



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Totten Creek #2 Sale 341-05-04

District: Coos

Date: 4/26/05

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$1,245,531.65	\$232,734.30	\$1,478,265.95
		<b>Project Work</b>	(\$49,631.00)
		<b>Advertised Value</b>	\$1,428,634.95



**Timber Sale Appraisal  
Timber Description  
Totten Creek #2  
Sale 341-05-04**

"STEWARDSHIP IN FORESTRY"

**District:** Coos

**Location:** Portions of Section 18, T24S, R11W, W.M., Coos County, Oregon.

**Date:** 4/26/05

**Stand Stocking:** 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	32	0	95
Alder (Red)	14	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
3P	22	0	22
SM	56	0	56
2S	1,584	122	1,706
3S	54	225	279
3S 12"+	1,020	0	1,020
4S	47	158	205
<b>Total</b>	<b>2,783</b>	<b>505</b>	<b>3,288</b>

**Comments:** Pond Values Used: 1st Quarter 2005.

Western Hemlock Price  
\$400 = \$475 (Pond Value) - \$75 (Variable Logging Cost)  
Western Red Cedar Price  
\$760 = \$835 (Pond Value) - \$75 (Variable Logging Cost)

**OTHER COSTS W/ P&R:**

**FELLING**

Directional Felling = \$2.00/MBF x 800MBF = \$1,600

**YARDING & LOADING**

Brand & Paint Logs = \$1.00/MBF x 3,208MBF = \$3,280

Loader Time for Firewood Stacking = \$75.00/Hour x 6 Hours = \$450

**SNAG CREATION**

Tree Topping = \$100/Tree x 36 Trees = \$3,600

**MISCELLANEOUS COSTS**

Additional Fire Equipment = \$1,000/Season x 1 Season = \$1,000

Artificial Tailholds: \$500/each x 4 = \$2,000

**TOTAL Other Costs With Profit & Risk Added = \$11,930**



# Timber Sale Appraisal Logging Conditions Totten Creek #2 Sale 341-05-04

"STEWARDSHIP IN FORESTRY"

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<b>Combination#:</b> 1	Douglas - Fir	100.00%
	Alder (Red)	100.00%
<b>Yarding Distance:</b>	Long (1,500 ft)	<b>Downhill Yarding:</b> No
<b>Logging System:</b>	Cable: Large Tower $\geq 70$	<b>Process:</b> Manual Delimiting
<b>Tree Size:</b>	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF	
<b>Loads/Day:</b>	10	<b>Bd. Ft./Load:</b> 4,800
<b>Cost/MBF:</b>	\$73.96	
<b>Machines:</b>		
	Log Loader (A)	
	Tower Yarder (Large)	



# Timber Sale Appraisal

## Logging Costs

### Totten Creek #2

### Sale 341-05-04

"STEWARDSHIP IN FORESTRY"

Date: 4/26/05

Operating Seasons: 1.0

Profit & Risk: 10%

Project Costs: \$49,631

Other Costs (P/R): \$11,930

Slash Disposal: \$0

Other Costs: \$0

Road Maintenance: \$0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
1.5	0.0	0.0	0.0

#### Hauling Costs

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

#### Local Pond Values

Date	Species	Grade	Value
4/6/05	Douglas - Fir	3S 12"+	\$430.00



# Timber Sale Appraisal Logging Costs Breakdown Totten Creek #2 Sale 341-05-04

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Alder (Red)
<b>Logging</b>	73.96	73.96
<b>Road Maintenance</b>	0.47	0.50
<b>Fire Protection</b>	0.97	0.00
<b>Hauling</b>	35.89	56.78
<b>Other (P/R appl.)</b>	4.29	0.00
<b>Profit &amp; Risk</b>	11.56	13.12
<b>Slash Disposal</b>	0.00	0.00
<b>Scaling</b>	2.00	2.00
<b>Other</b>	0.00	0.00
<b>Total</b>	129.14	146.36

<b>Amortization</b>	0.00	0.00
<b>Pond Value</b>	576.69	607.22
<b>Stumpage</b>	447.55	460.86
<b>Amortized</b>	0.00	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Totten Creek #2 Sale 341-05-04

**Amortized**

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

**Unamortized**

	Douglas - Fir	Alder (Red)
<b>MBF</b>	2,783.00	505.00
<b>Value</b>	447.55	460.86
<b>Total</b>	1,245,531.65	232,734.30

**Gross Timber Sale Value**

**Recovery \$1,478,265.95**

Prepared by: Gloria Clary

Date: 4/26/05

District: Coos

Phone: (541) 267-1757

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

Sale Name: Totten Creek #2

### 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>Felling</b>				
Felling of unmerch material	MBF	0	\$ 1.00	\$ -
Directional Felling	MBF	800	\$ 2.00	\$ 1,600.00
<b>Yarding and Loading</b>				
Artificial tailhold	anchor	4	\$ 500.00	\$ 2,000.00
Artificial guyline support	anchor	0	\$ 500.00	\$ -
Brand and paint logs	MBF	3280	\$ 1.00	\$ 3,280.00
Loader time for firewood stacking	Hours	6	\$ 75.00	\$ 450.00
<b>Snag Creation</b>				
Tree Topping	Trees	36	\$ 100.00	\$ 3,600.00
<b>Miscellaneous Costs</b>				
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	0	\$ 150.00	\$ -

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

**\$ 11,930.00**





**SUMMARY OF CONSTRUCTION COST  
Totten Ck No. 2**

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

Points: C to D Length: 2290' Type: 14' no ditch

**Clearing and Grubbing**

2 acres at \$560.00 \$ per acre = \$1,120.00

**Total clearing and grubbing \$1,120.00**

**Excavation**

Drill and Shoot	<u>875</u>	cubic yds at	<u>\$3.00</u>	per cu yd	<u>\$2,625.00</u>
Cat excavation and shaping fill areas	<u>40</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$5,000.00</u>
Excavator time	<u>15</u>	hrs at	<u>\$110.00</u>	per hr	<u>\$1,650.00</u>
Laborer	<u>40</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$1,200.00</u>

**Total Excavation \$10,475.00**

**Hauling**

Hauling for endhaul material 15 hrs at \$95.00 per hr \$1,425.00

**Total Hauling \$1,425.00**

**Grade Road Surface**

4 hrs at \$75.00 per hour \$300.00

**Total Grading \$300.00**

**Project 1A Total \$13,320.00**

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

Points: E to F Length: 330' Type: 14' no ditch

**Clearing and Grubbing**

0.4 acres at \$560.00 \$ per acre = \$224.00

**Total clearing and grubbing \$224.00**

**Excavation**

Cat time	<u>10</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$1,250.00</u>
Laborer	<u>10</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$300.00</u>

**Total Excavation \$1,550.00**

**Grade Road Surface**

1 hrs at \$75.00 per hour \$75.00

**Total Grading \$75.00**

**Project 1B Total \$1,849.00**

**SUMMARY OF CONSTRUCTION COST  
Totten Ck No. 2**

**Project No. 1C: Road and Landing Construction**

Points: G to H      Length: 485'      Type: 14' no ditch

**Clearing and Grubbing**

0.5      acres at      \$560.00      \$ per acre =      \$280.00

**Total clearing and grubbing      \$280.00**

**Excavation**

Cat time	<u>15</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$1,875.00</u>
Laborer	<u>15</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$450.00</u>

**Total Excavation      \$2,325.00**

**Grade Road Surface**

1      hrs at      \$75.00      per hour      \$75.00

**Total Grading      \$75.00**

**Project 1C Total      \$2,680.00**

**Project No. 1D: Landing Construction**

Point: J

**Clearing and Grubbing**

0.25      acres at      \$450.00      \$ per acre =      \$112.50

**Total clearing and grubbing      \$112.50**

**Excavation**

Cat time to construct landing	<u>5</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$625.00</u>
Laborer	<u>5</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$150.00</u>

**Total Excavation      \$775.00**

**Project 1D Total      \$887.50**

**Project No. 1E: Landing Construction**

Point: K

**Clearing and Grubbing**

0.4      acres at      \$790.00      \$ per acre =      \$316.00

**Total clearing and grubbing      \$316.00**

**SUMMARY OF CONSTRUCTION COST  
Totten Ck No. 2**

**Excavation**

Cat time	<u>10</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$1,250.00</u>
Excavator (borrow material from cutbank)	<u>10</u>	hrs at	<u>\$110.00</u>	per hr	<u>\$1,100.00</u>
Laborer	<u>10</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$300.00</u>

**Total Excavation**                      \$2,850.00

**Project 1E Total**                              \$2,956.00

**Move-In**

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	25	0.58	\$533.00	\$309.14
D8 Cat	25	0.58	\$533.00	\$309.14
Grader	25	0.58	\$241.00	\$139.78
Drill & Comp	25	0.58	\$241.00	\$139.78
Dump Truck	25	0.58	\$241.00	\$139.78

**Total Move-in**                              \$1,037.62

**Project 1 Cost**                                \$22,741.00

**Project 2: Road Improvement**

Points: A to B (3440 Rd)                      Length: 5344'                      Type: 14' no ditch

Cat time for re-shaping road surfaces	<u>5</u>	hrs at	<u>\$125.00</u>	per hour	<u>\$625.00</u>
Smooth Road Surfaces (Grader)	<u>5</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$375.00</u>

**Project 2 Cost**                                \$1,000.00

**Project 3A: Road Widening**

Points: L to M                                      Length: 656'                      Type: 16' w/ditch  
(3400 Rd)

**Excavation**

Drill and Shoot	<u>1000</u>	cubic yds at	<u>\$3.00</u>	per cu yd	<u>\$3,000.00</u>
Excavator time	<u>40</u>	hrs at	<u>\$110.00</u>	per hr	<u>\$4,400.00</u>
Cat time (for waste areas)	<u>20</u>	hrs at	<u>\$125.00</u>	per hr	<u>\$2,500.00</u>
Laborer	<u>40</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$1,200.00</u>

**Total Excavation**                              \$11,100.00

**Hauling**

Endhaul to waste area at Pt P (0.2 mi RT)	<u>1000</u>	cubic yds at	<u>\$0.72</u>	per cu yd	<u>\$720.00</u>
Endhaul to waste area at Pt Q (1.2 mi RT)	<u>1800</u>	cubic yds at	<u>\$1.44</u>	per cu yd	<u>\$2,592.00</u>

**Total Hauling**                                \$3,312.00

**Culvert Installation**

3 - 18" x 40' Culverts (includes installation)	<u>120</u>	ft at	<u>\$12.00</u>	per ft	<u>\$1,440.00</u>
Culvert bands	<u>3</u>	bands at	<u>\$12.00</u>	per band	<u>\$36.00</u>

**Total Culverts**                                \$1,476.00

**SUMMARY OF CONSTRUCTION COST  
Totten Ck No. 2**

**Grade Road Surface**

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

**Road Surfacing**

6" depth 2 1/2"-0" rock (1.2 hr RT Bobtail)	<u>359.1</u>	tons at	<u>\$10.20</u>	per ton	<u>\$3,662.82</u>	
Processing (grader)	<u>3</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$225.00</u>	
				<b>Total Road Surfacing</b>	\$3,887.82	
				<b>Project 3A Total</b>	\$19,650.82	

**Project 3B: Road Widening**

Points: N to O Length: 240' Type: 16' w/ditch  
(3000 Rd)

**Excavation**

Drill and Shoot	<u>370</u>	cubic yds at	<u>\$3.00</u>	per cu yd	<u>\$1,110.00</u>	
Excavator time	<u>15</u>	hrs at	<u>\$110.00</u>	per hr	<u>\$1,650.00</u>	
Laborer	<u>15</u>	hrs at	<u>\$30.00</u>	per hr	<u>\$450.00</u>	
				<b>Total Excavation</b>	\$3,210.00	

**Hauling**

Endhaul to waste area at Pt R (1.6 mi RT)	<u>606</u>	cubic yds at	<u>\$1.57</u>	per cu yd	<u>\$951.42</u>	
				<b>Total Hauling</b>	\$951.42	

**Grade Road Surface**

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

**Road Surfacing**

6" depth 1 1/2"-0" rock (1.0 hr RT truck and trailer)	<u>143.64</u>	tons at	<u>\$8.44</u>	per ton	<u>\$1,212.32</u>	
Processing (grader)	<u>1</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$75.00</u>	
				<b>Total Road Surfacing</b>	\$1,287.32	
				<b>Project 3B Total</b>	\$5,523.74	

**SUMMARY OF CONSTRUCTION COST  
Totten Ck No. 2**

**Move-in**

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Dump Truck	25	0.58	\$241.00	\$139.78

Lowboy to move equipment from timber  
sale area to Project 3 area

5	hrs at	\$75.00	per hour	\$375.00
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**Total Move-in                    \$814.78**

**Project 3 Cost                    \$25,890.00**

**Total Project Costs            \$49,631.00**

## TIMBER SALE SUMMARY

Totten Creek #2

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 total sale area is 71 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	3 Saw Large Diameter	4 Saw/Camp
Douglas-fir	0.8 %	2 %	56.9 %	1.9 %	36.7 %	1.7 %
Red Alder	-----	-----	24 %	45 %	-----	31 %
Western Hemlock	-----	-----	39.5 %	60.5 %	-----	-----

7. **Cruise:** The unit was variable plot cruised using the Big BAF cruise design, which consisted of 34 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 to cruise and the 250 BAF plot to select conifer trees. Selected trees were cruised for diameter at breast height, height, grade and defect. Forty-three conifer and sixty-one 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	43	6.45

**B. Stand Summary:**

<b>Species</b>	<b>D4H</b>	<b>Trees per Acre</b>	<b>Basal Area (ft<sup>2</sup>/ac)</b>	<b>Net BF per acre</b>
Douglas-fir	32	18	141	39,197
Red Alder	14	81	92	7,112

**C. Green Tree Retention Summary:** Most green trees were posted outside of the timber sale, except 6 scattered trees which will be removed from the cruise. These scattered trees are marked with a "W" in red. All minor conifer species are reserved from cutting.

**8. Timber Description:** The timber sale is a moderately stocked stand of approximately 117 year old second growth Douglas-fir, of good to average quality, with a large amount of alder in the understory. Conifers range from 130 to 160 feet tall while hardwoods are about 50 to 80 feet.

**9. Topography:** The unit ranges from 20% to 75% slope. There are a few large benches within both areas 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. Portions of Area I and II under 35% slope may be tractor loggable. Artificial tailholds may need to be placed for yarding the sale area as approved in the operations plan.

**11. Access:** From Coos Bay, proceed north on highway 101 to North Bay Road, proceed for 3 miles and then enter the forest from the west on Larson Way, take the 3000 Rd. to mile post 6 ½.

**12. Projects:**

Project No. 1: Road and Landing Construction

Project No. 2: Road Improvement

Project No. 3: Road Widening

## 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					
		CSL	BOF	Total	CSL	BOF	Total			
H-II	D-fir	2783		2783			0	2783	39.2	
	Hdwd	505		505			0	505	7	
				0			0	0		
<b>TOTALS</b>				3288	0	3288	0	0	0	3288

**TOTAL SALE VOLUME BY SPECIES**

Douglas-fir    2783 MBF  
 Hemlock        0 MBF  
 Hardwoods     505 MBF  
 Total            3288 MBF

Report by: Totten Creek #2

Date: 5/21/2004

Unit For. *[Signature]*  
 Date

Asst. Dist. For. *[Signature]* 6/5/2004 & 3/18/2005  
 Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS  
 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-II	56		15										71
													0
													0
<b>SUM</b>	56	0	15	0	0	0	0	0	0	0	0	0	71

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



# CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Totten Creek #2

DATE: 5/10/2004

LEGAL LOCATION:

T 24 S, R 11 W Sec. 18

BY: Gloria Clary

### GROSS VOLUME MBF \*

SPECIES>>	Doug-fir	Hardwds	TOTAL
AREA	BY AREA		
I and II	2,988.1	534.4	3,522.5
III R/W	20.5	8.8	29.3
Less GTR Vol.	16.1	0	16.1
<b>TOTAL</b>	<b>2,992.5</b>	<b>543.2</b>	<b>3,535.7</b>

### DEFECT AND BREAKAGE \*

AREA I and II			
Species	Doug-fir	Hardwds	
Field cull	0.02	0.02	
Hidden cull	0.03	0.03	
Breakage	0.02	0.02	
<b>Total</b>	<b>0.07</b>	<b>0.07</b>	

### NET VOLUME BY MBF

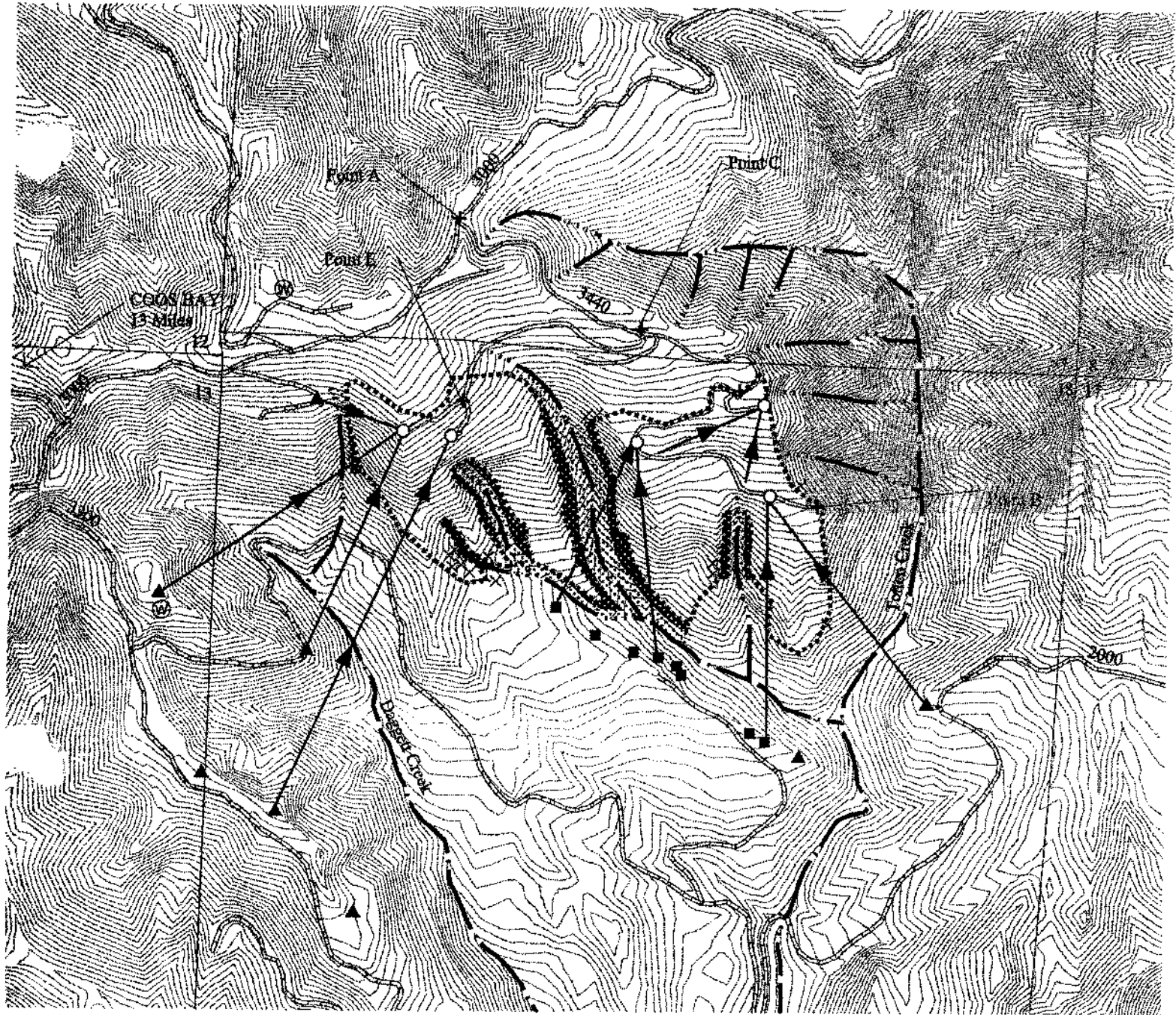
SPECIES	Doug-fir	Hardwds	TOTALS
AREA	BY AREA		
I and II	2764.0	497.0	3261.0
III R/W	19.1	8.2	27.2
<b>TOTALS</b>	<b>2783.0</b>	<b>505.2</b>	<b>3288.2</b>

### NET VOLUME BY GRADE AND MBF \*

Grade >>>>>>>>>		2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW/CR
Area	Species						
	Doug-Fir	0	22	56	1584	1074	47
	Hdwds	0	0	0	122	225	158

### GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>		2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW
	Doug-fir	0.00%	0.80%	2.00%	56.90%	38.60%	1.70%
	Hardwood	0%	0%	0%	24%	45%	31%



**LEGEND**

- Landing
- + Project point
- Ⓜ Waste area
- ⋯ Posted Sale Boundary
- Roads**
- ▬ State Maintained Road
- ▬ Purchaser Maintained Road
- ▬ Yarding corridor
- ▲ Tailhold location
- Tailhold tree
- Streams**
- ▬ Type F
- ▬ Type N
- ▬ Type N Draw
- × Green Tree Retention
- Green Tree Retention Group
- ▬ Stream buffer
- ▬ Contours: 20 Feet



**LOGGING PLAN**

TOTTEN CREEK NO. 2  
 341-05-04  
 SECTION 18, T24S, R11W, W.M.  
 COOS COUNTY, OREGON  
 APPROXIMATELY 71 NET HARVEST ACRES

APPROX. SCALE: 1"=1000'

