



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Cedar Glenn Sale 341-05-14

District: Coos

Date: 6/11/04

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$2,982,434.34	\$11,999.52	\$2,994,433.86
		Project Work	(\$100,183.00)
		Advertised Value	\$2,894,250.86



Timber Sale Appraisal Timber Description Cedar Glenn Sale 341-05-14

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of Sections 22, 27 and 28; T23S; R10W; W.M.; Coos and Douglas Counties, Oregon

Date: 6/11/04

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	32	0	95
Western Hemlock / Fir	18	0	95
Alder (Red)	13	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	316	0	0	316
SM	686	0	0	686
2S	3,300	0	0	3,300
3S	1,049	0	0	1,049
4S	190	0	0	190
Camprun	0	282	24	306
Total	5,541	282	24	5,847

Comments: Pond Values Used: 1st Quarter 2004.



Timber Sale Appraisal

Logging Conditions

Cedar Glenn

Sale 341-05-14

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Manual Delimiting
Tree Size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
Loads/Day:	15		Bd. Ft./Load: 4,500
Cost/MBF:	\$49.13		
Machines:			
	Log Loader (A)		
	Tower Yarder (Medium)		



Timber Sale Appraisal

Logging Costs

Cedar Glenn

Sale 341-05-14

"STEWARDSHIP IN FORESTRY"

Date: 6/11/04

Operating Seasons: 1.0

Profit & Risk: 10%

Project Costs: \$100,183

Other Costs (P/R): \$25,912

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
1.2	0.0	0.0	0.0

Road Maintenance: \$0.00

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	3.0	4.5
Western Hemlock / Fir	\$0.00	3.0	4.0
Alder (Red)	\$0.00	3.0	3.5



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Cedar Glenn Sale 341-05-14

Costs	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
Logging	49.13	49.13	49.13
Road Maintenance	0.38	0.38	0.40
Fire Protection	0.47	0.47	0.00
Hauling	35.89	40.37	48.67
Other (P/R appl.)	4.45	4.45	0.00
Profit & Risk	9.03	9.48	9.82
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	0.00	0.00	0.00
Total	101.35	106.28	110.02

Amortization	0.00	0.00	0.00
Pond Value	624.65	400.00	610.00
Stumpage	523.30	293.72	499.98
Amortized	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Cedar Glenn Sale 341-05-14

Amortized

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

Unamortized

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
MBF	5,541.00	282.00	24.00
Value	523.30	293.72	499.98
Total	2,899,605.30	82,829.04	11,999.52

Gross Timber Sale Value

Recovery \$2,994,433.86

Prepared by: Robert Fields

Date: 6/11/04

District: Coos

Phone: (541) 267-1755

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name:

Cedar Glenn

Additional "Other Cost" with additional profit and risk to be added:

	<u>Quantity</u>	<u>Units</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Felling				
Directional Felling	2245	MBF	\$ 2.00	\$ 4,490.00
Yarding and Loading				
Rig Tail Trees	8	Tree	\$ 100.00	\$ 800.00
Artificial guyline/tail tree support	6	Anchors	\$ 50.00	\$ 300.00
Brand and paint logs	5847	MBF	\$ 1.00	\$ 5,847.00
Loader time for firewood stacking	14	Hours	\$ 75.00	\$ 1,050.00
Snag Creation				
Tree Topping	108	Trees	\$ 100.00	\$ 10,800.00
Miscellaneous Costs				
Safety Flagging and/or signing	55	Days	\$ 15.00	\$ 825.00
Additional Fire Equipment	120	Days	\$ 15.00	\$ 1,800.00

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

\$ 25,912.00

**SUMMARY OF CONSTRUCTION COST
Cedar Glenn**

Project 1A: Road Improvement

Points:	A to C	Length:	2600'	Type:	14' subgrade, w/ ditch		
Smooth road surface - Grader		2	hrs at	\$75.00	per hour	\$150.00	
							Project 1A Total
							\$150.00

Project 1B: Road Improvement

Points:	C to D	Length:	880'	Type:	14' subgrade, w/ ditch		
Smooth road surface - Grader		1	hrs at	\$75.00	per hour	\$75.00	
							Project 1B Total
							\$75.00

Project 1C: Road Improvement

Points:	D to E	Length:	615'	Type:	14' subgrade, w/ ditch		
Smooth road surface - Grader		1	hrs at	\$75.00	per hour	\$75.00	
							Project 1C Total
							\$75.00

Project 1D: Road Improvement

Points:	D to F	Length:	2780'	Type:	14' subgrade, w/ ditch		
Roadside brushing		5	hrs at	\$30.00	per hour	\$150.00	
Smooth road surface - Grader		2	hrs at	\$75.00	per hour	\$150.00	
							Project 1D Total
							\$300.00

Project 1E: Road and Landing Improvement

Points: G to H Length: 585' Type: 14' subgrade, outslope

Excavation

Excavator for slough/slide removal and build turnaround/landing pad at H		20	hrs at	\$110.00	per hr	\$2,200.00	
Laborer		20	hrs at	\$30.00	per hr	\$600.00	
							Total Excavation
							\$2,800.00

Hauling

Haul slough material to Pt F		15	hrs at	\$95.00	per hr	\$1,425.00	
							Total Hauling
							\$1,425.00

Grade Road Surface

Smooth road surface - Grader		1	hrs at	\$75.00	per hour	\$75.00	
							Total Grading
							\$75.00
							Project 1E Total
							\$4,300.00

**SUMMARY OF CONSTRUCTION COST
Cedar Glenn**

Project 1F: Road and Landing Improvement

Points: I to J Length: 805' Type: 14' subgrade, outslope

Excavation

Excavator for slough and brush removal	10	hrs at	\$110.00	per hr	\$1,100.00
Laborer	10	hrs at	\$30.00	per hr	\$300.00

Total Excavation \$1,400.00

Hauling

Haul slough material to Pt F	5	hrs at	\$95.00	per hr	\$475.00
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Total Hauling \$475.00

Grade Road Surface

Smooth road surface - Grader	1	hrs at	\$75.00	per hour	\$75.00
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Total Grading \$75.00

Project 1F Total \$1,950.00

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
Dump Truck	35	0.74	\$241.00	\$178.34
Dump Truck	35	0.74	\$241.00	\$178.34

Total Move-in \$1,323.86

Project 1 Cost \$8,173.86

Project 2A: Landing Construction

Point: B

Excavator to remove brush	5	hrs at	\$110.00	per hr	\$550.00
Cat time	5	hrs at	\$125.00	per hr	\$625.00
Laborer	5	hrs at	\$30.00	per hr	\$150.00

Project 2A Total \$1,325.00

Project 2B: Landing Construction

Point: E

Excavator to remove stumps and build small landing pad above road	10	hrs at	\$110.00	per hr	\$1,100.00
Cat time	5	hrs at	\$125.00	per hr	\$625.00
Laborer	10	hrs at	\$30.00	per hr	\$300.00

Project 2B Total \$2,025.00

**SUMMARY OF CONSTRUCTION COST
Cedar Glenn**

Project 2C: Landing Construction

Point: F

Excavator to remove stumps and slash and prepare for fill material	5	hrs at	\$110.00	per hr	\$550.00
Cat time	10	hrs at	\$125.00	per hr	\$1,250.00

Project 2C Total \$1,800.00

Project 2 Cost \$5,150.00

Project 3A: Road Surfacing

Points: C to D
Length: 880'
Rock Type: 2 1/2"-0" Hard Crushed Quarry
Yds/STA 35 (6" compacted depth)

2 1/2"-0" Rock (3.5 hr RT)	306	yds at	\$19.14	per yd	\$5,856.84
Processing (Grader and Roller)	306	yds at	\$1.50	per yd	\$459.00

Points: D to E
Length: 615'
Rock Type: 2 1/2"-0" Hard Crushed Quarry
Yds/STA 35 (6" compacted depth)

2 1/2"-0" Rock (3.6 hr RT)	216	yds at	\$19.50	per yd	\$4,212.00
Processing (Grader and Roller)	216	yds at	\$1.50	per yd	\$324.00

Points: D to F
Length: 2780'
Rock Type: 2 1/2"-0" Hard Crushed Quarry
Yds/STA 35 (6" compacted depth)(volume includes turnouts)

2 1/2"-0" Rock (3.6 hr RT)	1008	yds at	\$19.50	per yd	\$19,656.00
Processing (Grader and Roller)	1008	yds at	\$1.50	per yd	\$1,512.00

Points: G to H
Length: 585'
Rock Type: 2 1/2"-0" Hard Crushed Quarry
Yds/STA 61 (10" compacted depth)(volume includes turnaround)

2 1/2"-0" Rock (3.2 hr RT - to reload at C)	378	yds at	\$18.42	per yd	\$6,962.76
Bobtail truck from reload pile	378	yds at	\$1.85	per yd	\$699.30
Processing (Grader and Roller)	378	yds at	\$1.50	per yd	\$567.00

Points: I to J
Length: 805'
Rock Type: 2 1/2"-0" Hard Crushed Quarry
Yds/STA 61 (10" compacted depth)

2 1/2"-0" Rock (3.2 hr RT - to reload at C)	486	yds at	\$18.42	per yd	\$8,952.12
Bobtail truck from reload pile	486	yds at	\$1.85	per yd	\$899.10
Processing (Grader and Roller)	486	yds at	\$1.50	per yd	\$729.00

**SUMMARY OF CONSTRUCTION COST
Cedar Glenn**

Points: Landings at B, E, and F
 Rock Type: Jaw Run
 Yds/STA 54 yds per landing

Jaw Run (3.5 hr RT)	162	yds at	\$19.14	per yd	\$3,100.68
Processing (Grader and Roller)	162	yds at	\$1.50	per yd	\$243.00

Points: Landings at H and J
 Rock Type: Jaw Run
 Yds/STA 54 yds per landing

Jaw Run (3.2 hr Rt to Reload Pile at Pt C)	108	yds at	\$18.42	per yd	\$1,989.36
Bobtail truck from reload pile to landings	108	yds at	\$1.85	per yd	\$199.80
Processing (Grader and Roller)	108	yds at	\$1.50	per yd	\$162.00

Move-in

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Loader	35	0.74	\$241.00	\$178.34
Grader	35	0.74	\$241.00	\$178.34
Roller	35	0.74	\$241.00	\$178.34

Total Move-in \$535.02

Project 3A Total \$57,058.98

Project 3B: Road Surfacing

Points: Haul Route - Maintenance Rock
 Rock Type: 1 1/2"-0" Hard Crushed Quarry

Rock for Haul Route - As needed (3.5 hr RT)	500	yds at	\$19.64	per yd	\$9,820.00
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Project 3B Total \$9,820.00

Project 3 Cost \$66,878.98

Project No. 4: Big Saddle Stockpile

Location: 10 mi on 1000 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):	\$9.05	per cu yd
Piling and shaping cost per cubic yard:	\$0.60	per cu yd

Total cost per cubic yard:	\$16.65	per cu yd
Total cubic yards:	1200	cubic yards

Total Cost for Stockpile rock: \$19,980.00

Project 4 Cost \$19,980.00

Total Project Costs \$100,182.84

TIMBER SALE SUMMARY

Cedar Glenn

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, 0% BOF.
4. **Sale Acreage:** The net harvested area is 81 acres. The acreage was determined using ArcView software by digitizing the boundary over an orthophoto image and then calculating the area using a measuring tool in an ArcView program extension.
5. **Volume by Species, Fund, and County:** See table on page 3.
6. **Grade by Percent:**

Species (by Area)	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp
Douglas-fir	6	12	60	19	3

7. **Cruise:** The sale area was variable plot cruised using the Big BAF cruise design, which consisted of 46 nested plots. Each plot consists of both a full 20 BAF count plot and a full 360 BAF measure plot. The 20 BAF count plot was used to tally the number of trees by species to determine stand basal area. The 360 BAF plot was used to obtain height, grade and defect. Thirty-four Big BAF trees were cruised for diameter, height, grade and defect. Cruising was done by ODF Foresters and compiled using Superace and Excel, in February 2004. The combined sampling error for board foot volume was 7.5%.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16'	Recorded or estimated on all trees	31	7.5

B. Stand Summary:

Species (By Area)	D4H	Trees per Acre	Basal Area (ft²/ac)	Net BF per acre
Douglas-fir	32	45	258	68.8
Western hemlock	18	17	29	3.6
Hardwoods	13	4	4	0.3

C. Green Tree Retention Summary: There are 386 trees marked as GTR associated with this sale. The following table summarizes the number of trees by species that correspond with each of the sale areas.

GTRs In Area	Total # of Stems	Douglas fir	Hemlock	Red cedar	Hardwoods
1	240	190	32	6	12
2	146	87	51	2	6

- 8. Timber Description:** The majority of the sale area is composed of 145 year old second growth Douglas-fir of good to average quality, intermixed with small amounts of western hemlock and scattered red alder plus a few red cedar. All western red cedar is reserved from cutting unless written approval has been given.
- 9. Topography:** The sale area is moderately steep (>50%) with some gentler bench areas on the lower slopes near the major stream reaches in both sale areas.
- 10. Logging Method:** The sale areas will be cable yarded uphill with single-end suspension over the unit. Lift trees may be necessary to facilitate suspension of payloads. Full suspension will be required as necessary to protect streams and RMAs. A motorized carriage may be needed to obtain the necessary suspension.
- 11. Access:** From Coos Bay, take Coos River Route past Allegany to the mouth of Marlow Creek (approximately 16 miles). Turn northeast (left) onto State Forest 1000 Road (Elk Ridge Road) take this road to Area 1 (approximately 18 miles). At this point turn southeast on to the 1850 Road and travel approximately 0.5 mile to the 1840 Road. Turn west onto the 1840 Road and take the next left (1848 Road) traveling southerly to the end of the road and Area 2.
- 12. Projects:**
- Project No. 1: Road and Landing Improvement
 - Project No. 2: Landing Construction
 - Project No. 3: Road Surfacing
 - Project No. 4: Rock Stockpile

NET VOLUMES AND ACREAGE

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			
I	D-fir	3673		3673	110		110	3783	68.8	
	Hem	191		191	6		6	197	3.6	
	Cedar	0		0	0		0	0	0.0	
	Hdwd	17		17	0		0	17	0.3	
II	D-fir	1758		1758			0	1758	67.6	
	Hem	85		85			0	85	3.3	
	Cedar	0		0			0	0	0.0	
	Hdwd	7		7			0	7	0.3	
TOTALS										
		5731	0	5731	116	0	116	5847		

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	5541	MBF
Hemlock	282	MBF
RedCedar	0	MBF
Hardwoods	24	MBF

Report by: R E Fields

Date: 4/2/2004

Unit For. Thomas Valley April 12, 04
Date

Asst. Dist. For. Greg Kreimeyer 4/17/2004
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	54						1						55
II	26						0						26
SUM	80	0	0	0	0	0	1	0	0	0	0	0	81

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Cedar Glenn

DATE: 4/1/2004

BY: R E Fields

GROSS VOLUME MBF *				
SPECIES>>> AREA	Doug-fir	Hemlock	Hardwds	TOTAL BY AREA
I	4201	216	20	4437
less retention vol	44	4	0	48
unit total	4157	212	20	4389
II	1986	102	9	2097
less retention vol	54	11	1	66
unit total	1932	91	8	2031
TOTAL	6089	303	28	6420

DEFECT AND BREAKAGE *

AREA I			
Species	Doug-fir	Hemlock	Hardwds
Field cull	5	2	
Hidden cl	2	2	Assigned
Breakage	2	3	15
Total	9	7	15

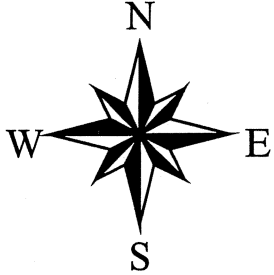
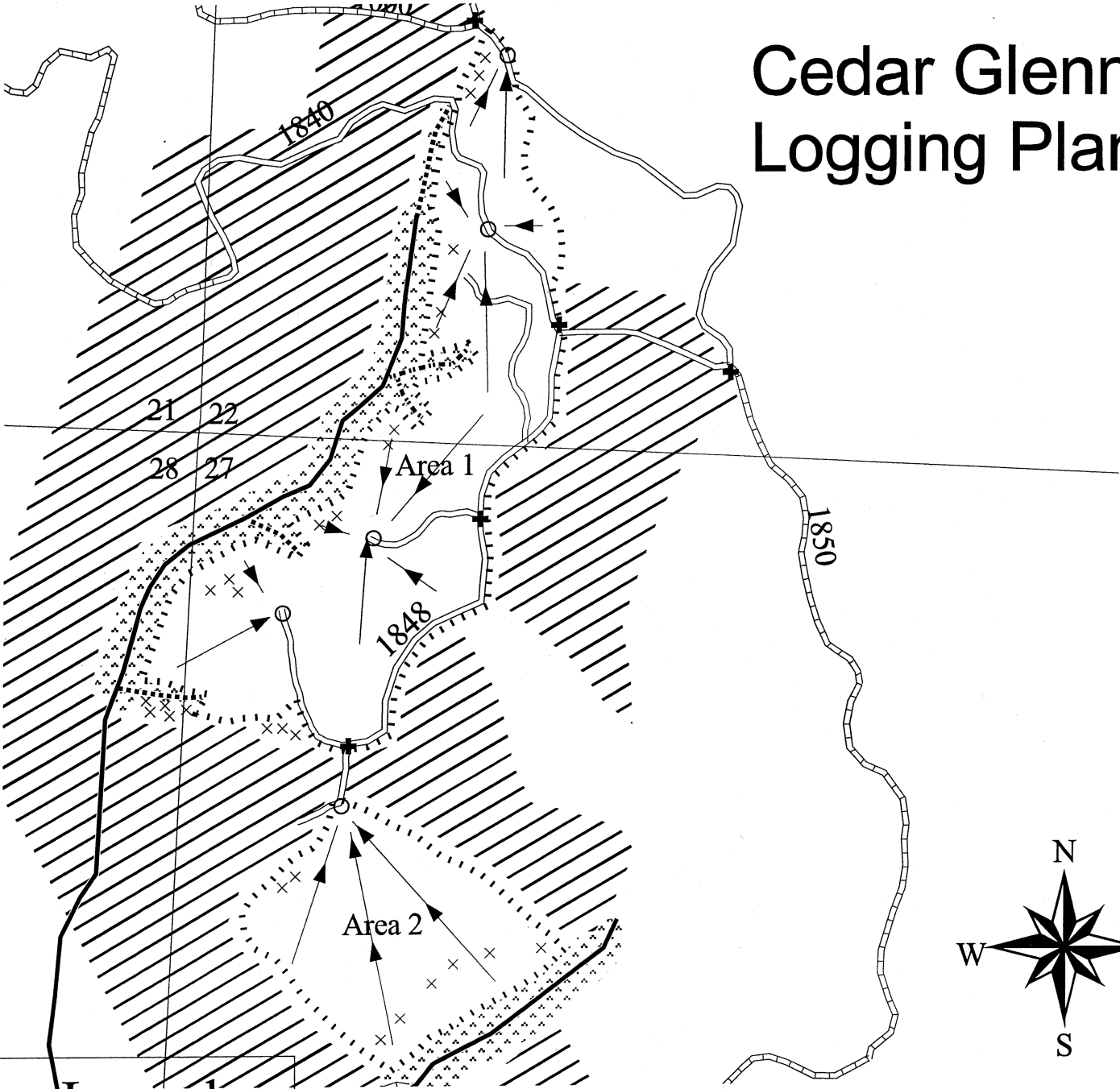
AREA II			
Species	Doug-fir	Hemlock	Hardwds
Field cull	5	2	
Hidden cl	2	2	Assigned
Breakage	2	3	15
Total	9	7	15

NET VOLUME BY MBF BY AREA*				
SPECIES AREA	Doug-fir	Hemlock	Hardwds	TOTALS BY AREA
I	3783	197	17	3997
II	1758	85	7	2031
TOTALS	5541	282	24	5847

NET VOLUME BY GRADE AND MBF *							
Grade >>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW/CR	
Doug-Fir	0	316	686	3300	1049	190	
Hemlock	0	0	0	0	0	282	
Hdwds						24	

GRADE DISTRIBUTION BY PERCENT							
Grade >>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW	
Doug-fir	0.00%	5.70%	12.39%	59.55%	18.93%	3.43%	
Hemlock	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	
Hdwds						100.00%	

Cedar Glenn Logging Plan



Legend

- Yarding Plan Section Lines
- Timber Sale Boundary
- Project Points**
- Landing
- Point for Project
- Access Roads**
- Purchaser Maintained
- STATE Maintained
- Stream Types**
- Fish Bearing
- Intermittent
- Perennial
- Stream Buffer
- Green Tree Retention
- Reforestation Areas

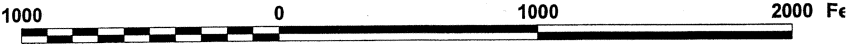
EXHIBIT "A"

OF TIMBER SALE CONTRACT NO.
 341-05-14
 CEDAR GLENN
 PORTIONS OF SECTIONS 22, 27 & 28; T23S, R10W, W.M.
 COOS AND DOUGLAS COUNTIES, OREGON

APPROXIMATE NET ACREAGE

AREA 1 = 55
 AREA 2 = 26
 TOTAL = 81

APPROX. SCALE 1" = 750'



WRITTEN PLAN

SALE NAME: Cedar Glenn

LOCATION: Portions of Sections 22, 27 and 28, T23S R10W, Coos and Douglas Counties, Oregon

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

CONTRACT PURCHASER: _____

NOTIFICATION NO: _____

SITUATION AND PROTECTED RESOURCE

The Cedar Glenn timber sale is located in the *Tyee Core Area*, on moderate to steep gradient slopes. Area 1 is adjacent to the upper reach of Cedar Creek, a Type F stream (native cutthroat) and Area 2 is adjacent to the upper reach of Glenn Creek, a Type F stream (native cutthroat).

LAYOUT

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

FELLING AND BUCKING

1. Felling shall not be allowed from April 1 to August 5.
2. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
3. High stumps shall be left as needed to prevent logs from entering stream channels as shown on the Exhibit "A"..

YARDING

1. Operator will use a machine and logging system capable of fully suspending logs.
2. Yarding shall not be allowed from April 1 to August 5.
3. Operator will fully suspend logs when sufficient deflection is available.
4. Any corridors needed within the RMA will be spaced a minimum of 100 feet apart.

SLOPE PROTECTION. Purchaser shall establish or maintain plant species that will enhance slope stability in harvested areas where needed to minimize the risk of erosion.

O.D.F. REPRESENTATIVE

DATE: _____

PURCHASER REPRESENTATIVE

DATE: _____

OPERATOR REPRESENTATIVE (if listed on notification)

DATE: _____

APPROVED BY: _____
FOREST PRACTICES/UNIT FORESTER

DATE: _____