



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Coast BSM Sale 341-05-53

District: Tillamook

Date: 10/13/04

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$689,848.20	\$350,250.12	\$1,040,098.32
		Project Work	(\$214,360.00)
		Advertised Value	\$825,738.32



Timber Sale Appraisal Timber Description Coast BSM Sale 341-05-53

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Portions of Sections 34 and 35, T2S, R8W, and portion of Section 2, T3S, R8W, W.M., Tillamook County, OR.

Date: 10/13/04

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	15	0	95
Alder (Red)	13	0	95

Volume by Grade	Douglas - Fir	Alder (Red)	Total
2S	255	0	255
3S	1,514	0	1,514
4S	301	0	301
CR 8" - 14"	0	964	964
Total	2,070	964	3,034

Comments: Pond Values: 3rd Quarter 2004.

Road maintenance total: \$4.34

Grading: 11 miles x \$500 /mile x 2 gradings / 3034 mbf = \$3.62 /mbf

Surfacing: \$3.33 /cu yd x 20 cu yds /mile x 11 miles x 3 mmbf /3034mbf = \$0.72 /mbf

Other Costs Total (Profit and Risk included): \$78,325

Trask River Road Public Safety Fee: \$25/mbf x 3,034mbf = \$75,850

Non-project roads: \$2310

Construction: \$120 /station x 13 stations = \$1560

Rocking costs: 50 cu yds /station x 3 stations x \$5 /cu yd = \$750

Slash piling and sorting: 75 acres clearcut cable harvest x \$110 /50 acres = \$165

Other Costs (add Profit and Risk): \$6068

Brand and paint: \$2.00 /mbf x 3034mbf = \$6068

Alder pond value of \$600/mbf was determined using prices obtained from local markets.

Cedar value: \$1050/mbf - \$224/mbf logging cost = \$826/mbf.



Timber Sale Appraisal

Logging Conditions

Coast BSM

Sale 341-05-53

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	39.67%	
	Alder (Red)	45.83%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: Yes
Logging System:	Track Skidder		Process: Feller Buncher
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	8		Bd. Ft./Load: 3,700
Cost/MBF:	\$118.88		
Machines:	Feller Buncher w/ Delimber Log Loader (B) Stroke Delimber (B) Track Skidder		
Combination#: 2	Douglas - Fir	37.92%	
	Alder (Red)	34.74%	
Yarding Distance:	Medium (800 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Stroke Delimber
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	6		Bd. Ft./Load: 3,700
Cost/MBF:	\$147.87		
Machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
Combination#: 3	Douglas - Fir	22.41%	
	Alder (Red)	19.43%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: Yes
Logging System:	Track Skidder		Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	7		Bd. Ft./Load: 3,700
Cost/MBF:	\$126.08		
Machines:	Log Loader (B) Track Skidder		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal

Logging Costs

Coast BSM

Sale 341-05-53

Date: 10/13/04

Operating Seasons: 2.0

Profit & Risk: 13%

Project Costs: \$214,360

Other Costs (P/R): \$6,068

Slash Disposal: \$0

Other Costs: \$78,325

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

Road Maintenance: \$4.34

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	3.5
Alder (Red)	\$0.00	3.0	3.2

Local Pond Values

Date	Species	Grade	Value
10/13/04	Alder (Red)	CR 8" - 14"	\$600.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Coast BSM Sale 341-05-53

Costs	Douglas - Fir	Alder (Red)
Logging	131.49	130.35
Road Maintenance	4.57	4.57
Fire Protection	1.79	1.79
Hauling	69.16	46.11
Other (P/R appl.)	2.00	2.00
Profit & Risk	27.17	24.03
Slash Disposal	0.00	0.00
Scaling	2.00	2.00
Other	25.82	25.82
Total	264.00	236.67

Amortization	0.00	0.00
Pond Value	597.26	600.00
Stumpage	333.26	363.33
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Coast BSM Sale 341-05-53

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	2,070.00	964.00
Value	333.26	363.33
Total	689,848.20	350,250.12

Gross Timber Sale Value

Recovery \$1,040,098.32

Prepared by: John Pine

Date: 10/13/04

District: Tillamook

Phone: (503) 842-2545



PROJECT SUMMARY SHEET

Sale: Coast BSM

CONSTRUCTION

SUBTOTAL CONSTRUCTION \$0.00

IMPROVEMENT

Point	A to B	82+20	stations =	\$66,971.10
Point	C to D	19+35	stations =	\$18,483.72
Point	E to F	15+20	stations =	\$13,287.52
Point	G to H	165+35	stations =	\$92,840.57
Point	I to J	7+25	stations =	\$8,178.97

SUBTOTAL IMPROVEMENT \$199,761.88

SPECIAL PROJECTS

Remove Culverts from State Lands				\$540.00
Brush	7.5	miles of road		\$6,000.00
Stream Enhancement Project # 6				\$5,500.00

SUBTOTAL SPECIAL PROJECTS \$12,040.00

MOVE IN

\$2,558.12

GRAND TOTAL

\$214,360.00

SUMMARY OF CONSTRUCTION COST

Sale:	<u>Coast BSM</u>					Road:	<u>A to B</u>	
Construction -	<u>0.00</u>	stations miles				Improvement -	<u>82+20</u> <u>1.56</u>	stations miles
CLEARING AND GRUBBING -								
Roadside Brushing		1.56 miles @				\$800.00 per mile =		\$1,248.00
Side cast		0.258 acres @				\$540.00 per acre =		\$139.32
Widening		0.028 acres @				\$540.00 per acre =		\$15.12
Scattering		0.175 acres @				\$815.00 per acre =		\$142.63
						TOTAL CLEARING AND GRUBBING		\$1,545.07
EXCAVATION -								
Pullback		727 cy. @				\$1.40 per c.y.=		\$1,017.80
Widening		240 cy. @				\$1.40 per c.y.=		\$336.00
						TOTAL EXCAVATION		\$1,353.80
ENDHAUL -								
Pullback	51+80	to	53+80	72	cy. @	\$1.67 per c.y.=		\$120.24
Pullback	55+85	to	56+75	160	cy. @	\$1.77 per c.y.=		\$283.20
Pullback	59+80	to	60+35	74	cy. @	\$2.31 per c.y.=		\$170.94
Pullback	68+25	to	69+50	167	cy. @	\$1.54 per c.y.=		\$257.18
Pullback	75+80	to	77+05	125	cy. @	\$1.67 per c.y.=		\$208.75
Pullback	78+60	to	79+45	68	cy. @	\$1.59 per c.y.=		\$108.12
Pullback	79+70	to	80+40	47	cy. @	\$1.60 per c.y.=		\$75.20
Pullback	81+00	to	81+30	14	cy. @	\$1.63 per c.y.=		\$22.82
Widening	54+20	to	54+60	240	cy. @	\$1.52 per c.y.=		\$364.80
Ditchline	0+00	to	82+20	120	cy. @	\$1.40 per c.y.=		\$168.00
Remove outside berm	52+50	to	52+70	20	cy. @	\$1.55 per c.y.=		\$31.00
Spread & compact				1107	cy. @	\$0.35 per c.y.=		\$387.45
						TOTAL ENDHAUL		\$2,197.70
CULVERTS - MATERIALS & INSTALLATION								
	<u>Culverts</u>							
	282	LF of 18"		\$4,159.50		0	LF of 24"	\$0.00
	0	LF of 30"		\$0.00		0	LF of 36"	\$0.00
	0	LF of 42"		\$0.00		44	LF of 48"	\$3,066.40
	0	LF of 54"		\$0.00		0	LF of 60"	\$0.00
	0	LF of 66"		\$0.00		0	LF of 72"	\$0.00
				<u>\$4,159.50</u>				<u>\$3,066.40</u>
	<u>Half Rounds</u>							
	0	LF of 21"		\$0.00		0	LF of 30"	\$0.00
	0	LF of 36"		\$0.00		0	LF of 42"	\$0.00
				<u>\$0.00</u>				<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>							
		stakes		\$0.00				
		9 markers		<u>\$54.00</u>				
				<u>\$54.00</u>				
						TOTAL CULVERTS		\$7,279.90
ROCK								
0+00 to	82+20	2,948	cy. of	Crushed	@	\$13.33 per c.y.=		\$39,296.84
Slope Stabilization		230	cy. of	Riprap	@	\$13.43 per c.y.=		\$3,088.90
Energy Dissipator		130	cy. of	Riprap	@	\$13.43 per c.y.=		\$1,745.90
Bedding/Backfill		100	cy. of	Crushed	@	\$12.63 per c.y.=		\$1,263.00
						TOTAL SURFACING		\$49,950.94
SPECIAL PROJECTS								
Construct waste areas -		6.00	hours @			\$130.00 per hour		\$780.00
Grade and shape road -		82.20	stations @			\$14.20 per station		\$1,167.24
Roll subgrade w/ vibratory roller prior to rocking -		82.20	stations @			\$11.00 per station		\$904.20
Remove large stumps -								\$180.45
Grass seed and fertilize -		2.18	acres @			\$220.00 per acre		\$479.60
Mulching -		1.887	acres @			\$600.00 per acre		\$1,132.20
						TOTAL SPECIAL PROJECTS		\$4,643.69
						GRAND TOTAL		\$66,971.10

SUMMARY OF CONSTRUCTION COST

Sale:	<u>Coast BSM</u>				Road: <u>C to D</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				<u>19+35</u> stations <u>0.37</u> miles
CLEARING AND GRUBBING -					
Scattering		1.840	acres @	\$815.00 per acre =	<u>\$1,499.60</u>
				TOTAL CLEARING AND GRUBBING	\$1,499.60
EXCAVATION -					
Road Earthwork		19.35	sta. @	\$100.00 per sta. =	\$1,935.00
Widening/Full Bench(Drift to Station 13+00)		600	cy. @	\$1.40 per c.y. =	<u>\$840.00</u>
				TOTAL EXCAVATION	\$2,775.00
ENDHAUL -					
				TOTAL ENDHAUL	\$0.00
CULVERTS - MATERIALS & INSTALLATION					
	<u>Culverts</u>				
	0	LF of 18"		\$0.00	
	0	LF of 30"		\$0.00	
	0	LF of 42"		\$0.00	
	0	LF of 54"		\$0.00	
	0	LF of 66"		<u>\$0.00</u>	
				\$0.00	
	<u>Half Rounds</u>				
	0	LF of 21"		\$0.00	
	0	LF of 36"		<u>\$0.00</u>	
				\$0.00	
	<u>Culvert Stakes & Markers</u>				
	0	stakes		\$0.00	
	0	markers		<u>\$0.00</u>	
				\$0.00	
				TOTAL CULVERTS	\$0.00
SURFACING-					
0+00 to	19+35	956	cy. of	Jaw Run	@ \$13.30 per c.y. = <u>\$12,714.80</u>
					TOTAL SURFACING
					\$12,714.80
Grade and shape road -					
		19.35	stations @	\$14.20 per station	\$274.77
Roll subgrade w/ vibratory roller prior to rocking -					
		19.35	stations @	\$11.00 per station	\$212.85
Remove large stumps -					
		1.00	lump sum @	\$643.50	\$643.50
Grass seed and fertilize -					
		0.44	acres @	\$220.00 per acre	\$96.80
Mulching -					
		0.444	acres @	\$600.00 per acre	<u>\$266.40</u>
				TOTAL SPECIAL PROJECTS	\$1,494.32
GRAND TOTAL					\$18,483.72

SUMMARY OF CONSTRUCTION COST

Sale:	<u>Coast BSM</u>					Road: <u>E to F</u>	
Construction -	0+00 stations <u>0.00 miles</u>					Improvement -	15+20 stations <u>0.29 miles</u>
Scattering		1.400 acres @		\$815.00 per acre =			<u>\$1,141.00</u>
						TOTAL CLEARING AND GRUBBING	\$1,141.00
EXCAVATION - Road Earthwork		15.20 sta. @		\$100.00 per sta. =		<u>\$1,520.00</u>	
						TOTAL EXCAVATION	\$1,520.00
ENDHAUL -						<u>TOTAL ENDHAUL</u>	\$0.00
CULVERTS - MATERIALS & INSTALLATION							
	<u>Culverts</u>						
	0	LF of 18"	\$0.00			0	LF of 24" \$0.00
	0	LF of 30"	\$0.00			0	LF of 36" \$0.00
	0	LF of 42"	\$0.00			0	LF of 48" \$0.00
	0	LF of 54"	\$0.00			0	LF of 60" \$0.00
	0	LF of 66"	<u>\$0.00</u>			0	LF of 72" <u>\$0.00</u>
			\$0.00				<u>\$0.00</u>
	<u>Half Rounds</u>						
	0	LF of 21"	\$0.00			0	LF of 30" \$0.00
	0	LF of 36"	<u>\$0.00</u>			0	LF of 42" <u>\$0.00</u>
			\$0.00				<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>						
	0	stakes	\$0.00				
	0	markers	<u>\$0.00</u>				
			\$0.00				
						TOTAL CULVERTS	\$0.00
SURFACING- 0+00 to	15+20	752 cy. of	Jaw Run	@	\$13.24 per c.y.=		<u>\$9,956.48</u>
						TOTAL SURFACING	\$9,956.48
Grade and shape road -		15.20 stations @		\$14.20 per station		\$215.84	
Roll subgrade w/ vibratory -		15.20 stations @		\$11.00 per station		\$167.20	
Grass seed and fertilize -		0.35 acres @		\$220.00 per acre		\$77.00	
Mulching -		0.350 acres @		\$600.00 per acre		\$210.00	
						TOTAL SPECIAL PROJECTS	\$670.04
GRAND TOTAL							\$13,287.52

SUMMARY OF CONSTRUCTION COST

Sale:	Coast BSM	Road:	G to H
Construction -	0+00 stations 0.00 miles	Improvement -	165+35 stations 3.13 miles
CLEARING AND GRUBBING -			
Roadside Brushing	3.13 miles @	\$800.00 per mile =	\$2,504.00
Side cast	0.029 acres @	\$540.00 per acre =	\$15.66
Widening	0.341 acres @	\$540.00 per acre =	\$184.14
		TOTAL CLEARING AND GRUBBING	\$2,703.80
EXCAVATION -			
Pullback	86 cy. @	\$1.40 per c.y.=	\$120.40
Widening	943 cy. @	\$1.40 per c.y.=	\$1,320.20
		TOTAL EXCAVATION	\$1,440.60
ENDHAUL -			
Pullback	76+86 to 77+50 86 cy. @	\$1.29 per c.y.=	\$110.94
Widening	12+00 to 12+75 134 cy. @	\$1.39 per c.y.=	\$186.26
Widening	28+20 to 29+90 152 cy. @	\$1.25 per c.y.=	\$190.00
Widening	35+40 to 36+65 223 cy. @	\$1.29 per c.y.=	\$287.67
Widening	40+55 to 42+80 300 cy. @	\$1.29 per c.y.=	\$387.00
Widening	55+25 to 55+80 49 cy. @	\$1.22 per c.y.=	\$59.78
Widening	76+55 to 77+50 85 cy. @	\$1.25 per c.y.=	\$106.25
Widening	98+30 to 99+65 180 cy. @	\$1.31 per c.y.=	\$235.80
Widening	106+10 to 109+00 258 cy. @	\$1.36 per c.y.=	\$350.88
Widening	113+10 to 113+65 74 cy. @	\$1.40 per c.y.=	\$103.60
Widening	144+00 to 144+60 80 cy. @	\$1.45 per c.y.=	\$116.00
Ditchline	0+00 to 165+35 150 cy. @	\$1.20 per c.y.=	\$180.00
Spread & compact	1771 cy. @	\$0.35 per c.y.=	\$619.85
		TOTAL ENDHAUL	\$2,934.03
CULVERTS - MATERIALS & INSTALLATION			
<u>Culverts</u>			
388 LF of 18"	\$5,723.00	0 LF of 24"	\$0.00
0 LF of 30"	\$0.00	0 LF of 36"	\$0.00
0 LF of 42"	\$0.00	0 LF of 48"	\$0.00
0 LF of 54"	\$0.00	0 LF of 60"	\$0.00
0 LF of 66"	\$0.00	0 LF of 72"	\$0.00
	\$5,723.00		\$0.00
<u>Half Rounds</u>			
0 LF of 21"	\$0.00	0 LF of 30"	\$0.00
0 LF of 36"	\$0.00	0 LF of 42"	\$0.00
	\$0.00		\$0.00
<u>Culvert Stakes & Markers</u>			
0 stakes	\$0.00		
14 markers	\$84.00		
	\$84.00		
		TOTAL CULVERTS	\$5,807.00
SURFACING-			
0+00 to 165+35	5,934 cy. of Crushed	@ \$12.28 per c.y.=	\$72,869.52
Culvert Backfill	140 cy. of Crushed	@ \$11.58 per c.y.=	\$1,621.20
		TOTAL SURFACING	\$74,490.72
SPECIAL PROJECTS			
Grade and shape road -	165.35 stations @	\$14.20 per station	\$2,347.97
Roll subgrade w/ vibratory roller prior to rocking -	165.35 stations @	\$11.00 per station	\$1,818.85
Remove large stumps -	1.00 lump sum @	\$84.00	\$84.00
Grass seed and fertilize -	1.48 acres @	\$220.00 per acre	\$325.60
Mulching -	1.48 acres @	\$600.00 per acre	\$888.00
		TOTAL SPECIAL PROJECTS	\$5,464.42
GRAND TOTAL			\$92,840.57

SUMMARY OF CONSTRUCTION COST

Sale:	<u>Coast BSM</u>				Road: <u>I to J</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				<u>7+25</u> stations <u>0.14</u> miles
CLEARING AND GRUBBING -					
Scattering		0.340 acres @	\$815.00 per acre =	\$277.10	
Endhaul		0.09 acres @	\$1,500.00 per acre =	\$135.00	
			TOTAL CLEARING AND GRUBBING		\$412.10
EXCAVATION -					
Road Earthwork		7.25 sta. @	\$100.00 per sta. =	\$725.00	
Full Bench		822 cy. @	\$1.40 per c.y. =	\$1,150.80	
			TOTAL EXCAVATION		\$1,875.80
ENDHAUL -					
Full Bench - 5+45 to 7+25		822 cy. @	\$0.86 per c.y. =	\$706.92	
Spread & compact		822 cy. @	\$0.35 per c.y. =	\$287.70	
			TOTAL ENDHAUL		\$994.62
CULVERTS - MATERIALS & INSTALLATION					
		<u>Culverts</u>			
		0	LF of 18"	\$0.00	0
		0	LF of 30"	\$0.00	0
		0	LF of 42"	\$0.00	0
		0	LF of 54"	\$0.00	0
		0	LF of 66"	\$0.00	0
			<u>\$0.00</u>		<u>\$0.00</u>
		<u>Half Rounds</u>			
		0	LF of 21"	\$0.00	0
		0	LF of 36"	\$0.00	0
			<u>\$0.00</u>		<u>\$0.00</u>
		<u>Culvert Stakes & Markers</u>			
		0	stakes	\$0.00	
		0	markers	\$0.00	
			<u>\$0.00</u>		<u>\$0.00</u>
					TOTAL CULVERTS
					\$0.00
SURFACING-					
0+00 to	2+25	88 cy. of	Crushed	@	\$12.28 per c.y. =
2+25 to	7+25	258 cy. of	Jaw Run	@	\$11.88 per c.y. =
					\$1,080.64
					\$3,065.04
					TOTAL SURFACING
					\$4,145.68
SPECIAL PROJECTS					
Grade and shape road -		7.25 stations @	\$14.20 per station	\$102.95	
Roll subgrade w/ vibratory roller -		7.25 stations @	\$11.00 per station	\$79.75	
Remove large stumps -		1.00 lump sum @	\$346.67	\$346.67	
Grass seed and fertilize -		0.27 acres @	\$220.00 per acre	\$59.40	
Mulching -		0.27 acres @	\$600.00 per acre	\$162.00	
			TOTAL SPECIAL PROJECTS		\$750.77
			GRAND TOTAL		\$8,178.97

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Boundary #1	Location:	NE1/4,SW1/4,Sec4,T3s, R7w, W.M.
Sale:	Coast BSM	Road:	11536 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage:	1.16	Total Truck Loads:	11536 c.y.
Drill Pct.:	75%	In Place Total:	8240 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.		\$9,120.00
Drill & Shoot:	\$2.10 /cu.yd. x 6180 cu.yds. =	\$12,978.00
Rip Rock	\$1.75 /cu.yd. x 2060 cu.yds. =	\$3,605.00
Push Rock:	\$0.60 /cu.yd. x 11536 cu.yds. =	\$6,921.60
Load Crusher:	\$0.60 /cu.yd. x 11176 cu.yds. =	\$6,705.60
Screen Rock:	\$0.75 /cu.yd. x 9210 cu.yds. =	\$6,907.50
Crush 2"-0" Rock	\$2.30 /cu.yd. x 9210 cu.yds. =	\$21,183.00
Crush Jaw Run	\$1.85 /cu.yd. x 1966 cu.yds. =	\$3,637.10
Load Dump Truck:	\$0.60 /cu.yd. x 11176 cu.yds. =	\$6,705.60
Load Rip Rap:	\$1.40 /cu.yd. x 360 cu.yds. =	\$504.00
Endhaul Reject:	\$1.20 /cu.yd. x 921 cu.yds. =	\$1,105.20
	Subtotal	\$79,372.60

Move In/Set-up Crusher & Screening Plant		\$3,307.72
Move In and set up Drill and Compressor		\$203.17
Move in Roller and Compactor		\$203.17
Move in Grader		\$113.94
Move in D-8		\$330.96
Move in Loader		\$306.91
Move in Excavator (Within area)		\$268.80
Move in Trucks		\$316.07
Move in Water Truck		\$74.30
Change Gradation		\$250.00
	Subtotal	\$5,375.04

Base Cost=	\$7.35	Per Cu.Yd.			TOTAL PRODUCTION COSTS	\$84,747.64
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Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B	4.68	1.30	7.35	13.33	2948	39,296.84
A to B Culvert Backfill	4.68	0.60	7.35	12.63	100	1,263.00
A to B Slope Stabilization	4.68	1.40	7.35	13.43	70	940.10
A to B Slope Stabilization	4.68	1.40	7.35	13.43	230	3,088.90
A to B Energy Dissipator	4.68	1.40	7.35	13.43	60	805.80
C to D Jaw Run	5.05	0.90	7.35	13.30	956	12,714.80
E to F Jaw Run	4.99	0.90	7.35	13.24	752	9,956.48
G to H	3.63	1.30	7.35	12.28	5934	72,869.52
G to H Culvert Backfill	3.63	0.60	7.35	11.58	140	1,621.20
I to J	3.63	1.30	7.35	12.28	88	1,080.64
I to J Jaw Run	3.63	0.90	7.35	11.88	258	3,065.04
				Total C.Y.	11536	Sub Total
						146,702.32

TOTAL ROCKING COSTS	146,702.32
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**SPECIAL PROJECT
SOUTH FORK TRASK TRIB #1 STREAM ENHANCEMENT**

Cost Estimate For SF Trask Trib #1 Stream Enhancement (in-strear (Instream Work)

	Hours	Cost/Hour	Cost
Move In Costs			
Excavator to job site	1	\$120.00	\$120.00
Dump truck to job site	1	\$60.00	\$60.00
Total Move In Costs			\$180.00
Equipment Time Including Operator			
Excavator to obtain trees	16	\$120.00	\$1,920.00
Excavator to load logs	4	\$120.00	\$480.00
Dump truck to move logs	4	\$60.00	\$240.00
Move trees by various means	10	\$120.00	\$1,200.00
Excavator to place trees	12	\$120.00	\$1,440.00
			\$0.00
			\$0.00
			\$0.00
Total Equipment Cost			\$5,280.00
Material Cost			
Seed, mulch.			\$100.00
Total Cost			\$5,380.00

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT



"STEWARDSHIP IN FORESTRY"

Coast BSM

1. **Type of Sale:**
Modified Clearcut Harvest, Retention Cut Harvest, Recovery.
2. **Legal Description:**
Portions of Sections 34 and 35, T2S, R8W, and portion of Section 2, T3S, R8W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:**
The sale boundaries were plotted on a digital orthophotograph and the acreage was calculated with GIS.

ACRES				
Area	Harvest Type	Sale	Total	Net
1	Clearcut	68	76	66
2	Retention	17	19	14
3	Clearcut	124	122	117
Total		209	217	197

Sale acres:

Area within the Timber Sale Boundary signs.

Total acres:

Sale acres; plus green tree retention acres outside the sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary. For accomplishment reporting - clearcut (regeneration) harvest.

Net acres:

Less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary. For calculating the advertised volume.

4. **Cruise Measures:**

A: Cruise Method

Cruise lines were run 45 Degrees NE and plots spaced at 200-foot intervals. 55 variable-radius plots were installed with proportional numbers of count and grade plots in each sale area. Every other plot was a grade plot. Minimum specifications for conifer trees was 8" DBH and for hardwoods was 10" DBH. On 24 plots all merchantable trees were counted by species, and alder was measured and graded. On 31 plots, all merchantable trees were measured and graded. Douglas-fir were also measured for form. Diameters were measured to the nearest inch; heights were measured to the nearest foot. The combined cruise had a coefficient of variation of 55.7 and a SE of 7.5% for net board feet/acre.

B: Plot size

A 27.78 BAF was used for conifers. A 20 BAF was used for hardwoods.

C: Grading System:

Douglas-fir was measured and graded, using Columbia River rules, to a 6" top favoring 40 foot log lengths. Alder and other hardwoods were measured to an 8" top favoring 40 foot logs and graded camprun. Other conifers were measured to a 6" top, and graded camprun.

5. **Computation Procedure:**

Plot data was entered into SuperAce for computation of basal area, V-BAR, stand tables and diameters. This data was then entered into the Volume Summary Worksheet to compute sale volumes.

6. **Defect and Breakage:**

A 5% reduction for defect and breakage was applied to the volume for Douglas-fir, 7% for alder.

7. **Timber Description:**

The sale area burned in the 1939 and 1951 Tillamook fires. Areas 1 and 2 were planted during 1958-1960. Alder stands were sprayed in the 1970's.

8. **Cruiser Names/Dates:**

Pine, Wallmark and Moyer, July, 2004.

9. **Revenue Distribution:**

100% FDF

Tax Code: 8-1 (99%), 8 (1%)

Deed Number: 211 (55%), 419 (44%), and 295 (1%)

60% Rehabilitation Obligated

10. **Attachments:**

Volume Summary

Logging Plan



"STEWARDSHIP IN FORESTRY"

Coast BSM

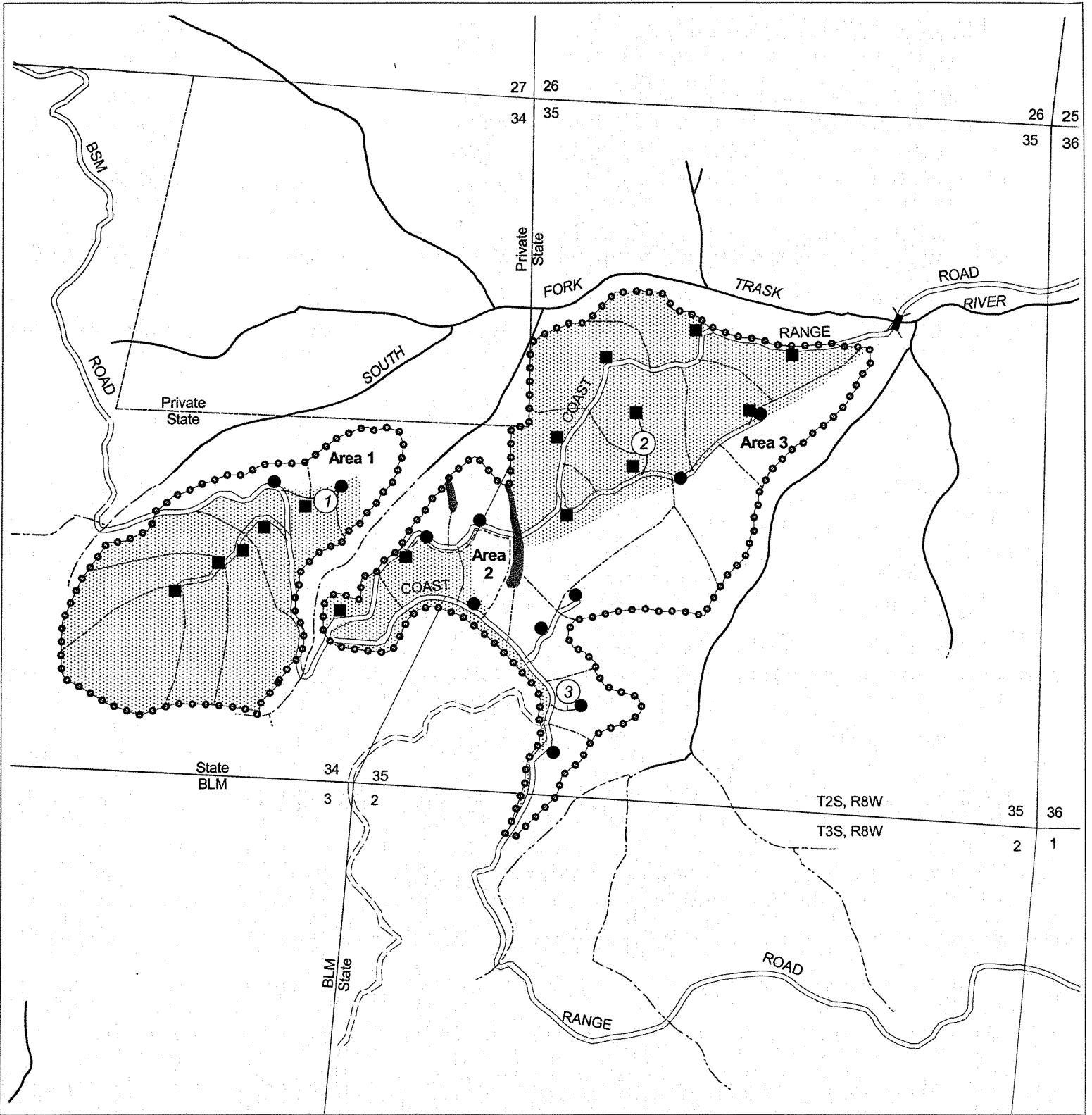
Volume Summary

Area I							
66 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	17	114	94	10.7	706	5%	671
Alder	13	62	88	5.5	363	7%	338
TOTAL					1069		1009

Area II							
14 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	13	35	117	4.1	57	5%	54
Alder	14	70	113	7.9	111	7%	103
TOTAL					168		157

Area III							
117 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	14	99	122	12.1	1416	5%	1345
Alder	12	61	79	4.8	562	7%	523
TOTAL					1978		1868

TOTAL SALE VOLUME				
SPECIES	QMD	MBF	D&B	Net Vol. (MBF)
Douglas-fir	15	2179	5%	2070
Alder	13	1036	7%	964
TOTAL		3215		3034



LOGGING PLAN
 Timber Sale Contract No. 341-05-53
 Coast BSM
 Portions of Sections 34 and 35, T2S, R8W,
 and portion of Section 2, T3S, R8W, W. M.
 Tillamook County, Oregon

Area	Type of Operation	Acres Sale	Acres Net
1	Mod. Clearcut	68	66
2	Retention Cut	17	14
3	Mod. Clearcut	125	117
Total		209	197



Tillamook District GIS
8-30-2004

This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.



- Bridge
- Tractor landing
- Cable landing
- Domestic water supply
- Blocked
- Cable yarding
- Ground yarding
- Helicopter yarding
- Buffer
- Non-required thinning
- Setting boundary
- Area boundary
- Sale boundary
- Ownership boundary
- Type-F stream
- Type-N stream
- Surfaced road
- Unsurfaced road
- State highway
- County road
- Non-project road
- Swing road
- Abandoned road
- OHV trail
- Non-motorized trail



Oregon Department of Forestry

WRITTEN PLAN

SALE NAME:

Coast BSM

PROTECTED WATERS:

South Fork Trask River and Tributaries

LOCATION:

Portions of Sections 34 and 35 T2S, R8W, W.M., Tillamook County, Oregon.

Riparian Management Area:

The area measured 100 feet slope distance from the high water mark on the South Fork Trask and tributaries, Type F streams.

Protection Measures:

Yarding Systems, Layout, and Stream Protection

When yarding with cables hanging within or across the streams, cables will be pulled out of the Riparian Management Area prior to rigging the next yarding road. Yarding roads will be spaced an average of 150 feet apart where they extend over or through the riparian management area.

Date: August 5, 2004

By: John Pine

OREGON DEPARTMENT OF FORESTRY
WRITTEN PLAN
COAST BSM TIMBER SALE

Protected Waters: Unnamed Tributary of the South Fork Trask River, Type F streams of the Trask River Basin.

Location: Portions of Sections 34 and 35 T2S R8W W.M. Tillamook County, Oregon

Activities: Placing trees in the RMA of an unnamed tributary of the South Fork Trask River for in-stream habitat improvement.

Protection Measures: Work will not be allowed from October 16 through April 30. No activity within 100 feet of the protected waters or in-stream activity will be conducted before July 1 or after September 15.

Habitat improvement work will be done only during dry weather periods and low water stream flows. Machine activity in the stream will be kept to a minimum. Disturbance of existing vegetation will be kept to a minimum. All practical erosion control measures will be taken to minimize sedimentation to waters of the State. Access trails will be blocked, water barred, seeded with grass and mulched upon completion. Alders that are cleared to gain access will be placed in the stream or used to block access trails.

All areas of disturbed soil will be grass seeded, fertilized and mulched upon completion of work.

Prepared By: Mark Main, Road Specialist
Date: August 19, 2004