



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Fish Divided Sale 341-06-69

District: Coos

Date: 1/23/06

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$4,928,233.52	\$85,261.14	\$5,013,494.66
		Project Work	(\$72,609.00)
		Advertised Value	\$4,940,885.66



Timber Sale Appraisal Timber Description Fish Divided Sale 341-06-69

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: T23S, R10W, Portions of Sections 4 and 5, Coos County, Oregon

Date: 1/23/06

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	23	0	95
Western Hemlock / Fir	15	0	90
Alder (Red)	13	0	85

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	741	0	0	741
SM	953	0	0	953
2S	6,459	0	25	6,484
3S	1,059	227	147	1,433
3S 12"+	1,376	0	0	1,376
4S	0	0	74	74
Total	10,588	227	246	11,061

Comments: Pond Values Used: 4th Quarter Calendar Year 2005.

Western Red Cedar Price = Pond Value minus Logging Costs.
 $\$715/\text{MBF} = \$800/\text{MBF} - \$85/\text{MBF}$

Hauling Costs Used: System currently uses hauling costs of \$460 daily truck cost. Additional hauling costs added in Other Costs (No P&R) to make equivalent to \$700 daily truck cost.

TOTAL Other Costs (Profit & Risk added): \$33,629

Felling -

Directional Felling = $\$2/\text{MBF} \times 1,000\text{MBF} = \$2,000$

Yarding and Loading -

Brand and Paint Logs = $\$1/\text{MBF} \times 11,089\text{MBF} = \$11,089$

Loader Time for Firewood Stacking = $\$75/\text{Hour} \times 10 \text{ Hours} = \750

Cull Sorting/Slash Piling on Landings = $\$125/\text{Landing} \times 11 \text{ Landings} = \$1,375$

Rig Lift Trees = $\$100/\text{Lift Tree} \times 3 \text{ Lift Trees} = \300

Snag Creation -

Tree Topping = $\$85/\text{Tree} \times 85 \text{ Trees} = \$8,500$

Miscellaneous Costs -

Additional Fire Equipment = $\$1,000/\text{Season} \times 2 \text{ Seasons} = \$2,000$

Stream Log Placement = $\$585.77/\text{Crossing} \times 13 \text{ Crossings} = \$7,615$

TOTAL Other Costs (No Profit & Risk added): \$254,112

Additional Hauling Costs = $\$24/\text{MBF} \times 10,588\text{MBF} = \$254,112$



Timber Sale Appraisal

Logging Conditions

Fish Divided

Sale 341-06-69

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
Yarding Distance:	Long (1,500 ft)		Downhill Yarding: No
Logging System:	Cable: Large Tower >=70		Process: Manual Delimiting
Tree Size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
Loads/Day:	12		Bd. Ft./Load: 4,800
Cost/MBF:	\$61.63		
Machines:			
	Log Loader (A)		
	Tower Yarder (Large)		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal

Logging Costs

Fish Divided

Sale 341-06-69

Date: 1/23/06

Operating Seasons: 1.0

Profit & Risk: 10%

Project Costs: \$72,609

Other Costs (P/R): \$33,629

Slash Disposal: \$0

Other Costs: \$254,112

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
2.2	1.1	3.7	0.0

Road Maintenance: \$0.00

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	4.5
Western Hemlock / Fir	\$0.00	2.0	4.5
Alder (Red)	\$0.00	2.0	3.5

Local Pond Values

Date	Species	Grade	Value
1/23/06	Douglas - Fir	3S 12"+	\$315.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Fish Divided Sale 341-06-69

Costs	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
Logging	61.63	61.63	61.63
Road Maintenance	2.93	3.10	3.28
Fire Protection	0.24	0.24	0.24
Hauling	53.79	56.78	77.29
Other (P/R appl.)	3.04	3.04	3.04
Profit & Risk	12.16	12.48	14.55
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	22.97	22.97	22.97
Total	158.76	162.24	185.00

Amortization	0.00	0.00	0.00
Pond Value	619.01	405.00	531.59
Stumpage	460.25	242.76	346.59
Amortized	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Fish Divided Sale 341-06-69

Amortized

	Douglas - Fir	Westem 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	Westem Hemlock / Fir	Alder (Red)
MBF	10,588.00	227.00	246.00
Value	460.25	242.76	346.59
Total	4,873,127.00	55,106.52	85,261.14

Gross Timber Sale Value

Recovery \$5,013,494.66

Prepared by: Ryan Greco

Date: 1/23/06

District: Coos

Phone: (541) 267-1755

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Fish Divided

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

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Felling				
Felling of unmerch material	MBF	0	\$ 1.00	\$ -
Directional Felling	MBF	1000	\$ 2.00	\$ 2,000.00
Yarding and Loading				
Artificial tailhold	anchor		\$ 500.00	\$ -
Artificial guyline support	anchor	0	\$ 500.00	\$ -
Brand and paint logs	MBF	11089	\$ 1.00	\$ 11,089.00
Loader time for firewood stacking	Hours	10	\$ 75.00	\$ 750.00
Cull sorting/slash piling on landings	landing	11	\$ 125.00	\$ 1,375.00
Rig lift trees	lift tree	3	\$ 100.00	\$ 300.00
Snag Creation				
Tree Topping	Trees	85	\$ 100.00	\$ 8,500.00
Miscellaneous Costs				
Additional Fire Equipment	Seasons	2	\$ 1,000.00	\$ 2,000.00
Maintenance rock per section 5	Cubic Yards	0	\$ 18.00	\$ -
Safety Flagging and/or signing	per day	0	\$ 150.00	\$ -
Stream Log Placement	per crossing	13	\$ 585.77	\$ 7,615.01

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

\$ 33,629.01



Additional "Other Cost" with no additional profit and Risk

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Non-required road construction	Stations			\$ -
Non-required road rocking	Cubic Yards			\$ -
Stream clearance	Feet			\$ -
Scaling (high piece count)	MBF		\$ 1.00	\$ -

Total additional "Other Cost" with no additional profit and Risk

\$ -

SUMMARY OF CONSTRUCTION COST

Fish Divided

Project 1A: Road Improvement - Area I

Points: A to I Length: 6500' Type: 14' subgrade no ditch

Excavation

Road brushing (excavator)	15	hrs at	\$120.00	per hour	\$1,800.00
Excavator (remove culvert past Pt I and remove slides/slumps 50+10-55+10)	30	hrs at	\$120.00	per hour	\$3,600.00
Cat time to shape road	30	hrs at	\$120.00	per hour	\$3,600.00
Dump Truck - haul material waste areas	15	hrs at	\$75.00	per hour	\$1,125.00
Drill and shoot to widen corner at Pt A	5	hrs at	\$150.00	per hour	\$750.00
Laborer	30	hrs at	\$30.00	per hour	\$900.00

Total Excavation \$11,775.00

Culvert Installation

Install 18" culvert (sta 50+30)	30	ft at	\$18.36	per ft	\$550.80
18" band	1	band at	\$10.80	per band	\$10.80

Total Culverts \$561.60

Grade and shape road surface

Grader time	3	hrs at	\$75.00	per hour	\$225.00
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Total Grader \$225.00

Total Project 1A: \$12,561.60

Project 1B: Road and Landing Improvement - Area I

Points: B to C Length: 300' Type: 14' subgrade no ditch

Excavator (includes brushing)	4	hrs at	\$120.00	per hour	\$480.00
Cat time for road and landing	4	hrs at	\$120.00	per hour	\$480.00
Laborer	4	hrs at	\$30.00	per hour	\$120.00
Grader to smooth road	1	hrs at	\$75.00	per hour	\$75.00

Total Project 1B: \$1,155.00

Project 1C: Road and Landing Improvement - Area II

Points: L to M Length: 500' Type: 14' subgrade no ditch

Excavation

Excavator to load material and to prep landing for waste material	8	hrs at	\$120.00	per hour	\$960.00
Cat time to shape road	4	hrs at	\$120.00	per hour	\$480.00
Laborer	4	hrs at	\$30.00	per hour	\$120.00
Dump Truck to haul old waste to Pt M	4	hrs at	\$75.00	per hour	\$300.00

Total Excavation \$1,860.00

**SUMMARY OF CONSTRUCTION COST
Fish Divided**

Grade and shape road surface

Grader time 1 hrs at \$75.00 per hour \$75.00

Total Grader \$75.00

Total Project 1C: \$1,935.00

Project 1D: Road Improvement - Area II

Points: P to S (7640 Rd) Length: 2,350' Type: 14' subgrade no ditch

Excavation

Excavator 10 hrs at \$120.00 per hour \$1,200.00
Cat time to shape road 20 hrs at \$120.00 per hour \$2,400.00
Laborer 20 hrs at \$30.00 per hour \$600.00

Total Excavation \$4,200.00

Grade and shape road surface

Grader to smooth road 2 hrs at \$75.00 per hour \$150.00

Total Grading \$150.00

Total Project 1D: \$4,350.00

ve-in

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Excavator	40	4.2	\$95.00	\$399.00
Cat	40	4.2	\$95.00	\$399.00
Grader	40	4.2	\$95.00	\$399.00
Dump Truck	40	4.2	\$95.00	\$399.00
Dump Truck	40	4.2	\$95.00	\$399.00
Drill & Comp	40	4.2	\$95.00	\$399.00

Total Move-in: \$2,394.00

Project 1 Total \$22,396.00

Project 2A: Road and Landing Construction - Area I

Points: D to E Length: 230' Type: 14' subgrade no ditch

Excavation

Excavator to remove stumps/small trees 4 hrs at \$120.00 per hour \$480.00
Cat time 5 hrs at \$120.00 per hour \$600.00
Laborer 5 hrs at \$30.00 per hour \$150.00

Total Excavation \$1,230.00

**SUMMARY OF CONSTRUCTION COST
Fish Divided**

Grader

Grader to smooth road surface 1 hrs at \$75.00 per hour \$75.00

Total Grader \$75.00

Total Project 2A: \$1,305.00

Project 2B: Road and Landing Construction - Area I

Points: F to G Length: 200' Type: 14' subgrade no ditch

Excavation

Excavator to remove stumps/small trees 4 hrs at \$120.00 per hour \$480.00
 Cat time 5 hrs at \$120.00 per hour \$600.00
 Laborer 5 hrs at \$30.00 per hour \$150.00

Total Excavation \$1,230.00

Grader

Grader to smooth road surface 1 hrs at \$75.00 per hour \$75.00

Total Grader \$75.00

Total Project 2B: \$1,305.00

Project 2C: Landing Construction - Area I

Points: H Length: n/a Type: n/a

Excavation

Excavator 5 hrs at \$120.00 per hour \$600.00
 Cat time 5 hrs at \$120.00 per hour \$600.00
 Laborer 5 hrs at \$30.00 per hour \$150.00

Total Excavation \$1,350.00

Total Project 2C: \$1,350.00

Project 2D: Landing Construction - Area I

Points: I Length: n/a Type: n/a

Excavation

Excavator 5 hrs at \$120.00 per hour \$600.00
 Cat time 5 hrs at \$120.00 per hour \$600.00
 Laborer 5 hrs at \$30.00 per hour \$150.00

Total Excavation \$1,350.00

Total Project 2D: \$1,350.00

SUMMARY OF CONSTRUCTION COST

Fish Divided

Project 2E: Road and Landing Construction - Area II

Points: J to K Length: 640' Type: 14' subgrade no ditch

Excavation

Excavator	10	hrs at	\$120.00	per hour	\$1,200.00
Cat time	20	hrs at	\$120.00	per hour	\$2,400.00
Drill and shoot	150	yds at	\$3.25	per yd	\$487.50
Laborer	25	hrs at	\$30.00	per hour	\$750.00

Total Excavation \$4,837.50

Grader

Grader to smooth road surface	1	hrs at	\$75.00	per hour	\$75.00
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Total Grader \$75.00

Total Project 2E: \$4,913.00

Project 2F: Road and Landing Construction - Area II

Points: N to O Length: 850' Type: 14' subgrade no ditch

Clearing and Grubbing (includes Cat and Excavator removing overburden and stumps)

4	hrs at	\$240.00	per hour	\$960.00
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Total clearing and grubbing: \$960.00

Excavation

Excavator	50	hrs at	\$120.00	per hour	\$6,000.00
Cat time (construction and waste area)	50	hrs at	\$120.00	per hour	\$6,000.00
Drill and shoot	930	yds at	\$3.50	per yd	\$3,255.00
Laborer	50	hrs at	\$30.00	per hour	\$1,500.00
Dump Truck to haul material to Pt M	50	hrs at	\$75.00	per hour	\$3,750.00

Total Excavation \$20,505.00

Grader

Grader to smooth road surface	1	hrs at	\$75.00	per hour	\$75.00
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Total Grader \$75.00

Total Project 2F: \$21,540.00

**SUMMARY OF CONSTRUCTION COST
Fish Divided**

Project 2G: Landing Construction - Area II

Points: Q Length: n/a Type: n/a

Excavation

Excavator	<u>5</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$600.00</u>
Cat time for excavation	<u>5</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$600.00</u>
Laborer	<u>5</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$150.00</u>

Total Excavation \$1,350.00

Total Project 2G: \$1,350.00

Project 2H: Landing Construction - Area II

Points: R Length: n/a Type: n/a

Excavation

Excavator	<u>5</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$600.00</u>
Cat time for excavation	<u>8</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$960.00</u>
Laborer	<u>8</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$240.00</u>

Total Excavation \$1,800.00

Total Project 2H: \$1,800.00

Project 2I: Landing Construction - Area II

Points: S Length: n/a Type: n/a

Excavation

Excavator	<u>40</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$4,800.00</u>
Cat time for excavation and to shape waste area	<u>40</u>	hrs at	<u>\$120.00</u>	per hour	<u>\$4,800.00</u>
Drill and shoot	<u>10</u>	hrs at	<u>\$150.00</u>	per hour	<u>\$1,500.00</u>
Laborer	<u>40</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$1,200.00</u>
Dump Truck to haul material to waste area at Point R	<u>40</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$3,000.00</u>

Total Excavation \$15,300.00

Total Project 2I: \$15,300.00

Project 2 Total \$50,213.00

Total Project Costs \$72,609.00

TIMBER SALE SUMMARY

Fish Divided

1. Type of Sale: Final Harvest, Recovery, Sealed Bid

2. Boundary Lines: Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, "Right of way Boundary" posters, red flagging, and red paint at locations shown on the Exhibit "A".

3. Revenue Distribution: 100% CSL, 100% Coos County.

4. Sale Acreage: The sale is comprised of five units totaling approximately 169 acres. Two of the units are Right Of Way for road construction. Sale acreage was determined from electronic digitizing using the ArcView GIS program. Interior road acres were accounted for by either including in the cruise or deducting from the expansion acreage.

5. Volume by Species, Fund and County. See Attached table titled Net Volumes and Acreages

6. Grade: (by Percent, all areas)

Species	3 Peeler %	Spec. Mill %	2 Saw %	3 Saw %	Big 3 Saw %	4 Saw %
Douglas-fir	7%	9%	61%	10%	13%	
Hemlock				100%		
Hardwoods			10%	60%		30%

7. Cruise: All areas of Fish Divided were variable plot cruised using a nested Big BAF plot method. The Big BAF method is a combination of count plots and individually measured trees. The plots were spaced 200 feet apart on cruise lines spaced 458 feet apart. A 360 BAF full plot at 16 feet was taken to determine which Douglas-fir trees would be fully measured.

A total of 59 Douglas-fir trees were fully measured for DBH, height, grade and defect. A 40 BAF full plot at 16 feet was used to determine tree counts and to measure minor species. A total of 83 count plots were measured. Cruising was done in October 2005 by ODF foresters.

A. Summary data:

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
D4H	6" DIB	Conifer: 16' Hardwood: 16'	Recorded for all cruised trees by estimate and measure	53%	6.7 %

B. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
Douglas Fir	23	92	258	62
Hemlock	15	9	12	1.3
Hardwoods	12	18	20	1

C. Green Tree Retention: There are twenty two (22) green tree reserve areas associated with this sale. The reserve areas consist primarily of fish bearing and perennial stream buffer extensions and trees left along seasonal drainages. The majority of the green tree retention is posted out of the sale boundary. There are

scattered trees in all areas that have been individually painted with red paint and are reserved from cutting. The table below summarizes reserve trees whose volume has been removed from the cruise. Stream buffers and GTR areas are mapped in Exhibit "A."

Sale Area	Douglas fir - MBF	Hemlock MBF	Hardwood MBF
Area 1	241	46	8
Area 2	161	7	2
Area 3	45	2	0.1

8. Timber Description: Timber in the sale area is stocked with mature 95 to 136 year-old Douglas-fir sawtimber and approximately 4 acres of 25 year old Douglas fir with minor amounts of western hemlock and red alder. Timber quality is good.

9. Topography: Area 1 has a dominant southerly aspect with some northwest faces while Area 2 is dominantly southerly with some northwest and easterly faces. Terrain is generally steep with gentler ground in Areas 1 and 2. Area 3 has a predominately northwest aspect with steeper slopes. Area 1 is bordered by Fish Creek to the south, and a Fish Creek tributary to the west. One small Fish bearing tributary to Fish creek enters the sale area, changing to a perennial stream 600' up the channel. Two other perennial streams are located in the southwest corner of area 1. Area 2 borders Cougar creek to the Southeast and a Cougar Creek tributary to the southwest. Nine perennial streams are located in Area 2 and are posted with Timber Sale Boundary Signs. Area 2 contains a rock cliff above the 7640 road that is marked with a 30' buffer and "Timber Sale Boundary" signs. Area 3 is bordered to the northwest by Cougar Creek and to the northeast by a Cougar Creek tributary. One perennial stream drains area 3 and is posted with "Timber Sale Boundary" signs and red paint. Locations of stream buffers and green tree retention areas are indicated on the Exhibit "A".

10. Logging Method: All areas are designed for cable logging. A small amount of Area 1 and 2 may be ground logged. Existing roads will be used for logging access on areas 1 and 2 and will require improvement. Final determination of landing locations and logging method must give priority to protection of stream buffers and green tree retention areas. Full suspension will be required while yarding over drainages and stream buffers, and full suspension will be maintained where possible over the remainder of the sale. Single end suspension will be utilized where full suspension is not possible. All areas are intended for dry season operation. Purchaser must comply with winter and wet weather option if operations are conducted during the wet season. The sale has been designed to be logged from eleven landings situated on or near the 7420 and 7640 roads. Area 3 will be logged from Point S in Area 2. Roads and landings are indicated on the Exhibit "A".

11. Access: From Coos Bay, take Highway 101 north to Reedsport, turn east and follow Highway 38 13.2 miles to the Loon Lake County Road. Proceed 6 miles to the 7700 road, turn west and go 2.1 miles to the 7000 road. Continue 1.3 miles northwest on the 7000 road until the 7600, turn south and proceed 2000 feet to the Timber Sale Area.

12. Projects:

Project No. 1: Road and landing improvement

Project No. 2: Road and landing construction

NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
			Coos			Douglas				
Area	Spec	CSL	BOF	Total	CSL	BOF	Total			
1	D-fir	4492		4492				4492	65	
	Hdwd	139		139				139	2	
	WH	67		67				67	1	
2	D-fir	5698		5698				5698	63	
	Hdwd	100		100				100	1	
	WH	153		153				153	2	
3	D-fir	387		387				387	43	
	Hdwd	7		7				7	1	
	WH	7		7				7	1	
4	D-fir	7		7				7	7	
	Hdwd	0		0				0	0	
	WH	0		0				0	0	
5	D-fir	4		4				4	4	
	Hdwd	0		0				0	0	
	WH	0		0				0	0	

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	10588	MBF
Hemlock	227	MBF
Hardwoods	246	MBF
Total	11061	MBF

Report by: Ryan Greco

Date: 12/21/2005

Unit For. None

Ryan Greco Dec 21, 05
Date

Asst. Dist. For. Greg Krueger

Greg Krueger 2005.12.23
Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS
NO INGROWTH INCLUDED**

ACREAGE BY COUNTY (to nearest acre)

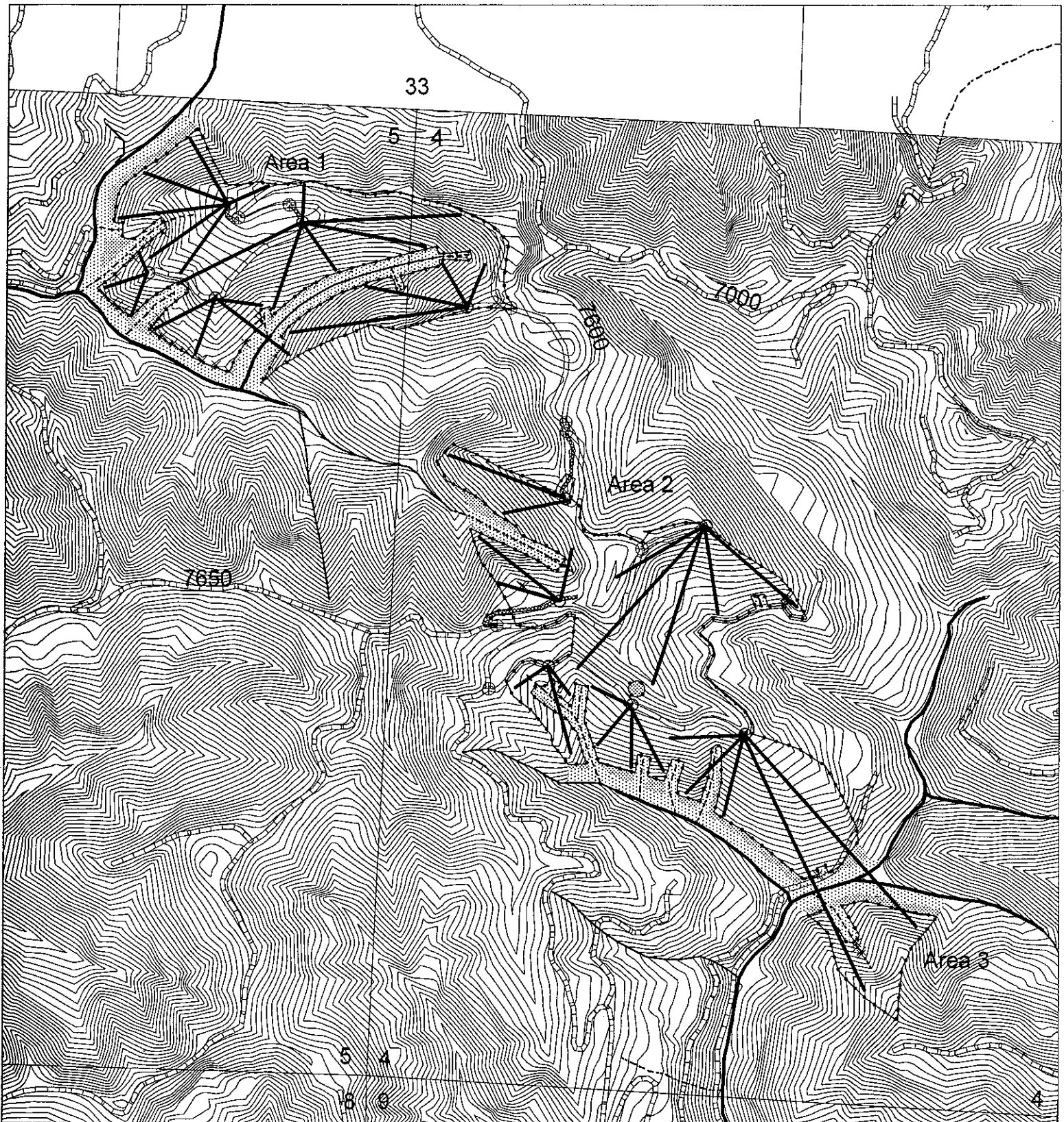
Sale Area	Coos County						Douglas County						TOTAL ACRES
	CSL		Hard wood	BOF		Hard woods	CSL		Hard woods	BOF		Hard woods	
	cc	pc		cc	pc		cc	pc		cc	pc		
1	69												69
2	91												91
3	9												9
4	<1												<1
5	<1												<1
SUM	169	0	0	0	0	0	0	0	0	0	0	0	169

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



- Sale Boundary
- Roads**
- Construct
- State Maintained
- Purchaser Maintained
- Project points**
- Landing
- Project Point
- Streams**
- Fish
- Nonfish
- Green Tree Retention
- Stream buffers



Approximate Net Acreage
 Area 1 - 69 acres
 Area 2 - 91 acres
 Area 3 - 9 acres
 Area 4 R/W - 1 acre
 Area 5 R/W - <1 acre
 Total - 169 harvest acres

Approx. Scale 1" = 1000'

1000 0 1000 2000 Feet



Logging Plan
 OF TIMBER SALE NO.
 341-06-69
 FISH DIVIDED

T23S, R10W, PORTIONS OF SECTIONS
 4 AND 5, W.M., COOS COUNTY, OREGON

The information shown on this map depicts approximate locations. Exact locations of features represented by map symbols shall be determined on site and shall depend upon the conditions that exist on site. Activities will be conducted based upon features determined on site rather than features shown on this map.