0	0	130
2S	1,292	24	20	6	1,342
3S	200	44	50	18	312
3S 12"+	326	0	0	0	326
4S	18	8	13	27	66
Total	1,966	76	83	51	2,176

Comments: Pond Values Used: 1st Quarter 2005.

See attached sheet for details of Other Costs.



Timber Sale Appraisal Logging Conditions East Fork Millicoma Sale 341-05-03

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Red Cedar	100.00%	
	Alder (Red)	100.00%	
Yarding Distance:	Long (1,500 ft)		Downhill Yarding: No
Logging System:	Cable: Large Tower ≥ 70		Process: Manual Delimiting
Tree Size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
Loads/Day:	12		Bd. Ft./Load: 4,800
Cost/MBF:	\$61.63		
Machines:			
	Log Loader (A)		
	Tower Yarder (Large)		



Timber Sale Appraisal Logging Costs East Fork Millicoma Sale 341-05-03

"STEWARDSHIP IN FORESTRY"

Date: 4/7/05

Operating Seasons: 0.5

Profit & Risk: 13%

Project Costs: \$25,462

Other Costs (P/R): \$15,176

Slash Disposal: \$0

Other Costs: \$30,730

Road Maintenance: \$0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.9	0.0	0.0	0.0

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	3.0	4.5
Western Hemlock / Fir	\$0.00	3.0	4.5
Red Cedar	\$0.00	3.0	4.5
Alder (Red)	\$0.00	3.0	3.5

Local Pond Values

Date	Species	Grade	Value
4/7/05	Douglas - Fir	3S 12"+	\$430.00



Timber Sale Appraisal Logging Costs Breakdown East Fork Millicoma Sale 341-05-03

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Western Hemlock / Fir	Red Cedar	Alder (Red)
Logging	61.63	61.63	61.63	61.63
Road Maintenance	0.28	0.28	0.28	0.30
Fire Protection	0.64	0.64	0.64	0.00
Hauling	35.89	35.89	35.89	48.67
Other (P/R appl.)	7.14	7.14	7.14	0.00
Profit & Risk	13.73	13.73	13.73	14.38
Slash Disposal	0.00	0.00	0.00	0.00
Scaling	2.00	2.00	2.00	2.00
Other	14.46	14.46	14.46	0.00
Total	135.77	135.77	135.77	126.98

Amortization	0.00	0.00	0.00	0.00
Pond Value	621.92	440.26	835.00	586.18
Stumpage	486.15	304.49	699.23	459.20
Amortized	0.00	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary East Fork Millicoma Sale 341-05-03

Amortized

	Douglas - Fir	Western Hemlock / Fir	Red Cedar	Alder (Red)
MBF	0.00	0.00	0.00	0.00
Value	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

Unamortized

	Douglas - Fir	Western Hemlock / Fir	Red Cedar	Alder (Red)
MBF	1,966.00	76.00	83.00	51.00
Value	486.15	304.49	699.23	459.20
Total	955,770.90	23,141.24	58,036.09	23,419.20

Gross Timber Sale Value

Recovery \$1,060,367.43

Prepared by: Gloria Clary

Date: 4/7/05

District: Coos

Phone: (541) 267-1757

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: East Fork Millicoma

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>
Felling				
Felling of unmerch material	MBF	0	\$ 1.00	\$ -
Directional Felling	MBF	1000	\$ 2.00	\$ 2,000.00
Yarding and Loading				
Artificial guyline support	anchor	0	\$ 500.00	\$ -
Brand and paint logs	MBF	2176	\$ 1.00	\$ 2,176.00
Loader time for firewood stacking	Hours	0	\$ 75.00	\$ -
Snag Creation				
Tree Topping	Trees	23	\$ 100.00	\$ 2,300.00
Miscellaneous Costs				
Additional Fire Equipment	Seasons	1	\$ 1,000.00	\$ 1,000.00
Maintenance rock per section 5	Cubic Yards	0	\$ 18.00	\$ -
Safety Flagging and/or signing	per day	70	\$ 110.00	\$ 7,700.00
Total additional "Other Cost" with additional profit and risk to be added				\$ 15,176.00

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		\$ 1.00	\$ -
Road Easements:				
Weyhaeuser Road Use Fee	MBF	2176	\$ 4.43	\$ 9,639.68
Lone Rock Timber, Road Amortization Fee	MBF	2176	\$ 8.73	\$ 18,996.48
Lone Rock Timber, Rock Wear Fee	MBF/1.75 Miles	2176	\$ 0.55	\$ 2,094.40
Total additional "Other Cost" with no additional profit and Risk				\$ 30,730.56

SUMMARY OF CONSTRUCTION COST

East Fork Millicoma

Project No. 1A: Road and Landing Construction

Points: B to C Length: 1290' Type: 14' no ditch

Clearing and Grubbing

1.4 acres at \$790.00 \$ per acre = \$1,106.00

Total clearing and grubbing \$1,106.00

Excavation

Drill and Shoot	<u>1717</u>	cubic yds at	<u>\$3.00</u>	per cu yd	<u>\$5,151.00</u>
Cat excavation, prepping waste area and shaping waste material at Point D	<u>50</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$6,250.00</u>
Excavator time	<u>50</u>	hrs at	<u>\$110.00</u>	per hr	<u>\$5,500.00</u>
Laborer	<u>50</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$1,500.00</u>

Total Excavation \$18,401.00

Hauling

Hauling for endhaul material to Point D	<u>3685</u>	cu yds at	<u>\$0.92</u>	per cu yd	<u>\$3,390.20</u>
Hauling stumps to location near Point D	<u>5</u>	hrs at	<u>\$95.00</u>	per hr	<u>\$475.00</u>

Total Hauling \$3,865.20

Grade Road Surface

2 hrs at \$75.00 per hour \$150.00

Total Grading \$150.00

Move-in

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	30	0.66	\$533.00	\$351.78
D8 Cat	30	0.66	\$533.00	\$351.78
Grader	30	0.66	\$241.00	\$159.06
Drill & Comp	30	0.66	\$241.00	\$159.06
Dump Truck	30	0.66	\$241.00	\$159.06
Dump Truck	30	0.66	\$241.00	\$159.06

Time for snapping low-boy on Move-in 4 hrs at \$75.00 per hour \$300.00

Total Move-in \$1,639.80

Project 1 Cost \$25,162.00

Project 2: Road Improvement

Points: A to B Length: 3850' Type: 14' no ditch

Smooth Road Surfaces (Grader) remove slough from cutbank side	<u>4</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$300.00</u>
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Project 2 Cost \$300.00

Total Project Costs \$25,462.00

TIMBER SALE SUMMARY

East Fork Millicoma

1. **Type of sale:** Final harvest; Recovery, Sealed Bid.
2. **Boundary Lines:** Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red paint, and red flagging at locations shown on the Exhibit A.
3. **Revenue Distribution:** 99.56% BOF and .44% CSL; 100% Coos County.
4. **Sale Acreage:** The total sale area is 45 net acres. Grouped green trees and buffer areas are posted outside the sale area and are not included in the net acreage calculation. The acreage was determined using orthophoto imagery on the ARCVIEW Geographic Information System program.
5. **Volume by Species, Fund, and County:** See attached table.
6. **Grade by Percent:**

Species	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp
Douglas-fir	0 %	6.6 %	65.7 %	26.8 %	0.9 %
Red Alder	----	----	11.9 %	36.2 %	51.9 %
Western Red Cedar	----	----	25 %	60 %	15 %
Western Hemlock	----	----	32 %	58 %	10 %
Big Leaf Maple	----	----	----	19.5 %	80.5 %

7. **Cruise:** The unit was variable plot cruised using the Big BAF cruise design, which consisted of 106 nested plots. Each plot consists of both a full 40 BAF count plot and a full 250 BAF measure plot. The 40 BAF count plot was used to tally the number of trees by species to determine the stand basal area. The 40 BAF plot was then used to select hardwoods and minor species to cruise and the 250 BAF plot to select conifer trees. Selected trees were cruised for diameter at breast height, height, grade and defect. Seventy-seven conifer and twenty red alder Big BAF trees were cruised for diameter, height, grade and defect. The cruise was analyzed using the SuperACE cruising program.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16' Hardwood: 16'	Estimated or measured on all trees	49	8

B. Stand Summary:

Species	D4H	Trees per Acre	Basal Area (ft ² /ac)	BF per acre
Douglas-fir	24	64	200	43,691
Red Alder	15	9	11	874
Western Cedar	23	5	15	2,097
Western Hemlock	27	2	8	1,693
Big Leaf Maple	13	6	5	261

C. Green Tree Retention Summary: Most green trees were posted outside of the timber sale, except scattered trees which will be removed from the cruise. These scattered trees are marked with a "W" in red.

8. Timber Description: The timber sale is a moderately stocked stand of approximately 100 year old second growth Douglas-fir, of good to average quality, with alder, big leaf maple, western hemlock and western red cedar in the understory. Conifers range from 100 to 190 feet tall while hardwoods are about 50 to 80 feet.

9. Topography: The unit ranges from 20% to 100% slope. There are a few benches as well as steep drainages.

10. Logging Method: The sale will be cable logged uphill with single-end suspension over the unit; full suspension will be required over designated streams and RMAs. A motorized carriage will be required to obtain the necessary suspension. Tailtrees may need to be placed for yarding the sale area as approved in the operations plan.

11. Access: From Coos Bay, proceed east on Coos River Highway for 18 miles to Lockhart Ridge Rd. and then proceed for 4 miles to Point A.

12. Projects:

Project No. 1: Road and Landing Construction

Project No. 2: Road Improvement

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: East Fork Millicoma

DATE: 6/16/2004

LEGAL LOCATION: T 24 S, R 11 W Sec. 27, 28, 33 & 34

BY: Gloria Clary

GROSS VOLUME MBF *

SPECIES>>	Doug-fir	Hemlock	Red Cedar	Hardwds	TOTAL
AREA	BY AREA				
Area I	2,180.7	84.7	104.9	58.6	2,428.9
II R/W	16.3	0.0	0.0	1.5	17.8
Less GTR Vol.	12.4	0	12.6	0	12.4
TOTAL	2184.6	84.7	92.3	60.1	2434.3

DEFECT AND BREAKAGE *

Species	Doug-fir	Hemlock	Red Cedar	Hardwds
Field cull	0.02	0.02	0.02	0.03
Hidden cull	0.03	0.03	0.03	0.05
Breakage	0.05	0.05	0.05	0.07
Total	0.10	0.10	0.10	0.15

NET VOLUME BY MBF BY AREA*

SPECIES AREA	Doug-fir	Hemlock	Red Cedar	Hardwds	TOTALS BY AREA
I	1951.5	76.2	83.1	49.8	2160.6
II R/W	14.7	0	0	1.3	15.9
TOTALS	1966.1	76.2	83.1	51.1	2176.5

NET VOLUME BY GRADE AND MBF *

Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW/CR
AREA I						
Species						
Doug-Fir	0	0	130	1292	526	18
Hdwds	0	0	0	6	18	27
Red Cedar	0	0	0	20	50	13
Hemlock	0	0	0	24	44	8

GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW
Doug-fir	0%	0%	7%	66%	27%	1%
Hardwood	0%	0%	0%	12%	36%	52%
Red Cedar	0%	0%	0%	24%	60%	16%
Hemlock	0%	0%	0%	32%	58%	10%

NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							Vol. per Acre
			By County and Fund						Total Vols.	
Area	Spec	Coos			Douglas			Total Vols.		Vol. per Acre
		CSL	BOF	Total	CSL	BOF	Total			
I	D-fir	3.8	1962	1966			0	1966	43.8	
	Hdwd	0.4	50.6	51			0	51	1.1	
	Cedar	0	83	83			0	83	1.9	
	Hemlock	0	76	76			0	76	1.7	
TOTALS										
		4.2	2172	2176	0	0	0	2176		

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	1966	MBF
Hardwoods	51	MBF
Cedar	83	MBF
Hemlock	76	MBF
Total	2176	MBF

Report by: East Fork Millicoma

Date: 6/16/2004

Unit For. *Norm Kline* 6/29/04
Date

Asst. Dist. For. *Greg Kreimeyer* 6/29/2004
Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS
NO INGROWTH INCLUDED**

ACREAGE BY COUNTY (to nearest acre)

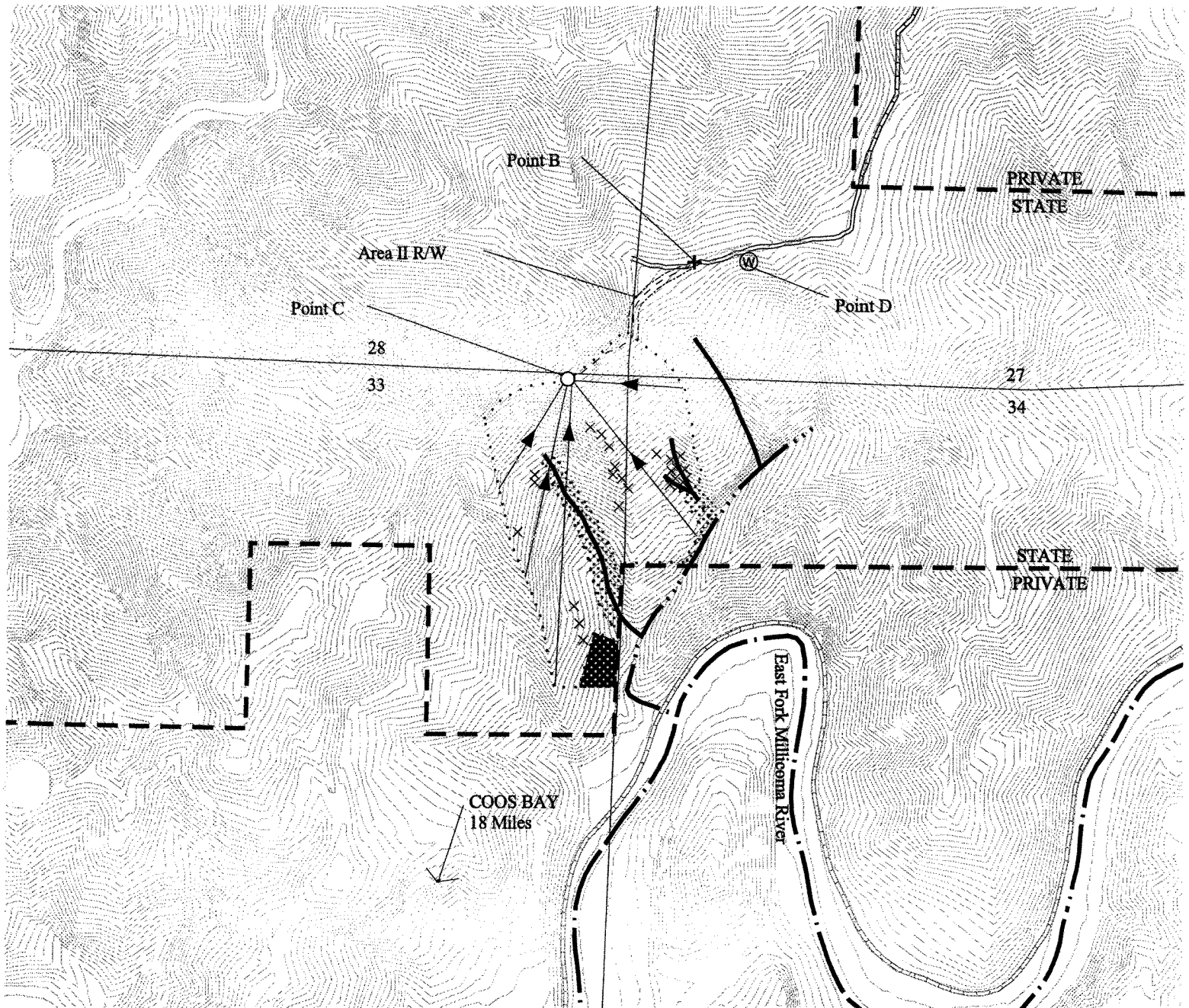
Sale Area	Coos County						Douglas County						TOTAL ACRES	
	CSL			BOF			CSL			BOF				
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods		
	cc	pc		cc	pc		cc	pc		cc	pc			
I	0.2			44.8										45
														0
														0
SUM	0.2	0	0	44.8	0	0	0	0	0	0	0	0	0	45

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



LEGEND

- Landing
- + Project Points
- Ⓜ Waste Area
- - - - - Posted Sale Boundary
- - - - - Elliot State Forest Boundary
- Roads**
- ▬ County Roads
- ▬ Purchaser Maintained (PRIVATE) Roads
- ▬ Purchaser Maintained (STATE) Roads
- - - - - Right of Way Boundary
- ▬ New Road Construction
- ▬ Yarding Corridors
- ⋯ Contours: 20 Foot
- Streams**
- ▬ Type F
- ▬ Type N Perennial
- ▬ Type N Seasonal
- ⋯ Stream Buffer
- Green Tree Retention Group
- × Green Tree Retention

LOGGING PLAN

EAST FORK MILLICOMA
 341-05-03
 PORTIONS OF SECTIONS 27, 28, 33 AND 34
 T24S, R11W, W.M.
 COOS COUNTY, OREGON
 APPROXIMATELY 45 NET HARVEST ACRES

APPROX. SCALE 1"=1000'

