



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Dry Moby Sale 341-04-83

District: Coos

Date: 4/5/04

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$1,420,424.74	\$40,177.20	\$1,460,601.94
		<b>Project Work</b>	(\$61,611.28)
		<b>Advertised Value</b>	\$1,398,990.66



# Timber Sale Appraisal Timber Description Dry Moby Sale 341-04-83

"STEWARDSHIP IN FORESTRY"

**District:** Coos

**Location:** Portions of sections 27, 28, 33, and 34,  
T23S, R11W, W. M.,  
Coos County, Oregon.

**Date:** 4/5/04

**Stand Stocking:** 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	29	0	95
Western Hemlock / Fir	21	0	95
Alder (Red)	15	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	83	0	0	83
SM	332	0	0	332
2S	1,648	0	0	1,648
3S	813	0	0	813
Camprun	0	70	84	154
<b>Total</b>	<b>2,876</b>	<b>70</b>	<b>84</b>	<b>3,030</b>

**Comments:** Pond Values Used: 1st Quarter 2004.

50 acre regeneration sale of 130 year-old timber.



# Timber Sale Appraisal

## Logging Conditions

### Dry Moby

## Sale 341-04-83

"STEWARDSHIP IN FORESTRY"

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



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal

## Logging Costs

### Dry Moby

### Sale 341-04-83

Date: 4/5/04

Operating Seasons: 0.5

Profit & Risk: 15%

Project Costs: \$61,611

Other Costs (P/R): \$5,065

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.2	0.5	0.0	0.0

Road Maintenance: \$0.00

#### Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	4.8
Western Hemlock / Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	3.0	3.5



# Timber Sale Appraisal Logging Costs Breakdown Dry Moby Sale 341-04-83

"STEWARDSHIP IN FORESTRY"

<b>Costs</b>	<b>Douglas - Fir</b>	<b>Western Hemlock / Fir</b>	<b>Alder (Red)</b>
<b>Logging</b>	61.63	61.63	61.63
<b>Road Maintenance</b>	0.34	0.34	0.36
<b>Fire Protection</b>	0.45	0.45	0.45
<b>Hauling</b>	48.42	60.53	48.67
<b>Other (P/R appl.)</b>	1.67	1.67	1.67
<b>Profit &amp; Risk</b>	16.88	18.69	16.92
<b>Slash Disposal</b>	0.00	0.00	0.00
<b>Scaling</b>	2.00	2.00	2.00
<b>Other</b>	0.00	0.00	0.00
<b>Total</b>	131.39	145.31	131.70

<b>Amortization</b>	0.00	0.00	0.00
<b>Pond Value</b>	619.08	400.00	610.00
<b>Stumpage</b>	487.69	254.69	478.30
<b>Amortized</b>	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Dry Moby Sale 341-04-83

**Amortized**

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
<b>MBF</b>	0.00	0.00	0.00
<b>Value</b>	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00

**Unamortized**

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
<b>MBF</b>	2,876.00	70.00	84.00
<b>Value</b>	487.69	254.69	478.30
<b>Total</b>	1,402,596.44	17,828.30	40,177.20

**Gross Timber Sale Value**

**Recovery \$1,460,601.94**

Prepared by: Chris Rudd

Date: 4/5/04

District: Coos

Phone: (541) 267-1756

## Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Dry Moby

### 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>
<b>Yarding and Loading</b>				
Brand and paint logs	MBF	3030	\$ 0.50	\$ 1,515.00
Loader time for firewood stacking	Hours	3	\$ 75.00	\$ 225.00
Slash piling on landings	landing	5	\$ 125.00	\$ 625.00
<b>Miscellaneous Costs</b>				
<b>Marking Wildlife Trees</b>	Trees	20	\$ 10	\$ 200.00
<b>Snag Creation</b>				
Tree Topping	per tree	25	\$ 100.00	\$ 2,500.00
<b>Total additional "Other Cost" with additional profit and risk to be added</b>				<b>\$ 5,065.00</b>

**SUMMARY OF CONSTRUCTION COST  
Dry Moby**

**Project No. 1A: Road Construction**

Points: A to B      Length: 550'      Type: 14' no ditch

**Clearing and Grubbing**

Clearing and Grubbing	0.8	acres at	\$900.00	per ac	\$720.00
Haul debris to stable locations	1	hrs at	\$95.00	per hr	\$95.00

**Total clearing and grubbing      \$815.00**

**Excavation**

Drill and Shoot	330	cubic yds at	\$3.10	per cu yd	\$1,023.00
Excavation (includes Excavator and Cat)	2679	cubic yds at	\$2.08	per cu yd	\$5,572.32
Cat time for waste area at Pt E	3	hrs at	\$95.00	per hr	\$285.00
Laborer	30	hrs at	\$30.00	per hr	\$900.00

**Total Excavation      \$7,780.32**

**Culvert Installation**

18" pipe (Point A) (includes installation)	60	feet at	\$12.00	per foot	\$720.00
18" band	2	band at	\$12.00	per band	\$24.00

**Total Culvert Installation      \$744.00**

**Hauling**

Endhaul to waste area at Pt E (0.8 mi RT)	1688	cubic yds at	\$1.40	per cu yd	\$2,363.20
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**Total Hauling      \$2,363.20**

**Grade Road Surface**

	1	hrs at	\$75.00	per hour	\$75.00
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**Total Grading      \$75.00**

**Project 1A Total      \$11,777.52**

**Project No. 1B: Road Construction**

Points: C to D      Length: 795'      Type: 14' no ditch

**Clearing and Grubbing**

	0.9	acres at	\$960.00	\$ per acre =	\$864.00
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**Total clearing and grubbing      \$864.00**



**SUMMARY OF CONSTRUCTION COST  
Dry Moby**

**Excavation**

Drill and Shoot	1557	cubic yds at	\$3.10	per cu yd	\$4,826.70
Excavation (includes Excavator and Cat)	5158	cubic yds at	\$2.00	per cu yd	\$10,316.00
Cat time for waste area at Pt E	5	hrs at	\$95.00	per hr	\$475.00
Laborer	50	hrs at	\$30.00	per hr	\$1,500.00
<b>Total Excavation</b>					<b>\$17,117.70</b>

**Hauling**

Endhaul to waste area at Pt E (1.4 mi RT)	4954	cubic yds at	\$1.73	per cu yd	\$8,570.42
Haul brush and stumps to Pt F (1.0 mi RT)	5	hrs at	\$95.00	per hr	\$475.00
<b>Total Hauling</b>					<b>\$9,045.42</b>

**Grade Road Surface**

	1	hrs at	\$75.00	per hour	\$75.00
<b>Total Grading</b>					<b>\$75.00</b>

**Project 1B Total \$27,102.12**

**Project No. 1C: Waste Area Construction**

Point: E

Cat for prep	3	hrs at	\$95.00	per hr	\$285.00
Excavator to remove stumps and slash and shape pile at end of project	5	hrs at	\$115.00	per hr	\$575.00
<b>Project 1C Total</b>					<b>\$860.00</b>

**Move-in**

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	35	0.74	\$533.00	\$394.42
D8 Cat	35	0.74	\$533.00	\$394.42
Grader	35	0.74	\$241.00	\$178.34
Drill & Comp	35	0.74	\$241.00	\$178.34
Dump Truck	35	0.74	\$144.00	\$106.56
Dump Truck	35	0.74	\$144.00	\$106.56

**Total Move-in \$1,358.64**

**Project 1 Cost \$41,098.28**

**Project 2A: Road and Landing Improvement**

Points: A to C      Length: 1600'      Type: 14' with ditch

Smooth Road Surfaces (Grader)	2	hrs at	\$75.00	per hour	\$150.00
<b>Project 2A Total</b>					<b>\$150.00</b>

**SUMMARY OF CONSTRUCTION COST  
Dry Moby**

**Project No. 2B: Waste Area Improvement**

Point: F

Excavator to widen road up to F, and remove 5 hrs at \$115.00 per hr \$575.00  
brush on road edge and at Pt G for turnaround

**Project 2B Total \$575.00**

**Project 2 Cost \$725.00**

**Project 3: West Fork Millicoma Rock Stockpile**

Location: 1.5 mi on 8000 Rd  
Measured amount: 1000 cubic yards  
Delivered amount: 1200 cubic yards (20% expansion)  
Size: 1 1/2" - 0"

Cost per cubic yard at crusher: \$7.00 per cu yd  
Haul cost per cubic yard (2.5 hr. RT): \$8.89 per cu yd  
Piling and shaping cost per cubic yard: \$0.60 per cu yd

Total cost per cubic yard: \$16.49 per cu yd  
Total cubic yards: 1200 cubic yards

**Total Cost for Stockpile rock: \$19,788.00**

**Project 3 Cost \$19,788.00**

**Total Project Costs \$61,611.28**

## TIMBER SALE SUMMARY

Dry Moby

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:** 100% CSL; 100% Coos County.
4. **Sale Acreage:** The sale area is 50 acres Net. The net acreage includes that area of the sale posted within the timber sale boundary signs. Green trees and buffer areas are posted outside the sale area and are not included in the net acreage calculation. The total sale area including buffers and green trees is 59 acres. The acreage was determined by ArcView software, a geographic information system.
5. **Volume by Species, Fund, and County:** See table on following page.
6. **Grade by Percent:**

Species	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp
Douglas-fir	3%	12%	57%	28%	0
Western Hemlock					100%
Hardwood	----	----	----	----	100%

7. **Cruise:** The unit was variable plot cruised using the big basal area factor method. A 360 BAF wedge factor was used for measure trees and a 40 BAF was used for count trees. Heights, diameter, form factor, grade and defect were taken on measure plots. Dry Moby was cruised by ODF Foresters and compiled using Superace, in January 2004.

### A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16' Hardwood: 16'	Recorded on all trees	70	7.3

### B. Stand Summary:

Species	D4H	Trees per Acre	Basal Area (ft <sup>2</sup> /ac)	BF per acre
Douglas-fir	29	32	209	57,500
Western Hemlock	21	6	14	1,400
Hardwood	15	28	36	1,700

C. Marked and Purchaser Select Green Tree Retention Summary:

Species	D4H	Total Trees	Basal Area (ft <sup>2</sup> /ac)	Total BF Removed
Douglas-fir	32	35	196	56,600
Western Hemlock	22	30	43	22,800
Spruce	38	3	23	4,000
Red Cedar	18	5	9	1,000
Red Alder	15	7	12	920

Green trees are arranged throughout the sale area in a variable pattern. The majority of the reserve trees are posted out of the sale in groups or along buffers. There are approximately 80 reserve trees within the sale boundary as shown in the above table. The majority of these trees are along the buffers posted with a "W" (wildlife tree). All of the Douglas-fir in the above table are marked wildlife tree in red. There is a pod of Douglas-fir on a knob along the south edge of the sale. Approximately ten western hemlock and two spruce trees are marked as wildlife trees scattered throughout the sale. All other unmarked cedar and spruce trees are reserved from cutting, and twenty (20) additional western hemlock (also shown in the table above) will be selected by the Purchaser for wildlife trees.

- 8. Timber Description:** Dry Moby is approximately 130 year-old second growth Douglas-fir, of good to average quality, with a small amount of hemlock and alder understory. Timber is typical of other stands this age in the Elliott. The field cull was found to be 6.5% compared to about 4% for the rest of the Elliott. Overall defect and breakage is estimated to be 11.5% for this stand.
- 9. Topography:** The sale is steep and dissected with streams running through and along the sides of it. The main ridges along the west and south sides will have two landings for logging.
- 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 buffers. A motorized carriage may be required to obtain the necessary suspension. The sale has two main landings.
- 11. Access:** From Coos Bay take the Coos River Highway to Allegany. Turn left on County Road 47 (West Fork Millicoma) and continue for five miles. Turn left at Dean Mountain Road (2000). The sale area is located 6½ miles north on the 2000 Road at the 2195 Road junction.
- 12. Projects:**

Project No. 1: Spur Road Construction

Project No. 2: Road and Landing Improvement

Project No. 3: Rock Stock Piling

## NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							Total Vols.	Vol. per Acre
			By County and Fund								
Area	Spec		Coos			Douglas					
		CSL	BOF	Total	CSL	BOF	Total				
I	D-fir	2,876		2,876			0		2876	57.5	
	Hem	70		70			0		70	1.4	
	Hdwd	84		84			0		84	1.7	
<b>TOTALS</b>				3030	0	3030	0	0	0	3030	

**TOTAL SALE VOLUME BY SPECIES**

Douglas-fir	2,876	MBF
Hemlock	70	MBF
Hardwoods	84	MBF
<b>Total Sale</b>	<b>3,030</b>	<b>MBF</b>

Report by: Dry Moby

Date: 2/3/2004

Unit For. Thomas Hill Feb 26, 04  
Date

Asst. Dist. For. Dry Moby 3/3/2004  
Date

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

**ACREAGE BY COUNTY (to nearest acre)**

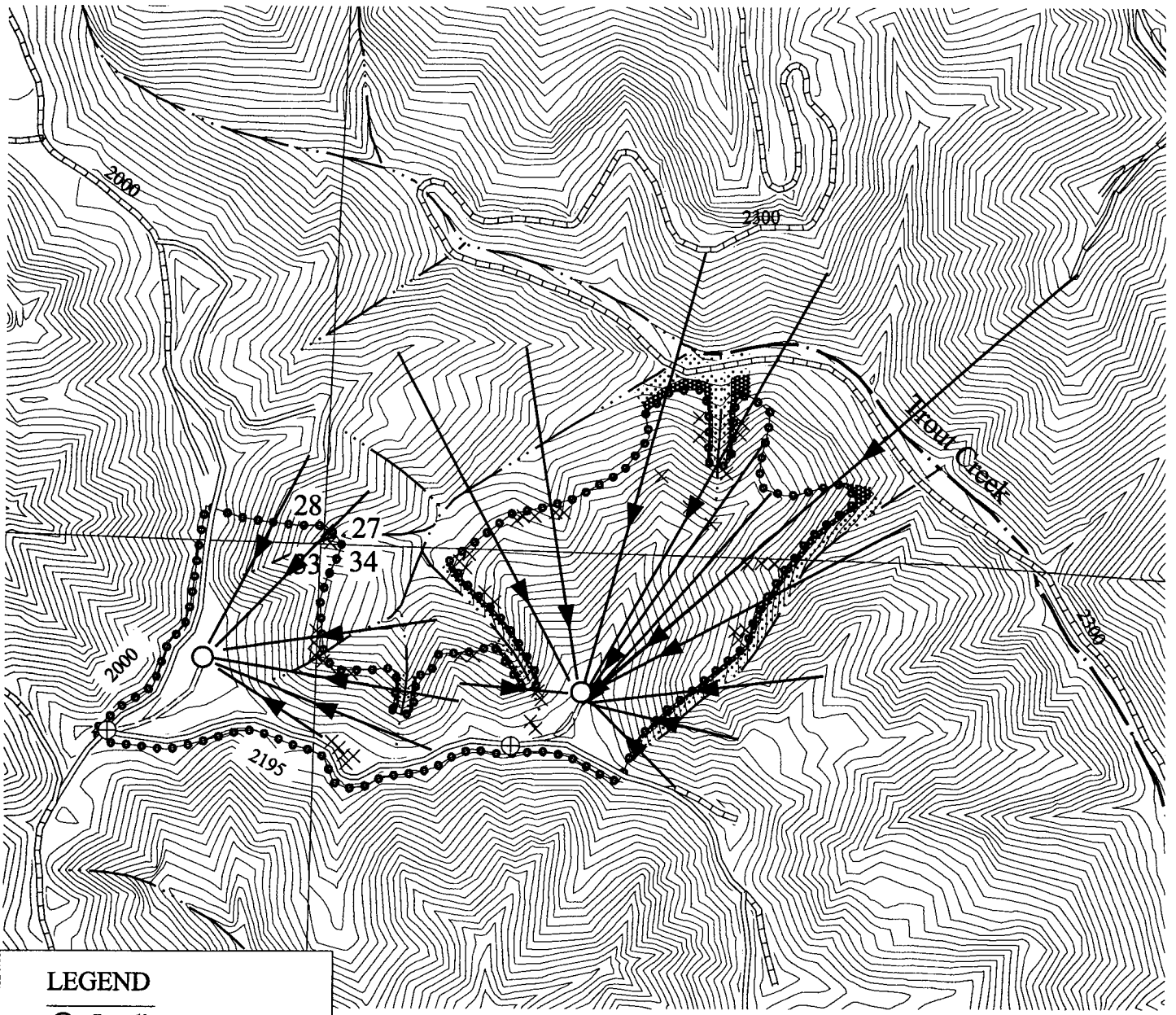
Sale Area	Coos County						Douglas County						TOTAL ACRES	
	CSL			BOF			CSL			BOF				
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods		
	cc	pc		cc	pc		cc	pc		cc	pc			
I	50													50
<b>SUM</b>	50	0	0	0	0	0	0	0	0	0	0	0	0	50

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



**LEGEND**

- Landing
- ⊕ Project Point
- × Wildlife Trees
- ↘ Yarding Corridors
- Roads
  - ▨ State Maintained
  - ▧ Contractor Maintained
  - ▩ Surfaced
  - Unsurfaced
- ⋯ Sale Boundary
- PLS
- ▭ Contours 20 Foot
- Streams
  - ▧ Type F
  - ▨ Type N
- Reserve Trees
  - ⋯ Buffer
  - ▩ GTR

**LOGGING PLAN**

OF TIMBER SALE CONTRACT NO.  
 341-04-83  
 DRY MOBY  
 PORTIONS OF SECTIONS 27, 28, 33, AND 34, T23S, R11W, W. M.  
 COOS COUNTY, OREGON



Net Acres	Gross Acres
50	59

DATE: Feb, 7 2004

# WRITTEN PLAN

**SALE NAME:** Dry Moby

**LOCATION:** Portions of sections 27, 28, 33 and 34 T23S R11W, Coos County, Oregon

**LANDOWNER:** Oregon Department of Forestry, 63612 Fifth Road, Coos Bay, Or.

**CONTRACT PURCHASER:** \_\_\_\_\_

**NOTIFICATION NO:** \_\_\_\_\_

## **SITUATION AND PROTECTED RESOURCE**

The protected resource is Trout Creek, a Type F stream.

## **LAYOUT**

Landings have been provided to enable best possible deflection for suspension of logs while yarding the sale area.

## **STREAM BUFFER**

A minimum 100 foot slope distance no harvest buffer has been posted on the ground.

## **FELLING AND BUCKING**

1. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
2. High stumps shall be left as needed to minimize accumulation of logs in stream channels.

## **YARDING**

1. Operator will use a machine and logging system capable of fully suspending logs.
2. Operator will fully suspend logs when sufficient deflection is available.

## **OPERATIONS PLAN.**

Purchaser shall attach a yarding plan indicating landing locations, machinery and procedures to be used to obtain adequate suspension in the sale area and to minimize impacts during the felling process.

PREPARED BY: Norma Kline,  
Timber Management Unit Forester  
February 26, 2004

\_\_\_\_\_  
PURCHASER REPRESENTATIVE

DATE: \_\_\_\_\_

\_\_\_\_\_  
OPERATOR REPRESENTATIVE (if listed on notification)

DATE: \_\_\_\_\_