



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Basin 3-4 Thin Sale 341-02-40

District: Coos

Date: 7/3/01

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$38,808.96	\$1,512.80	\$40,321.76
		Project Work	(\$9,564.00)
		Advertised Value	\$30,757.76



Timber Sale Appraisal Timber Description Basin 3-4 Thin Sale 341-02-40

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of Secs. 13, 15, 16, 17, 21, 22, 24 and 27, T22S, R11W WM Douglas, County, OR

Date: 7/3/01

Stand Stocking: 20%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	8	0	95
Alder (Red)	9	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
3S	108	0	108
4S	220	0	220
Camprun	0	16	16
Total	328	16	344

Comments: Pond Values Used: 2nd Quarter 2001

97 acres (net) of Automark thinning



Timber Sale Appraisal

Logging Conditions

Basin 3-4 Thin

Sale 341-02-40

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	95.00%
	Alder (Red)	95.00%
Yarding Distance:	Short (400 ft)	Downhill Yarding No
Logging System:	Cable: Small Tower <=40	Process: Manual Delimiting
Tree Size:	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF	
Loads/Day:	3	Bd. Ft./Load: 3,500
Cost/MBF:	\$245.53	
Machines:		
	Log Loader (A)	
	Tower Yarder (Small)	
Combination#: 2	Douglas - Fir	5.00%
	Alder (Red)	5.00%
Yarding Distance:	Short (400 ft)	Downhill Yarding Yes
Logging System:	Wheel Skidder	Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF	
Loads/Day:	4	Bd. Ft./Load: 3,500
Cost/MBF:	\$214.34	
Machines:		
	Log Loader (B)	
	Tire Skidder	



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal

Logging Costs

Basin 3-4 Thin

Sale 341-02-40

Date: 7/3/01

Operating Seasons: 1.0

Profit & Risk: 16%

Project Costs: \$9,564

Other Costs (P/R): \$8,132

Slash Disposal: \$0

Other Costs: \$688

Road Maintenance: \$0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.9	1.0	0.0	0.0

Hauling Costs

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



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Basin 3-4 Thin Sale 341-02-40

Costs	Douglas - Fir	Alder (Red)
Logging	243.97	243.97
Road Maintenance	0.83	0.88
Fire Protection	7.88	7.88
Hauling	46.11	56.78
Other (P/R appl.)	23.64	23.64
Profit & Risk	51.59	53.30
Slash Disposal	0.00	0.00
Scaling	2.00	2.00
Other	2.00	2.00
Total	378.02	390.45

Amortization	0.00	0.00
Pond Value	496.34	485.00
Stumpage	118.32	94.55
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Basin 3-4 Thin Sale 341-02-40

Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

Unamortized

	Douglas - Fir	Alder (Red)
MBF	328.00	16.00
Value	118.32	94.55
Total	38,808.96	1,512.80

Gross Timber Sale Value

Recovery \$40,321.76

Prepared by: Jon Haynes

Date: 7/3/01

District: Coos

Phone: (541) 267-1759

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Basin 3-4 Thin

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	344	\$ 2.00	\$ 688.00
Yarding and Loading				
Brand and paint logs	MBF	344	\$ 1.00	\$ 344.00
Skid logs up swing yarder road	MBF	20	\$ 75.00	\$ 1,500.00
Piling landing slash & sorting firewood	landing	15	\$ 50.00	\$ 750.00
Miscellaneous Costs				
Additional fire equipment	Seasons	1	\$ 2,000.00	\$ 2,000.00
Safety Flagging and/or signing	per day	25	\$ 64.00	\$ 1,600.00
Additional fire watchman	per day	50	\$ 25.00	\$ 1,250.00
Total additional "Other Cost" with additional profit and risk to be added				\$ 8,132

Additional "Other Cost" with no additional profit and Risk

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Scaling (high piece count)	MBF	344	\$ 2.00	\$ 688.00
Total additional "Other Cost" with no additional profit and Risk				\$ 688

SUMMARY OF CONSTRUCTION COST
Basin 3-4 Thin

Project 1A: Road Improvement

Points A to B
 Length: 1140'
 Type: 14' no ditch

Re-shape Road Surface

Clear and Grub	<u>0.5</u>	acres at	<u>\$790.00</u>	per acre	<u>\$395.00</u>
Cat time to remove cutbank slough	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Grader time for shaping road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$75.00</u>

Project 1A Cost: \$1,420

Project 1B: Road Improvement

Points C to D
 Length: 200'
 Type: 14' no ditch

Re-shape Road Surface

Clear and Grub	<u>0.1</u>	acres at	<u>\$790.00</u>	per acre	<u>\$79.00</u>
Cat time to shape road surface	<u>4.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$380.00</u>
Grader time for shaping road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$75.00</u>

Project 1B Cost: \$534

Project 1C: Road Improvement

Points G to H
 Length: 430'
 Type: 14' no ditch

Re-shape Road Surface

Saw time	<u>5.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$150.00</u>
Cat time to remove stumps and shape road surface	<u>5.0</u>	hrs at	<u>\$95.00</u>	per hr	<u>\$475.00</u>
Grader time to shape road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hour	<u>\$75.00</u>

Project 1C Cost: \$700

Project 1D: Road and Landing Improvement

Points I to J
 Length: 2425'
 Type: 14', no ditch

Re-shape Road Surface

Saw time	<u>10.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$300.00</u>
Cat time to remove cutbank slough and smooth road surface	<u>15.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$1,425.00</u>
Excavator time	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Grader time for shaping road surface	<u>2.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$150.00</u>

Project 1D Cost: \$2,825

Project 1E: Road and Landing Improvement

Points K to L

**SUMMARY OF CONSTRUCTION COST
Basin 3-4 Thin**

Length: 600'
Type: 14' no ditch

Re-shape Road Surface

Saw time	<u>5.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$150.00</u>
Excavator to help improve approach	<u>5.0</u>	hrs at	<u>\$95.00</u>	per hr	<u>\$475.00</u>
Cat time to improve approach and road	<u>10.0</u>	hrs at	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Grader to smooth road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hour	<u>\$75.00</u>

Project 1E Cost: \$1,650

Move-in

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	35	0.74	\$533.00	\$394.42
Cat	35	0.74	\$533.00	\$394.42
Grader	35	0.74	\$241.00	\$178.34

Total Move-in \$967

Move between sale areas (about 10 miles)

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	10	0.58	\$533.00	\$309.14
Cat	10	0.58	\$533.00	\$309.14
Grader	10			\$75.00

Total Move-between \$693

Project 1 Cost: \$8,789

Project 2: Swing Road Improvement

Points: E to F
Length: 470'
Type: Swing Road, 12' wide, no ditch

Re-shape Road Surface

Saw time to clear road	<u>10.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$300.00</u>
Cat time to shape road surface	<u>5.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$475.00</u>

Project 2 Cost: \$775

Total Project Costs \$9,564

TIMBER SALE SUMMARY

Basin 3-4 Thin

1. **Type of Sale:** Thinning; 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". Location of group selection areas will be determined during the thinning operation and are not posted.
3. **Revenue Distribution:** 56% CSL, 44% BOF, 100% Douglas County.
4. **Sale Acreage:** The sale is divided into five separate areas totaling approximately 115 gross acres. Portions of units I and II contain areas of hardwood and poor stocking which will be exempt from thinning. Total net acres is 97 (Area I = 43 acres, Area II = 40 acres, Area III = 4 acres, Area IV = 1 acre, Area V = 9 acres). Within the gross posted acres will be a total of 4.5 acres of group selection areas. Acreage was determined by electronic digitizing using the ArcView GIS program.
5. **Volume by Species, Fund, and County:** See attached table.
6. **Grade (by percent) Areas I - V:**

Species	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp
Douglas-fir				33%	67%
Hardwood					100%

7. **Cruise:** A total of 85 full prism plots were taken over the sale units. Areas I, II, and V were cruised by Second Growth Inc in 1999. Half of the plots were fully measured and half were count only. Areas III and IV were cruised by ODF foresters in spring of 2001. All the plots in Areas III and IV were fully measured. All cruising was done using the Superace program.

A. Cruise Summary Data (Areas I - V):

Diam	Ht. Stand	Form Point	Form Factor	Top Cr. Diam
D4H	Total height	Conifer: 4' Hdwd: 4'	Estimated or measured on all trees	Conifer: 5" Hdwd: 5"

B. Cruise Statistics by Area::

Area	No. of Plots	CV % Net vol.	SE % Net vol
I	25	28%	6%
II	35	51%	9%
III	3	11%	7%
IV	5	10%	4%
V	17	45%	11%
Total	85	40	4.4

C. Defect and breakage summary of cut trees (Areas I - V):

Species	Douglas-fir	Hardwoods
Cruised Defect	0%	0%
Hidden Defect	4%	10%
Breakage	2%	0%
Total	6%	10%

D. Summary of cut trees:

Area (acres)	Species	Ave. D4H	Trees per Acre	Basal Area (ft ² /ac)	MBF Per acre
I (43)	Douglas-fir	7.0	140	38	2.2
I (43)	Hardwood	8.7	6	2	.3
I (2.0) Group Selection Areas	Hardwood	11.1	19	13	1.5
II (40)	Douglas-fir	8.5	138	54	4.4
II (2.0) Group Selection Areas	Hardwood	12.6	17	15	1.2
III (4)	Douglas-fir	11.8	132	100	7.8
IV (1)	Douglas-fir	8.1	168	60	5.8
V (9)	Douglas-fir	9.7	99	51	4.2
V (.5) Group Selection Area	Hardwood	11.3	15	11	.6

8. **Timber Description:** Timber in this sale is composed mostly of small diameter, 30 to 39 year old second growth Douglas-fir with minor components of red alder and western hemlock. Stocking and tree sizes vary greatly and only densely stocked areas will be thinned. Area I has thin crowns due to presence of Swiss Needle Cast and will be lightly thinned to reduce stress on residual trees. Area II has a component of redcedar which will be exempt from cutting.

9. **Topography:** The majority of the sale areas are on deeply dissected slopes over 65 percent. Areas III and IV are small units located on ridgetops.

10. **Logging Method:** This is an Automark thinning in which the operator selects the trees to be cut. All units except for Area III and IV will be cable logged uphill with single end suspension over the units and full end suspension over designated streams and RMA's. A motorized carriage may be required to obtain the necessary suspension. Intermediate supports will be utilized where necessary. The middle access spur into Area I is suitable only for a swing yarder and logs will be skidded up the spur for loading on the 2000 road. Areas III and IV will be yarded with ground based equipment from ridgetop skidtrails. Area IV is seasonally restricted because it is within a quarter mile of a marbled murrelet management area. Motorized equipment will not be allowed to operate within the seasonally restricted portion from April 1 to September 15. Since no rock surfacing is included in the contract, Purchaser will need to plan operations during the dry season as much as possible. Tractor, shovel, or skidder logging will be limited to existing or designated skid trails and allowed only during the dry season to minimize soil disturbance. Dirt spurs will be waterbarred and blocked to vehicle access at completion of yarding and hauling activities.

11. Access: The sale units can be accessed from the 2000, and 6000 road systems. To access Area I proceed south on the Dean Creek Road from Highway 38 and continue on the gravel uphill for approximately 2 miles. Area II is located approximately 1/2 mile south of Area I. Access into Area II is via the 2770 road. Areas III and IV are located approximately 2 1/2 miles further south along the 2000 road. To access Area V continue south on the 2000 road to the 7000 road. Proceed east on the 7000 to the 6000. Head north on the 6000 to the 6500 road. Area V is located approximately 1/4 mile up the 6500 road.

12. Projects:

Project No. 1: Road and Landing Improvement

Project No. 2: Swing Road Improvement

NET VOLUMES AND ACREAGE

Basin 3-4 Thin

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
Area	Spec	Coos			Douglas					
		CSL	BOF	Total	CSL	BOF	Total			
1	D-fir			0	5	87	92	92	2.1	
	Hdwd				1	13	14	14	1.5	
2	D-fir			0	115	50	165	165	4.1	
	Hdwd				1	1	2	2	1.2	
3	D-fir			0	29		29	29	7.3	
	Hdwd			0	0					
4	D-fir			0	6		6	6	6.0	
	Hdwd			0	0					
5	D-fir				36		36	36	4.0	
	Hdwd				0					
TOTALS				0	0	0	193	151	344	

TOTAL SALE VOLUME BY SPECIES

Douglas-fir 328 MBF
 Hardwoods 16 MBF

Report by: J. Haynes

Date: June 26, 2001

Unit For: _____

Asst. Dist. For: _____

Alan P. Ryan 6-29-01
 Date
Gregory J. Kremer 6/29/2001
 Date

NO INGROWTH INCLUDED

NET 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		
1								2			41		43
2								28			12		40
3								4					4
4								1					1
5								9					9
SUM	0	0	0	0	0	0	0	44	0	0	53	0	97

cc- clearcut

pc- partial cut

CSL- Common School Land

BOF- Board of Forestry