



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Trask Cutoff Sale 341-07-01

District: Tillamook

Date: 11/3/06

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$277,524.99	\$135,689.40	\$413,214.39
		Project Work	(\$69,000.00)
		Advertised Value	\$344,214.39



Timber Sale Appraisal Timber Description Trask Cutoff Sale 341-07-01

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Portions of Sections 23, 24, and 26, T1S, R8W, W.M., Tillamook County, Oregon.

Date: 11/3/06

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	14	0	95
Western Hemlock / Fir	16	0	95
Sitka Spruce	16	0	95
Alder (Red)	14	0	95

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)	Total
2S	366	45	13	0	424
3S	656	87	52	0	795
3S 10" - 11"	0	0	0	76	76
4S	480	26	62	0	568
4S 8" - 9"	0	0	0	814	814
Total	1,502	158	127	890	2,677

Comments: Pond Values Used: 3rd Quarter Calendar Year 2006.

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost
\$690/MBF = \$1,000/MBF - \$310/MBF

HAULING

Hauling costs adjusted to make equivalent to \$700 daily truck cost.

\$700 - % Profit & Risk ($\$700 / 1.15$) = \$608 Daily Truck Cost.

Hauling Cost Calculation Douglas-fir:

\$608 Daily Truck Cost / (2 trips per day x 3.5 MBF per load) = \$86.86/MBF Hauling Cost.

Hauling Cost Calculation Western Hemlock:

\$608 Daily Truck Cost / (3 trips per day x 3.3 MBF per load) = \$61.41/MBF Hauling Cost.

Hauling Cost Calculation Sitka Spruce:

\$608 Daily Truck Cost / (3 trips per day x 3.4 MBF per load) = \$59.61/MBF Hauling Cost.

Hauling Cost Calculation Red Alder:

\$608 Daily Truck Cost / (3 trips per day x 3.3 MBF per load) = \$61.41/MBF Hauling Cost.

OTHER COSTS (Profit & Risk to be added):

Brand and Paint: \$2.00/MBF x 1787 MBF = \$3,574

Snag Creation: \$5/Snag x 100 snags = \$500

TOTAL OTHER COSTS (P&R to be added) = \$4,074

OTHER COSTS (Profit and Risk included):

Slash piling and sorting: (155 acres of cable harvest / 50 acres/hour) x \$110/hr = \$341

Trask Public Safety Road Fee: \$25/MBF x 2677 MBF = \$66,925

OHV trail clearing: 47 stations x \$40/sta = \$1,880

TOTAL OTHER COSTS (P&R included) = \$69,146

MAINTENANCE

Maintenance of Trask Cutoff, Samson Ridge, and Kansas Creek Roads:

Grading- Interim Maintenance = \$250/mile x 7 miles x 3 gradings / 2,677 MBF = \$1.96 MBF

Grading- Final Maintenance = \$500/mile x 7 miles / 2677 MBF = \$1.31 MBF

Surfacing: 20 cy/mile x 5.50 cy x 2.7 MMBF x 7 miles / 2677 MBF = \$0.78 MBF

TOTAL MAINTENANCE = \$4.05 MBF



Timber Sale Appraisal

Logging Conditions

Trask Cutoff

Sale 341-07-01

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	26.84%	
	Western Hemlock / Fir	28.86%	
	Sitka Spruce	30.00%	
	Alder (Red)	29.16%	
Yarding Distance:	Long (1,500 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:	4		Bd. Ft./Load: 3,500
Cost/MBF:	\$234.47		
Machines:	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Medium)		
Combination#: 2	Douglas - Fir	21.84%	
	Western Hemlock / Fir	17.47%	
	Sitka Spruce	15.00%	
	Alder (Red)	16.83%	
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:	5		Bd. Ft./Load: 3,500
Cost/MBF:	\$187.58		
Machines:	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Medium)		
Combination#: 3	Douglas - Fir	51.32%	
	Western Hemlock / Fir	53.67%	
	Sitka Spruce	55.00%	
	Alder (Red)	54.02%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: Yes
Logging System:	Track Skidder		Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
Loads/Day:	7		Bd. Ft./Load: 3,500
Cost/MBF:	\$143.54		
Machines:	Log Loader (B)		
	Track Skidder		



Timber Sale Appraisal

Logging Costs

Trask Cutoff

Sale 341-07-01

"STEWARDSHIP IN FORESTRY"

Date: 11/3/06

Operating Seasons: 2.0

Profit & Risk: 15%

Project Costs: \$69,000

Other Costs (P/R): \$4,074

Slash Disposal: \$0

Other Costs: \$69,146

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

Road Maintenance: \$4.05

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$86.86	2.0	3.5
Western Hemlock / Fir	\$61.41	3.0	3.3
Sitka Spruce	\$59.61	3.0	3.4
Alder (Red)	\$61.41	3.0	3.3



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Trask Cutoff Sale 341-07-01

Costs	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)
Logging	177.57	177.48	177.42	177.46
Road Maintenance	4.26	4.26	4.26	4.26
Fire Protection	2.02	2.02	2.02	2.02
Hauling	91.43	64.64	62.75	64.64
Other (P/R appl.)	1.52	1.52	1.52	1.52
Profit & Risk	41.52	37.49	37.20	37.48
Slash Disposal	0.00	0.00	0.00	0.00
Scaling	2.00	2.00	2.00	0.00
Other	25.83	25.83	25.83	25.83
Total	346.15	315.24	313.00	313.21

Amortization	0.00	0.00	0.00	0.00
Pond Value	518.06	370.98	395.75	465.67
Stumpage	171.91	55.74	82.75	152.46
Amortized	0.00	0.00	0.00	0.00



Timber Sale Appraisal Summary Trask Cutoff Sale 341-07-01

"STEWARDSHIP IN FORESTRY"

Amortized

	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	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	Sitka Spruce	Alder (Red)
MBF	1,502.00	158.00	127.00	890.00
Value	171.91	55.74	82.75	152.46
Total	258,208.82	8,806.92	10,509.25	135,689.40

Gross Timber Sale Value

Recovery \$413,214.39

Prepared by: Ed Wallmark

Date: 11/3/06

District: Tillamook

Phone: (503) 842-2545



PROJECT SUMMARY SHEET

Sale: TRASK CUTOFF

CONSTRUCTION

Point	A to B	5+50	stations =	\$7,237.41
Point	C to D	16+00	stations =	\$19,024.25
Point	E to F	9+00	stations =	\$10,284.30
Point	G to H	13+70	stations =	\$15,638.81
Point	I to J	8+50	stations =	\$9,170.89
SUBTOTAL CONSTRUCTION				\$61,355.66

SPECIAL PROJECTS

Brush	5.9	miles of road		\$6,196.00
SUBTOTAL SPECIAL PROJECTS				\$6,196.00

MOVE IN

\$1,448.34

GRAND TOTAL

\$69,000.00

SUMMARY OF CONSTRUCTION COST

Sale:	TRASK CUTOFF			Road:	A to B															
Construction -	<table border="0" style="margin: auto;"> <tr> <td style="text-align: right;">5+50</td> <td style="text-align: center;">stations</td> <td></td> </tr> <tr> <td style="text-align: right; border-top: 1px solid black;">0.10</td> <td style="text-align: center; border-top: 1px solid black;">miles</td> <td></td> </tr> </table>			5+50	stations		0.10	miles			Improvement -	<table border="0" style="margin: auto;"> <tr> <td style="text-align: right;">0+00</td> <td style="text-align: center;">stations</td> <td></td> </tr> <tr> <td style="text-align: right; border-top: 1px solid black;">0.00</td> <td style="text-align: center; border-top: 1px solid black;">miles</td> <td></td> </tr> </table>			0+00	stations		0.00	miles	
5+50	stations																			
0.10	miles																			
0+00	stations																			
0.00	miles																			
CLEARING AND GRUBBING -																				
Scattering			0.530 acres @	\$980.00 per acre =	\$519.40															
				TOTAL CLEARING AND GRUBBING			\$519.40													
EXCAVATION -																				
Road Earthwork			5.50 sta. @	\$140.00 per sta. =	\$770.00															
				TOTAL EXCAVATION			\$770.00													
CULVERTS - MATERIALS & INSTALLATION																				
	<u>Culverts</u>																			
	28	LF of 18"	\$476.00		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													
			\$476.00				\$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																	
	1	markers	\$8.00																	
			\$8.00																	
						TOTAL CULVERTS	\$484.00													
ROCK																				
0+00 to	5+50	362	cy. of	Pit-Run	@	\$10.13 per c.y. =	\$3,667.06													
Landing Rock	5+50	50	cy. of	Pit-Run	@	\$10.13 per c.y. =	\$506.50													
Jct. Rock	0+00	20	cy. of	Pit-Run	@	\$10.13 per c.y. =	\$202.60													
							TOTAL ROCK													
							\$4,376.16													
SPECIAL PROJECTS																				
Grade and shape road -				5.50	stations @	\$15.50 per station	\$85.25													
Landing Construction				1.00	@	\$285.00 each	\$285.00													
Roll subgrade w/ vibratory roller prior to rocking -				5.50	stations @	\$13.20 per station	\$72.60													
Remove large stumps -				4.00	lump sum @	\$130.00	\$520.00													
Grass seed and fertilize -				0.35	acres @	\$220.00 per acre	\$77.00													
Mulching -				0.080	acres @	\$600.00 per acre	\$48.00													
							TOTAL SPECIAL PROJECTS													
							\$1,087.85													
GRAND TOTAL							\$7,237.41													

SUMMARY OF CONSTRUCTION COST

Sale:	<u>TRASK CUTOFF</u>					Road: <u>C to D</u>
Construction -	<u>16+00</u> stations <u>0.30</u> miles					<u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -						
Scattering		1.540	acres @	\$980.00	per acre =	<u>\$1,509.20</u>
						TOTAL CLEARING AND GRUBBING
						\$1,509.20
EXCAVATION -						
Road Earthwork		16.00	sta. @	\$140.00	per sta. =	<u>\$2,240.00</u>
						TOTAL EXCAVATION
						\$2,240.00
CULVERTS - MATERIALS & INSTALLATION						
	<u>Culverts</u>					
	40 LF of 18"	\$680.00		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	
		\$680.00			\$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				
	1 markers	\$8.00				
		\$8.00				
						TOTAL CULVERTS
						\$688.00
ROCK						
0+00 to 16+00	1,055 cy. of	Pit-Run	@	\$10.13	per c.y.=	\$10,687.15
Jct. Rock 0+00	40 cy. of	Pit-Run	@	\$10.13	per c.y.=	\$405.20
Landing Rock 16+00	50 cy. of	Pit-Run	@	\$10.13	per c.y.=	<u>\$506.50</u>
						TOTAL ROCK
						\$11,598.85
SPECIAL PROJECTS						
Cut and Drift at stations 7+50 and 14+00	10.00	hours @		\$140.00	per hour	\$1,400.00
Grade and shape road -	16.00	stations @		\$15.50	per station	\$248.00
Landing Construction	1.00	@		\$285.00	each	\$285.00
Roll subgrade w/ vibratory roller prior to rocking -	16.00	stations @		\$13.20	per station	\$211.20
Remove large stumps -	5.00	lump sum @		\$130.00		\$650.00
Grass seed and fertilize -	0.50	acres @		\$220.00	per acre	\$110.00
Mulching -	0.140	acres @		\$600.00	per acre	\$84.00
						TOTAL SPECIAL PROJECTS
						\$2,988.20
						GRAND TOTAL
						\$19,024.25

SUMMARY OF CONSTRUCTION COST

Sale:	<u>TRASK CUTOFF</u>				Road: <u>E to F</u>
Construction -	<u>9+00</u> stations <u>0.17</u> miles				<u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING - Scattering		0.830 acres @		\$980.00 per acre =	<u>\$813.40</u>
				TOTAL CLEARING AND GRUBBING	\$813.40
EXCAVATION - Road Earthwork		9.00 sta. @		\$100.00 per sta. =	<u>\$900.00</u>
				TOTAL EXCAVATION	\$900.00
 CULVERTS - MATERIALS & INSTALLATION					
	<u>Culverts</u>				
	30	LF of 18"	\$510.00		
	0	LF of 30"	\$0.00		
	0	LF of 42"	\$0.00		
	0	LF of 54"	\$0.00		
	0	LF of 66"	\$0.00		
			<u>\$510.00</u>		
	<u>Half Rounds</u>				
	0	LF of 21"	\$0.00		
	0	LF of 36"	\$0.00		
			<u>\$0.00</u>		
	<u>Culvert Stakes & Markers</u>				
	0	stakes	\$0.00		
	1	markers	\$8.00		
			<u>\$8.00</u>		
				TOTAL CULVERTS	\$518.00
 ROCK					
0+00 to	9+00	600	cy. of Pit-Run	@	\$10.20 per c.y. = \$6,120.00
Landing Rock	0+00	50	cy. of Pit-Run	@	\$10.20 per c.y. = \$510.00
Jct. Rock	9+00	40	cy. of Pit-Run	@	\$10.20 per c.y. = \$408.00
					<u>TOTAL ROCK</u>
					\$7,038.00
 SPECIAL PROJECTS					
Grade and shape road -		9.00	stations @	\$15.50	per station \$139.50
Landing Construction		1.00	@	\$285.00	each \$285.00
Roll subgrade w/ vibratory roller prior to rocking -		9.00	stations @	\$13.20	per station \$118.80
Remove large stumps -		2.00	lump sum @	\$130.00	\$260.00
Grass seed and fertilize -		0.58	acres @	\$220.00	per acre \$127.60
Mulching -		0.140	acres @	\$600.00	per acre \$84.00
					<u>TOTAL SPECIAL PROJECTS</u>
					\$1,014.90
GRAND TOTAL					\$10,284.30

SUMMARY OF CONSTRUCTION COST

Sale:	<u>TRASK CUTOFF</u>					Road: <u>G to H</u>	
Construction -	<u>13+70</u> stations <u>0.26</u> miles					Improvement -	<u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -							
Scattering		1.260	acres @	\$980.00	per acre =	\$1,234.80	
						<u>TOTAL CLEARING AND GRUBBING</u>	\$1,234.80
EXCAVATION -							
Road Earthwork		13.70	sta. @	\$140.00	per sta. =	\$1,918.00	
						<u>TOTAL EXCAVATION</u>	\$1,918.00
CULVERTS - MATERIALS & INSTALLATION							
	<u>Culverts</u>						
	70	LF of 18"		\$1,190.00		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
				<u>\$1,190.00</u>			<u>\$0.00</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>						
	0	stakes		\$0.00			
	2	markers		\$16.00			
				<u>\$16.00</u>			
						<u>TOTAL CULVERTS</u>	\$1,206.00
ROCK							
0+00 to	13+70	924	cy. of	Pit-Run	@	\$10.13 per c.y.=	\$9,360.12
Jct. Rock	0+00	40	cy. of	Pit-Run	@	\$10.13 per c.y.=	\$405.20
Landing Rock	13+70	50	cy. of	Pit-Run	@	\$10.13 per c.y.=	\$506.50
						<u>TOTAL ROCK</u>	\$10,271.82
SPECIAL PROJECTS							
Grade and shape road -	13.70	stations @		\$15.50	per station	\$212.35	
Landing Construction	1.00	@		\$285.00	each	\$285.00	
Roll subgrade w/ vibratory roller prior to rocking -	13.70	stations @		\$13.20	per station	\$180.84	
Remove large stumps -	1.00	lump sum @		\$130.00		\$130.00	
Grass seed and fertilize -	0.50	acres @		\$220.00	per acre	\$110.00	
Mulching -	0.150	acres @		\$600.00	per acre	\$90.00	
						<u>TOTAL SPECIAL PROJECTS</u>	\$1,008.19
						GRAND TOTAL	\$15,638.81

SUMMARY OF CONSTRUCTION COST

Sale:	<u>TRASK CUTOFF</u>		Road: <u>I to J</u>
Construction -	<u>8+50</u> stations <u>0.16</u> miles		Improvement - <u>0+00</u> stations <u>0.00</u> miles
 CLEARING AND GRUBBING - Scattering		0.780 acres @	\$980.00 per acre = <u>\$764.40</u> TOTAL CLEARING AND GRUBBING
			\$764.40
 EXCAVATION - Road Earthwork		8.50 sta. @	\$100.00 per sta. = <u>\$850.00</u> TOTAL EXCAVATION
			\$850.00
 ROCK			
0+00 to	8+50	568 cy. of	Pit-Run @ \$10.13 per c.y. = \$5,753.84
Jct. Rock	0+00	40 cy. of	Pit-Run @ \$10.13 per c.y. = \$405.20
Landing Rock	8+50	50 cy. of	Pit-Run @ \$10.13 per c.y. = <u>\$506.50</u>
			<u>TOTAL ROCK</u>
			\$6,665.54
 SPECIAL PROJECTS			
Grade and shape road -		8.50 stations @	\$15.50 per station \$131.75
Landing Construction		1.00 @	\$285.00 each \$285.00
Roll subgrade w/ vibratory roller prior to rocking -		8.50 stations @	\$13.20 per station \$112.20
Remove large stumps -		2.00 lump sum @	\$130.00 \$260.00
Grass seed and fertilize -		0.30 acres @	\$220.00 per acre \$66.00
Mulching -		0.060 acres @	\$600.00 per acre \$36.00
			<u>TOTAL SPECIAL PROJECTS</u>
			\$890.95
			GRAND TOTAL
			\$9,170.89

ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit Run	Location:	Sec.19 , T1S, R7W, W.M.
Sale:	TRASK CUTOFF	Road:	3936 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	3936 c.y.
Drill Pct.:	50%	In Place Total:	2811 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$6,953.86
Drill & Shoot:	\$2.50 /cu.yd. x 1406 cu.yds. = \$3,515.00
Rip Rock	\$1.90 /cu.yd. x 1405 cu.yds. = \$2,669.50
Load Dump Truck:	\$0.70 /cu.yd. x 3936 cu.yds. = \$2,755.20

Subtotal \$15,893.56

Move In and set up Drill and Compressor	1	@	\$179.02	=	\$179.02
Move in D-8	1	@	\$283.14	=	\$283.14
Move in Loader	1	@	\$184.92	=	\$184.92
Move in Excavator	1	@	\$305.57	=	\$305.57
Move in Trucks	2	@	\$49.13	=	\$98.26
Move in Water Truck	1	@	\$57.75	=	\$57.75
					Subtotal \$1,108.66

TOTAL PRODUCTION COSTS \$17,002.22

Base Cost= \$4.32 Per Cu.Yd.

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	\$4.11	\$1.70	\$4.32	\$10.13	362	\$3,667.06
A to B Landing Rock	\$4.11	\$1.70	\$4.32	\$10.13	50	\$506.50
A to B Jct. Rock	\$4.11	\$1.70	\$4.32	\$10.13	20	\$202.60
C to D	\$4.11	\$1.70	\$4.32	\$10.13	1054	\$10,677.02
C to D Jct. Rock	\$4.11	\$1.70	\$4.32	\$10.13	40	\$405.20
C to D Landing Rock	\$4.11	\$1.70	\$4.32	\$10.13	50	\$506.50
E to F	\$4.18	\$1.70	\$4.32	\$10.20	599	\$6,109.80
E to F Landing Rock	\$4.18	\$1.70	\$4.32	\$10.20	50	\$510.00
E to F Jct. Rock	\$4.18	\$1.70	\$4.32	\$10.20	40	\$408.00
G to H	\$4.11	\$1.70	\$4.32	\$10.13	923	\$9,349.99
G to H Jct. Rock	\$4.11	\$1.70	\$4.32	\$10.13	40	\$405.20
G to H Landing Rock	\$4.11	\$1.70	\$4.32	\$10.13	50	\$506.50
I to J	\$4.18	\$1.70	\$4.32	\$10.20	568	\$5,793.60
I to J Jct. Rock	\$4.18	\$1.70	\$4.32	\$10.20	40	\$408.00
I to J Landing Rock	\$4.18	\$1.70	\$4.32	\$10.20	50	\$510.00
Total C.Y.					3936	Sub Total \$39,965.97

	TOTAL ROCKING COSTS	\$39,965.97
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Move-In Calculations

Sale: **TRASK CUTOFF**

Sec.19 , T1S, R7W, W.M.

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
13.0	Pavement	30
2.0	Main Lines	7
1.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move In Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
0	Drill & Compressor	\$0.00		\$46.00	0.00	0.00	0	\$0.00	\$0.00
1	Brush Cutter	\$167.52		\$4.00	0.00	0.00	0	\$0.00	\$167.52
1	Graders	\$187.29		\$3.65	0.00	0.00	0	\$0.00	\$187.29
0	Loader (Small)	\$0.00	1	\$3.55	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Med. & Large)	\$0.00	1	\$9.00	0.00	0.00	0	\$0.00	\$0.00
1	Rollers (smooth/grid) & Compactors	\$179.02		\$5.00	0.00	0.00	0	\$0.00	\$179.02
0	Excavators (Small)	\$0.00		\$22.00	0.00	0.00	0	\$0.00	\$0.00
0	Excavators (Med.)	\$0.00		\$35.50	0.00	0.00	0	\$0.00	\$0.00
1	Excavators (Large)	\$315.54	1	\$44.80	0.00	0.00	0	\$0.00	\$315.54
0	Tired Backhoes/Skidders	\$0.00		\$3.00	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D6)	\$0.00	2	\$7.10	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D7)	\$0.00	2	\$11.30	0.00	0.00	0	\$0.00	\$0.00
1	Tractor (D8)	\$308.51	2	\$15.10	0.00	0.00	0	\$0.00	\$308.51
4	Dump Truck (10 cy +)	\$241.33		\$2.85	0.00	0.00	0	\$0.00	\$241.33
0	Dump Truck (Off Hiway)	\$0.00	1	\$4.75	0.00	0.00	0	\$0.00	\$0.00
1	Water Truck (1500 Gal)	\$49.13		\$2.85	0.00	0.00	0	\$0.00	\$49.13
0	Water Truck (2500 Gal)	\$0.00		\$2.85	0.00	0.00	0	\$0.00	\$0.00
0	Jaw	\$1,066.00							
0	2-Stage Crusher	\$1,597.00							
0	3-Stage Crusher	\$2,489.00							

	TOTAL MOVE-IN COSTS:	\$1,448.34
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SUMMARY OF ROAD BRUSHING COST

Sale:	<u>Trask Cutoff</u>	Road:	<u>See Below</u>
		Brushing -	5.92 Miles

BRUSHING PROJECTS:

Road System	Name of Road	Miles of Road	Cost per Mile	Total Cost for Segment
Trask	Samson	0.75	\$1,300	\$975
Trask	Trask Cutoff	3.00	\$800	\$2,400
Trask	Spur # 1	0.42	\$1,300	\$546
Trask	Spur # 2	0.75	\$1,300	\$975
Trask	Spur # 3	1.00	\$1,300	\$1,300
Total		5.92		TOTAL \$6,196
				<u>GRAND TOTAL \$6,196</u>



CRUISE REPORT

Trask Cutoff

"STEWARDSHIP IN FORESTRY"

1. **Type of Sale:** Retention Cut – Conifer-Recovery/Hardwoods-Cash
2. **Legal Description:** Portions of Sections 23, 24, and 26, T1S, R8W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:** The sale boundary was plotted on a digital orthophotograph and the acreage was calculated with GIS.

Area	Harvest Type	Sale	Net
1	Retention Cut	294	267
2	Retention Cut	22	20
Total		316	287

Sale Acres

Area within the Timber Sale Boundary signs

Net acres for calculating the advertised volume

Sale acres, less green tree retention, less roads, and less riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. **Cruising Procedures:**
 - A. **Cruise Method:** A total of 81 plots were taken. Cruise lines and plots were placed to obtain representative sampling intensities throughout the two sale areas. All trees were recorded by species, merchantable height, form, and diameter class. Diameters were measured to the nearest inch and heights to the nearest foot. Conifers less than 8" DBH and hardwood less than 10" DBH were not sampled.
 - B. **Plot size:** All plots were variable radius full point plots. A BAF of 33.61 was used for conifers and a 20 BAF was used for hardwoods in all areas. The point of tree observation was 4.5 feet.
 - C. **Grading System:** Tree heights were measured to a 6" merchantable top for conifers and 8" for hardwoods outside bark. Conifer was graded using Columbia River rules favoring a 40' log. Alder was graded to the top end diameter for determining sort while still favoring a 40' log. 2S equals 12" and greater, 3S equals 10" and 11", and 4S equals 8" and 9".
 - D. **Defect and Breakage:** A 5% defect and breakage reduction was applied to conifers and a 10% reduction to hardwood volumes for hidden defect. This was in addition to visual defect deducted during the cruise.
 - E. **Cruiser Names / Dates:** South Unit staff. April, 2006.

5. **Computation Procedures:** Plot data was entered into SuperAce for computation of stand tables. Take and leave trees were determined by reviewing diameters and defect on each plot and SuperAce was rerun to compute basal area, V-BAR, stand tables and diameters. This data was entered into a volume summary worksheet to compute sale volumes.

The cruise had a coefficient of variation of 65.2% and a standard error of 7.6% for the net board feet/acre in Area 1 and 40.5% and 16.5% in Area 2 respectfully. The statistics for the entire timber sale were 63.3% coefficient of variation and 7.0% standard error. Volumes are based on the statistics for each area.

6. **Timber Description:** The sale contains 40 to 50 year old hemlock, spruce, and Douglas-fir. Portions of the stand are natural regeneration with areas of planted Douglas-fir after the Burn. Red alder is scattered throughout the sale with areas of concentration in the riparian areas. The alder was not aerially sprayed.

7. **Revenue Distribution:**
 - 100% FDF
 - Tax Code: 9-1
 - Deed No. 169, 211, 565
 - 57% Rehabilitation Obligated

8. **Appendices:**
 - Stand Table
 - Volume Summary
 - Logging Plan

TC		Stand Table Summary														
TSTNDSUM		Project TRASKCUT														
T01S R08W S23 T00RC											T01S R08W S23 T00RC					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
01S	08W	23	AREA1	00RC	267.00	74	485	Date:	09/18/201							
								Time:	8:40:30AM							
Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		8	1	90	68	1.301	.45	1.30	6.9	40.0	.25	9	52	68	24	14
DF		9	8	87	45	8.225	3.63	8.22	6.6	30.0	1.54	54	247	411	144	66
DF		10	5	85	48	4.164	2.27	4.16	8.6	34.0	1.02	36	142	273	96	38
DF		11	11	87	58	7.570	5.00	7.57	12.6	43.6	2.72	95	330	725	255	88
DF		12	14	85	60	8.096	6.36	8.67	15.1	46.7	3.73	131	405	997	349	108
DF		13	22	85	65	10.840	9.99	12.81	17.2	53.1	6.27	220	680	1,675	587	182
DF		14	12	85	70	5.098	5.45	7.22	17.8	57.6	3.67	129	416	980	344	111
DF		15	8	86	67	2.961	3.63	3.70	21.8	67.0	2.30	81	248	615	216	66
DF		16	8	86	78	2.602	3.63	4.55	21.3	80.7	2.77	97	368	741	260	98
DF		17	6	86	79	1.729	2.73	2.88	25.3	87.0	2.07	73	251	553	195	67
DF		18	5	86	83	1.285	2.27	2.06	31.7	110.0	1.85	65	226	495	174	60
DF		19	7	85	96	1.615	3.18	3.23	34.9	119.3	3.21	113	385	857	301	103
DF		20	7	87	106	1.457	3.18	2.91	39.9	147.1	3.31	116	429	884	311	115
DF		21	3	86	95	.566	1.36	1.13	41.4	141.7	1.34	47	161	357	125	43
DF		22	4	87	103	.688	1.82	1.20	51.7	210.0	1.77	62	253	474	166	68
DF		23	4	86	103	.630	1.82	1.26	53.1	208.8	1.91	67	263	510	179	70
DF		24	4	87	107	.578	1.82	1.16	58.9	242.5	1.94	68	280	518	182	75
DF		25	1	87	102	.133	.45	.27	61.5	250.0	.47	16	67	125	44	18
DF		28	1	84	103	.106	.45	.21	81.6	310.0	.49	17	66	132	46	18
DF	Totals	131	86	65		59.646	59.50	74.54	20.1	70.7	42.66	1,496	5,268	11,389	3,995	1,406
DL		19	4	88	88	.923	1.82	1.61	35.3	127.1	1.57	57	205	418	152	55
DL		20	3	86	89	.625	1.36	1.04	41.7	146.0	1.20	43	152	319	116	41
DL		21	4	87	104	.755	1.82	1.51	42.9	167.5	1.78	65	253	476	173	68
DL		22	5	88	95	.860	2.27	1.72	46.3	164.0	2.19	80	282	586	213	75
DL		23	6	86	100	.945	2.73	1.89	52.4	195.8	2.72	99	370	727	264	99
DL		24	4	88	100	.578	1.82	1.16	57.1	227.5	1.82	66	263	485	176	70
DL		25	7	87	104	.933	3.18	1.87	64.2	261.4	3.30	120	488	880	320	130
DL		26	7	87	106	.862	3.18	1.48	70.5	295.0	2.86	104	436	765	278	116
DL		27	4	86	119	.457	1.82	.91	80.3	351.2	2.02	73	321	539	196	86
DL		28	6	88	106	.637	2.73	1.06	80.2	340.0	2.34	85	361	626	227	96
DL		29	4	87	115	.396	1.82	.89	83.5	382.2	2.05	74	341	546	199	91
DL		30	5	87	102	.463	2.27	1.11	77.0	323.3	2.35	85	359	627	228	96
DL		31	5	87	106	.433	2.27	1.13	76.8	340.0	2.38	87	383	635	231	102
DL		33	2	89	103	.153	.91	.31	106.7	467.5	.90	33	143	240	87	38
DL		34	1	87	117	.072	.45	.14	127.8	615.0	.51	18	89	135	49	24
DL		35	2	84	120	.136	.91	.41	94.2	418.3	1.06	38	171	282	103	46
DL		36	1	88	109	.064	.45	.13	138.7	620.0	.49	18	80	131	48	21
DL		37	2	87	112	.122	.91	.24	146.3	680.0	.98	36	165	261	95	44
DL	Totals	72	87	102		9.414	32.70	18.61	63.5	261.2	32.50	1,182	4,861	8,678	3,155	1,298
RA		10	15	79	29	7.433	4.05	7.43	5.4	20.0	1.10	40	149	293	107	40
RA		11	12	80	46	4.914	3.24	4.91	9.5	34.2	1.28	46	168	341	124	45
RA		12	15	79	53	5.162	4.05	5.16	15.6	53.3	2.21	80	275	590	215	74
RA		13	27	80	65	7.917	7.30	7.92	21.3	66.7	4.64	169	528	1,239	450	141
RA		14	25	80	63	6.321	6.76	6.32	23.7	67.6	4.12	150	427	1,100	400	114
RA		15	25	79	67	5.506	6.76	5.51	30.1	83.2	4.55	166	458	1,216	442	122
RA		16	25	79	70	4.839	6.76	5.03	35.5	100.4	4.92	179	505	1,312	477	135
RA		17	20	79	72	3.429	5.41	3.77	37.0	113.2	3.84	140	427	1,025	373	114
RA		18	9	79	67	1.376	2.43	1.38	44.9	123.3	1.70	62	170	454	165	45
RA		19	6	79	72	.824	1.62	.96	48.1	128.6	1.27	46	124	339	123	33
RA		20	12	79	58	1.487	3.24	1.61	46.7	115.4	2.07	75	186	552	201	50
RA		21	6	79	63	.674	1.62	.67	56.6	126.7	1.05	38	85	280	102	23

Stand Table Summary

Project **TRASKCUT**

T01S R08W S23 T00RC

T01S R08W S23 T00RC

Twp Rge Sec Tract
01S 08W 23 AREA1

Type Acres Plots Sample Trees
00RC 267.00 74 485

Page: 2
Date: 09/18/201
Time: 8:40:30AM

S Spc	T	Sample		Av	Trees/ BA/ Logs			Average Log		Net		Net	Totals			
		DBH	Trees	FF 16'	Ht Tot	Acres	Acres	Acres	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acres	Cu.Ft. Acres	Bd.Ft. Acres	Tons	Cunits	MBF
RA		22	3	80	58	.307	.81	.31	68.1	136.7	.57	21	42	153	56	11
RA		23	1	79	67	.094	.27	.09	46.4	90.0	.12	4	8	32	12	2
RA		24	1	80	56	.086	.27	.09	79.1	150.0	.19	7	13	50	18	3
RA		26	2	79	43	.147	.54	.15	72.1	140.0	.29	11	21	77	28	5
RA		27	1	80	47	.068	.27	.07	90.2	90.0	.17	6	6	45	16	2
RA	Totals	205	79	57		50.583	55.41	51.38	24.1	69.9	34.08	1,240	3,592	9,099	3,310	959
WL		19	1	88	117	.260	.51	.52	41.6	165.0	.69	22	86	185	58	23
WL		21	1	84	89	.212	.51	.42	41.3	140.0	.56	18	59	150	47	16
WL		22	1	84	106	.194	.51	.39	50.5	180.0	.62	20	70	167	52	19
WL		23	1	91	99	.177	.51	.35	57.0	235.0	.65	20	83	172	54	22
WL		25	3	88	100	.450	1.53	.90	64.6	263.3	1.86	58	237	495	155	63
WL		27	1	90	95	.129	.51	.13	23.6	50.0	.10	3	6	26	8	2
WL		28	2	84	125	.239	1.02	.60	75.4	344.0	1.44	45	206	385	120	55
WL		30	2	89	93	.208	1.02	.42	90.0	400.0	1.20	37	167	320	100	44
WL		31	2	84	138	.195	1.02	.58	85.9	413.3	1.61	50	242	429	134	65
WL		32	1	86	175	.091	.51	.37	87.1	472.5	1.02	32	173	272	85	46
WL		40	1	89	84	.059	.51	.12	117.4	515.0	.44	14	60	118	37	16
WL	Totals	16	87	109		2.213	8.18	4.79	66.4	289.5	10.18	318	1,388	2,719	850	371
SL		13	1	85	68	.511	.47	1.02	11.4	50.0	.30	12	51	81	31	14
SL		15	1	87	34	.384	.47	.38	19.0	30.0	.19	7	12	51	19	3
SL		16	2	79	100	.675	.94	1.35	24.4	85.0	.86	33	115	228	88	31
SL		17	1	85	73	.299	.47	.30	42.4	150.0	.33	13	45	88	34	12
SL		18	1	81	60	.267	.47	.27	41.3	150.0	.29	11	40	76	29	11
SL		19	2	84	76	.478	.94	.72	37.1	106.7	.69	27	77	185	71	20
SL		20	1	82	83	.216	.47	.43	37.6	115.0	.42	16	50	113	43	13
SL		22	1	82	72	.178	.47	.18	73.0	200.0	.34	13	36	91	35	10
SL		23	1	82	104	.163	.47	.16	87.4	360.0	.37	14	59	99	38	16
SL		25	2	83	83	.276	.94	.28	94.1	320.0	.68	26	88	181	69	24
SL		26	4	84	60	.511	1.88	.38	83.0	160.0	.83	32	61	221	85	16
SL		27	1	84	33	.118	.47	.12	61.0	40.0	.19	7	5	50	19	1
SL		28	1	84	36	.110	.47	.11	69.5	190.0	.20	8	21	53	20	6
SL		32	1	84	68	.084	.47	.17	83.5	215.0	.37	14	36	98	38	10
SL		33	1	85	87	.079	.47	.16	107.8	430.0	.44	17	68	119	46	18
SL		36	2	84	72	.133	.94	.20	138.7	453.3	.72	28	91	193	74	24
SL		38	1	84	83	.060	.47	.12	75.8	210.0	.24	9	25	63	24	7
SL		39	1	81	43	.057	.47	.06	166.5	170.0	.25	9	10	66	25	3
SL		48	1	90	49	.037	.47									
SL	Totals	27	83	72		4.689	12.72	6.40	46.2	138.7	7.69	296	888	2,055	790	237
WH		11	1	92	32	.746	.49	.75	8.9	30.0	.21	7	22	57	18	6
WH		14	4	89	65	1.841	1.97	2.76	17.6	65.0	1.55	49	180	415	130	48
WH		15	2	89	67	.802	.98	.80	28.4	90.0	.73	23	72	194	61	19
WH		18	1	85	82	.278	.49	.56	29.2	105.0	.52	16	58	139	43	16
WH		20	1	85	89	.226	.49	.45	39.5	135.0	.57	18	61	152	48	16
WH		22	1	91	115	.186	.49	.37	56.4	260.0	.67	21	97	180	56	26
WH		24	1	84	95	.157	.49	.31	56.8	210.0	.57	18	66	152	47	18
WH		27	1	84	104	.124	.49	.25	79.5	325.0	.63	20	80	168	53	21
WH	Totals	12	89	66		4.359	5.90	6.25	27.3	101.8	5.46	171	637	1,457	455	170
SS		10	1	84	19	.833	.45	.83	6.0	20.0	.13	5	17	34	13	4

TC TSTNDSUM				Stand Table Summary												
Project TRASKCUT																
T01S R08W S23 T00RC										T01S R08W S23 T00RC						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	3							
01S	08W	23	AREA1	00RC	267.00	74	485	Date:	09/18/201							
								Time:	8:40:30AM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
SS		13	1	88	33	.493	.45	.49	14.0	40.0	.18	7	20	49	18	5
SS		14	2	81	54	.850	.91	.85	18.2	50.0	.40	15	42	106	41	11
SS		15	2	86	42	.740	.91	.74	22.4	50.0	.43	17	37	115	44	10
SS		16	1	87	48	.325	.45	.33	29.0	70.0	.24	9	23	65	25	6
SS		17	3	86	42	.864	1.36	.86	28.3	80.0	.63	24	69	169	65	18
SS		18	2	85	63	.514	.91	.77	30.0	96.7	.60	23	75	161	62	20
SS		22	1	73	21	.172	.45	.17	29.3	20.0	.13	5	3	35	13	1
SS		24	1	84	76	.145	.45	.29	51.1	160.0	.38	15	46	103	39	12
SS		25	1	82	111	.133	.45	.27	69.2	260.0	.48	18	69	128	49	18
SS		Totals	15	84	44	5.069	6.81	5.60	24.8	71.6	3.61	139	401	965	372	107
RC		36	1	90	84	.064	.45	.13	119.5	450.0	.36	15	58	96	41	15
RC		Totals	1	90	84	.064	.45	.13	119.5	450.0	0.36	15	58	96	41	15
BM		15	1	80	20	.440	.54	.44	13.4	30.0	.16	6	13	42	16	4
BM		Totals	1	80	20	.440	.54	.44	13.4	30.0	0.16	6	13	42	16	4
Totals		480	84	65		136.478	182.21	168.15	28.9	101.7	136.70	4863	17,106	36,500	12,984	4,567

TC TSTNDSUM		Stand Table Summary														
Project TRASKCUT																
T01S R08W S24 T00RC											T01S R08W S24 T00RC					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
01S	08W	24	AREA2	00RC	20.00	7	45	Date:	09/18/201							
								Time:	8:41:30AM							
S Spc	T	Sample		Av	Trees/ Acres	BA/ Acres	Logs Acres	Average Log		Net Tons/ Acres	Net Cu.Ft. Acres	Net Bd.Ft. Acres	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DL		19	2	86	108	4.877	9.60	9.75	35.3	130.0	9.48	345	1,268	190	69	25
DL		21	1	92	104	1.996	4.80	3.99	43.7	180.0	4.80	175	719	96	35	14
DL		22	1	92	121	1.819	4.80	3.64	57.4	275.0	5.75	209	1,000	115	42	20
DL		23	1	91	103	1.664	4.80	3.33	57.0	235.0	5.22	190	782	104	38	16
DL		25	1	90	108	1.409	4.80	2.82	67.4	290.0	5.22	190	817	104	38	16
DL		26	1	91	112	1.302	4.80	2.60	74.9	340.0	5.36	195	886	107	39	18
DL		27	2	84	111	2.415	9.60	4.83	75.6	287.5	10.06	365	1,389	201	73	28
DL		28	3	87	108	3.369	14.40	5.61	88.7	374.0	13.69	498	2,100	274	100	42
DL		29	1	85	104	1.047	4.80	2.09	85.6	325.0	4.93	179	680	99	36	14
DL		30	1	84	104	.978	4.80	1.96	92.9	360.0	5.00	182	704	100	36	14
DL		32	1	85	108	.860	4.80	.86	160.0	720.0	3.78	138	619	76	28	12
DL		34	1	84	115	.762	4.80	1.52	125.1	540.0	5.24	190	822	105	38	16
DL	Totals	16	88	109		22.497	76.82	43.01	66.4	274.0	78.52	2,855	11,786	1,570	571	236
DF		10	4	84	37	35.213	19.21	35.21	7.2	27.5	7.25	254	968	145	51	19
DF		12	3	84	38	18.340	14.40	18.34	11.2	26.7	5.83	206	489	117	41	10
DF		14	2	85	77	8.983	9.60	13.47	18.2	66.7	7.00	246	898	140	49	18
DF		15	1	87	94	3.913	4.80	7.83	19.3	75.0	4.30	151	587	86	30	12
DF		16	4	86	88	13.755	19.21	27.51	20.8	80.0	16.36	572	2,201	327	114	44
DF		17	2	87	103	6.092	9.60	12.18	28.3	110.0	9.84	345	1,340	197	69	27
DF		18	1	84	63	2.717	4.80	2.72	31.9	130.0	2.47	87	353	49	17	7
DF		21	1	85	111	1.996	4.80	3.99	43.2	170.0	4.91	172	679	98	34	14
DF		23	1	84	119	1.664	4.80	3.33	57.8	240.0	5.48	192	799	110	38	16
DF	Totals	19	85	59		92.673	91.23	124.58	17.9	66.7	63.45	2,226	8,314	1,269	445	166
RA		12	1	79	56	3.638	2.86	3.64	15.9	50.0	1.59	58	182	32	12	4
RA		14	3	80	50	8.018	8.57	8.02	19.9	53.3	4.38	159	428	88	32	9
RA		15	2	79	51	4.656	5.71	4.66	24.4	65.0	3.13	114	303	63	23	6
RA		16	1	80	55	2.046	2.86	2.05	30.5	80.0	1.72	63	164	34	13	3
RA		17	1	80	70	1.813	2.86	1.81	44.2	120.0	2.20	80	218	44	16	4
RA		18	1	79	18	1.617	2.86	1.62	18.5	60.0	.82	30	97	16	6	2
RA	Totals	9	80	51		21.788	25.71	21.79	23.1	63.8	13.84	503	1,390	277	101	28
WH		16	1	85	59	3.439	4.80	3.44	33.3	70.0	3.66	114	241	73	23	5
WH	Totals	1	85	59		3.439	4.80	3.44	33.3	70.0	3.66	114	241	73	23	5
Totals		45	84	66		140.397	198.57	192.82	29.6	112.7	159.47	5699	21,732	3,189	1,140	435



"STEWARDSHIP IN FORESTRY"

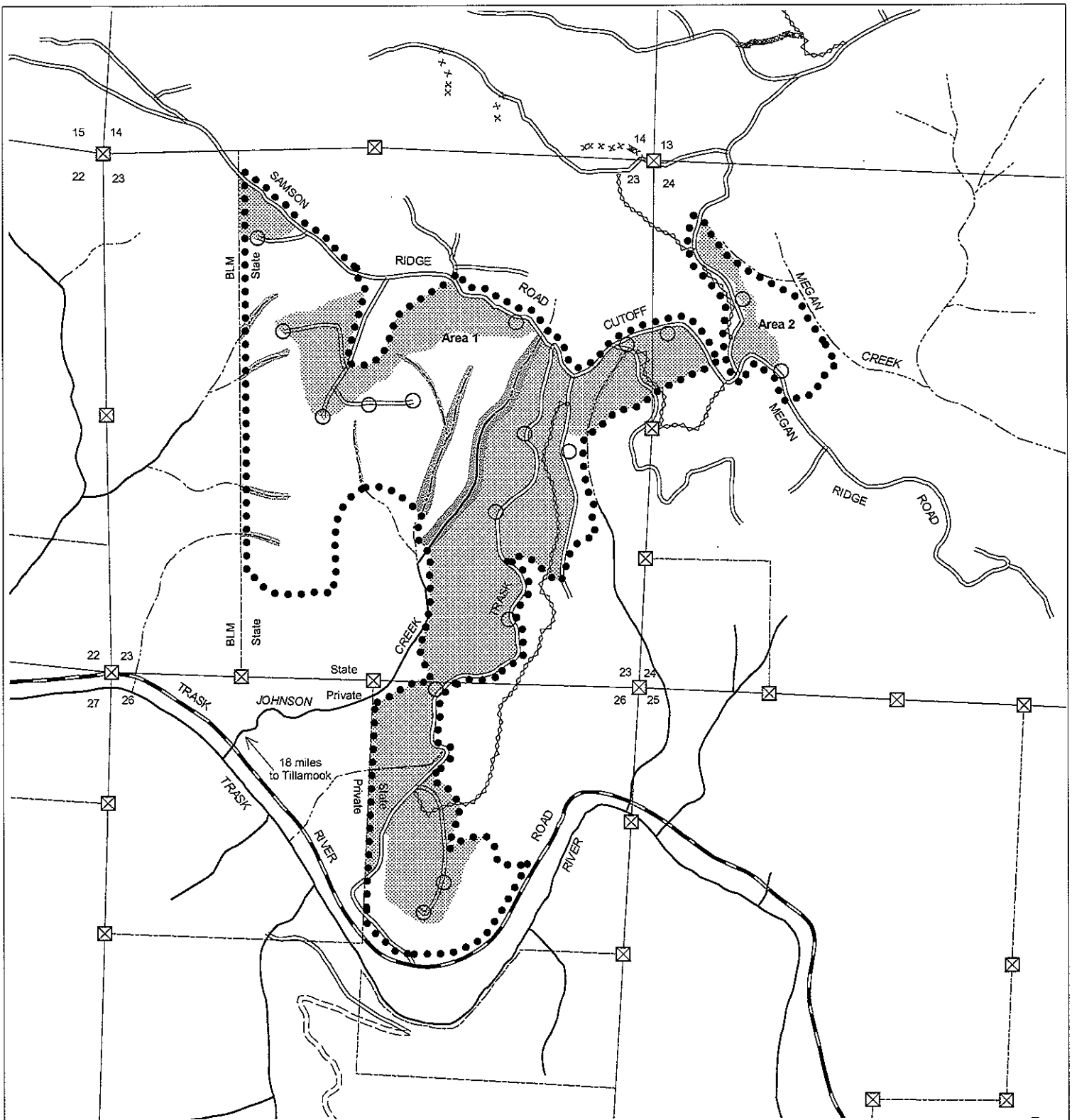
Trask Cutoff

Volume Summary

Area 1 - Retention Cut							
267 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	14	60	89	5.3	1415	5%	1344
Hemlock	16	6	108	0.6	160	5%	152
Spruce	16	8	59	0.5	134	5%	127
Alder	14	55	65	3.6	961	10%	865
TOTAL					2670		2488

Area 2 - Retention Cut							
20 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	14	91	91	8.3	166	5%	158
Hemlock	16	5	50	0.3	6	5%	6
Alder	15	26	54	1.4	28	10%	25
TOTAL					200		189

TOTAL SALE VOLUME			287 acres
SPECIES	Gross (MBF)	Net Vol (MBF)	
Douglas-fir	1581	1502	
Hemlock	166	158	
Spruce	134	127	
Alder	989	890	
TOTAL	2870	2677	



- Landing
- Ⓧ Domestic water supply intake
- Ⓜ Helicopter landing zone
- Ⓣ Truck turn-around
- ⓧ Survey corner
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- ▧ Downhill yarding
- ▦ Buffer
- ▨ Non-required thinning
- - - - Area boundary
- Sale boundary
- - - - Ownership boundary
- Perennial Type-F stream
- - - - Perennial Type-N stream
- == Surfaced road
- === Unsurfaced road
- State/Federal highway
- County road
- Ⓣ Non-project road
- . - . Swing road
- ⊘ Legacy road
- xxx Blocked road
- ⊘ OHV trail
- - - - Non-motorized trail
- T T Transmission line

LOGGING PLAN

Timber Sale Contract No. 341-07-01
 Trask Cutoff
 Portions of Sections 23, 24,
 and 26, T1S, R8W, W. M.
 Tillamook County, Oregon

	Type of Area Operation	Gross	Net
1	Retention Cut	294	267
2	Retention Cut	22	20
Total		316	287



Tillamook District GIS
 8/31/2006

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

