



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Fish Knife No. 2 Sale 341-04-84

District: Coos

Date: 1/9/04

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,376,475.48	\$25,872.00	\$1,402,347.48
		Project Work	(\$24,870.00)
		Advertised Value	\$1,377,477.48



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Timber Description Fish Knife No. 2 Sale 341-04-84

District: Coos

Location: Portions of Sec. 6, T23S, R10W, WM Coos County, OR

Date: 1/9/04

Stand Stocking: 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	27	0	95
Western Hemlock / Fir	17	0	95
Alder (Red)	16	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	236	0	0	236
SM	530	0	0	530
2S	1,766	0	0	1,766
3S	412	108	0	520
Camprun	0	0	60	60
Total	2,944	108	60	3,112

Comments: Pond Values Used: 4th Quarter 2003.

Regeneration harvest of approximately 42 acres of mature second growth Douglas-fir sawtimber.



Timber Sale Appraisal

Logging Conditions

Fish Knife No. 2

Sale 341-04-84

"STEWARDSHIP IN FORESTRY"

Combination#: 1 Douglas - Fir 95.00%
 Western Hemlock / Fir 95.00%
 Alder (Red) 95.00%

Yarding Distance: Medium (800 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)

Combination#: 2 Douglas - Fir 5.00%
 Western Hemlock / Fir 5.00%
 Alder (Red) 5.00%

Yarding Distance: Short (400 ft) **Downhill Yarding:** Yes
Logging System: Wheel Skidder **Process:** Manual Falling/Delimiting
Tree Size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
Loads/Day: 12 **Bd. Ft./Load:** 4,800
Cost/MBF: \$52.10

Machines:

 Log Loader (B)
 Tire Skidder



Timber Sale Appraisal Logging Costs Fish Knife No. 2 Sale 341-04-84

"STEWARDSHIP IN FORESTRY"

Date: 1/9/04

Operating Seasons: 1.0

Profit & Risk: 15%

Project Costs: \$24,870

Other Costs (P/R): \$16,373

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.5	0.4	0.0	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	3.0	3.5



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Fish Knife No. 2 Sale 341-04-84

Costs	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
Logging	61.15	61.15	61.15
Road Maintenance	0.38	0.38	0.40
Fire Protection	0.87	0.87	0.87
Hauling	53.79	53.79	48.67
Other (P/R appl.)	5.26	5.26	5.26
Profit & Risk	18.22	18.22	17.45
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	0.00
Other	0.00	0.00	0.00
Total	141.67	141.67	133.80

Amortization	0.00	0.00	0.00
Pond Value	601.03	365.00	565.00
Stumpage	459.36	223.33	431.20
Amortized	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary

Fish Knife No. 2 Sale 341-04-84

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	2,944.00	108.00	60.00
Value	459.36	223.33	431.20
Total	1,352,355.84	24,119.64	25,872.00

Gross Timber Sale Value

Recovery \$1,402,347.48

Prepared by: Jon Haynes

Date: 1/9/04

District: Coos

Phone: (541) 267-1758

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Fish Knife No. 2

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

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Felling				
Locate Corridors and Skid Roads	MBF		\$ 5.00	\$ -
Select Trees and Fall to Lead	MBF		\$ 5.00	\$ -
Small Tree Volume Cost addition	MBF		\$ 10.00	\$ -
Directional Felling/Tree Jacking	MBF	1000	\$ 2.00	\$ 2,000.00
Felling of unmerch material	MBF		\$ 1.00	\$ -
Yarding and Loading				
Clear chute at cable settings	MBF		\$ 3.00	\$ -
Brand and paint logs	MBF	3098	\$ 1.00	\$ 3,098.00
Cull sorting/slash piling on landings	landing	3	\$ 125.00	\$ 375.00
Rig lift trees	lift tree	5	\$ 100.00	\$ 500.00
Artificial guy anchors(dozer, skidder)	anchor	4	\$ 500.00	\$ 2,000.00
Log Processing at landing	MBF		\$ 10.00	\$ -
Skid Road Layout	MBF		\$ 5.00	\$ -
Non required Road Construction	Stations			\$ -
Miscellaneous Costs				
Additional fire equipment	Seasons		\$ 2,000.00	\$ -
Maintenance rock per section 54	Cubic Yards		\$ 18.00	\$ -
Safety Flagging and/or signing	per day			\$ -
Tree topping	per tree	84	\$ 100.00	\$ 8,400.00
Total additional "Other Cost" with additional profit and risk to be added				\$ 16,373.00

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		\$ 2.00	\$ -
Grass Seeding and Fertilizing	Ac			\$ -

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

\$ -

SUMMARY OF CONSTRUCTION COST

Fish Knife No. 2

Project No. 1A: Road and Landing Construction

Points: C to D Length: 240' Type: 14' no ditch

Clearing and Grubbing

0.4 acres at \$870.00 \$ per acre = \$348.00

Total clearing and grubbing \$348.00

Excavation

Cat excavation	10	hrs at	\$125.00	per hr	\$1,250.00
Excavation	5	hrs at	\$110.00	per hr	\$550.00
Laborer	10	hrs at	\$30.00	per hr	\$300.00

Total Excavation \$2,100.00

Grade Road Surface

1 hrs at \$75.00 per hour \$75.00

Total Grading \$75.00

Project 1A Total \$2,523.00

Project No. 1B: Road and Landing Construction

Points: G to H Length: 325' Type: 14' no ditch

Clearing and Grubbing

0.3 acres at \$870.00 \$ per acre = \$261.00

Total clearing and grubbing \$261.00

Excavation

Drill and Shoot	200	cubic yds at	\$3.00	per cu yd	\$600.00
Cat excavation and shape fill material	20	hrs at	\$125.00	per hr	\$2,500.00
Excavator time	5	hrs at	\$110.00	per hr	\$550.00
Laborer	20	hrs at	\$30.00	per hr	\$600.00

Total Excavation \$4,250.00

Project 1B Total \$4,511.00

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
Drill & Comp	35	0.74	\$241.00	\$178.34

Total Move-In \$1,145.52

Project 1 Cost \$8,179.52

**SUMMARY OF CONSTRUCTION COST
Fish Knife No. 2**

Project 2A: Road and Landing Improvement

Points	A to B	Length:	1030'	Type:	14' no ditch			
Cat time for re-shaping road surfaces		4	hrs at	\$125.00	per hour	\$500.00		
Smooth Road Surfaces (Grader)		1	hrs at	\$75.00	per hour	\$75.00		
							Project 2A Total	\$575.00

Project 2B: Road and Landing Improvement

Points	E to F	Length:	1080'	Type:	14' no ditch			
Cat time for clearing landing at Pt F		1	hrs at	\$125.00	per hour	\$125.00		
Smooth Road Surfaces (Grader)		2	hrs at	\$75.00	per hour	\$150.00		
							Project 2B Total	\$275.00
							Project 2 Cost	\$850.00

Project 3: Dry Ridge Rock Stockpile

Location:	7.5 mi on 2000 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 (1.7 hr. RT):	\$5.67	per cu yd	
Piling and shaping cost per cubic yard:	\$0.53	per cu yd	
Total cost per cubic yard:	\$13.20	per cu yd	
Total cubic yards:	1200	cubic yards	
Total Cost for Stockpile rock:	\$15,840.00		

Project 3 Cost \$15,840.00

Total Project Costs \$24,869.52

**Volume Summary
Points C to D**

Station		Horz. Dist.	End area		Double end area		Cubic Yards		% Rock	Rock	Unclass
Index	Distance		Cut	Fill	Cut	Fill	Cut	Fill			
1	0	18	4.3	0	26.1	14.9	9	5		0	9
2	18	14.8	21.8	14.9	42.8	21.7	12	6		0	12
3	32.8	18	21	6.8	31	15.6	10	5		0	10
4	50.8	20.7	10	8.8	25.6	24	10	9		0	10
5	71.5	30.5	15.6	15.2	20.5	19.6	12	11		0	12
6	102	16	4.9	4.4	15.7	5.8	5	2		0	5
7	118	12.7	10.8	1.4	15	12.6	4	3		0	4
8	130.7	25.2	4.2	11.2	266.2	146.4	124	68		0	124
9	155.9	22.2	262	135.2	521.5	306.7	214	126		0	214
10	178.1	34.6	259.5	171.5	335.7	406.4	215	260		0	215
11	212.7	30.8	76.2	234.9	76.2	234.9	43	134		0	43
12	243.5	0	0	0	0	0	0	0		0	0
							658	630		0	658

	Bank Cubic Yards			Expanded Cubic Yards	
	Cut	Fill		Cut	Fill
Rock	0		1.4	0	0
Commor	658	630	1.3	855	819
			Total	855	819

Endhaul 36

TIMBER SALE SUMMARY

Fish Knife No. 2

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

2. Boundary Lines: Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red 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 approximately 42 acres. Sale acreage was determined from electronic digitizing using the ArcView GIS program and deductions were made for existing interior roads.

Posted Acres	Interior Road Acres	Net Cruise Acres	Net Harvest Acres
44.7	2.9	41.8	41.8

5. Volume by Species, Fund and County. See Attached table.

6. Grade: (by Percent)

Species	3 Peeler %	Spec. Mill %	2 Saw %	3 Saw %	4 Saw/Camprun %
Douglas-fir	8 %	18 %	60 %	14 %	0 %
Hemlock				100 %	0 %
Hardwoods					100 %

7. Cruise: The sale area was variable plot cruised using a nested Big BAF plot method. The Big BAF method is a combination of count plots and individually measured trees on seventy-four (74) nested plots. The plots were spaced 2 chains apart on cruise lines spaced 3 chains apart. At each plot center a 360 BAF full plot at 16 feet was taken to determine which Douglas-fir trees would be fully measured. A total of 49 Douglas-fir trees were fully measured for DBH, height, grade and defect. At the same plot centers a 40 BAF full plot at 16 feet was used to determine tree counts and to measure minor species. Cruising was done in September 2003 by ODF foresters J. Haynes, C. Rudd, and G. Clary.

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	62 %	7.2 %

B. Defect and Breakage Summary:

BY PERCENT

SPECIES	CRUISED DEFECT	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	2	4	4	10
HEMLOCK	0	6	4	10
HARDWOODS	0	15	--	15

C. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	27	68	264	79
HEMLOCK	17	20	30	3
HARDWOODS	16	15	21	2

D. Green Tree Retention: This sale has been prepared under the Wildlife Emphasis option of the Elliott Management plan which provides for additional green tree retention. There are eighteen (18) green tree reserve areas associated with this sale. Areas 1-10 are extensions of riparian buffers and have been posted out of the sale area with "Timber Sale Boundary" posters, red flagging and red paint. Areas A-G are pods, clusters, and scattered trees located on the upland portions of the sale. Areas A and B were posted out of the sale area. Areas C-G consist of individually marked blue or red painted trees and their volume has been removed from the cruise. There are a few scattered large diameter legacy Douglas-fir trees marked for retention that were not cruised.

GTR Area	D-fir Count	D-fir MBF	Hemlock Count	Hemlock MBF	Hdwd Count	Hdwd MBF
AREA C	4	5.3	0	0	0	0
AREA D	12	35.2	22	8.3	14	1.9
AREA E	6	1.8	10	7.5	6	.9
AREA F	13	47.2	8	1.2	23	3.1
AREA G	3	2.0	3	.8	0	

8. Timber Description: Timber in sale area is even-aged and medium to well stocked with mature 92-110 year-old Douglas-fir sawtimber with minor amounts of western hemlock and patches of red alder. Timber quality is good to very good.

9. Topography: The sale area occupies the headwaters of a unnamed Type N tributary to Knife Creek. The south half of the sale has moderate to steep north facing slopes of 50% to over 70%, with several side drainages. The north half has slightly gentler south facing slopes with some benchy areas. The streams and drainages within the sale area are classed as Type N perennials or Type N seasonals. In accordance to the Northwest Riparian Strategy, stream buffers have been posted along all drainages exhibiting a channel whether flowing or dry. Buffer lengths extend to encompass at least 75 percent of the length of each drainage. Buffer widths per side can range in size from 50 feet to 160 feet in order to capture the required number of trees (40 trees/1000 feet of reach for Type N perennials and 15 trees/1000 feet of reach for Type N seasonals). In accordance to the Elliott HCP, buffer trees above 50 feet on Type N perennials and all buffer trees on Type N seasonals are counted as green tree retention. Additional green tree retention is located in pods, clusters, and scattered trees on the upper slopes of the sale area. Locations of stream buffers and green tree retention areas are indicated on the Exhibit "A".

10. Logging Method: The majority of the sale area will be cable logged uphill from new landings at Points D and G-H located on existing dirt roads along the north and south boundaries. Existing landings at Points B and F may be used to log the northwest and southwest corners of the sale. A small portion of gentle ground in the north portion may be tractor yarded when soil conditions permit. 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. This sale is intended for dry season operation. Purchaser must comply with winter and wet weather options if operations are conducted during the wet season.

11. Access: To access the timber sale area from the west, take the Lakeside exit off Highway 101, continue east on North Lake Road to the 4000 road (Benson Ridge Road). Continue on the 4000 road for 7.5 miles to the 2000 road. Continue north of the 2000 to the 7000 road. Continue east on the 7000 road for approximately 4 miles to the junction of the 7300 road. Continue south on the 7300 for approximately 1 mile into the sale area. To access from the north, take the Loon Lake Rd (Mill Creek Road) from Highway 38 and continue for approx 1.7 miles to the 7500 road. Turn west onto the 7500 and follow the road uphill to the 7000 junction. Continue west on the 7000 road for approximately 1 mile to the 7300 road.

12. Projects: See attached "Project Cost Summary Sheet"

Project No. 1: Road Construction

Project No. 2: Road and Landing Improvement

Project No. 3: Rock Stockpile Delivery

NET VOLUMES AND ACREAGE

Fish Knife No. 2

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
			Coos			Douglas				
Areas	Spec		FRA	FDF	Total	FRA	FDF	Total		
	D-fir		2944		2944			0	2944	70.1
	Hem		108		108			0	108	2.6
	Hdwd		60		60			0	60	1.4
TOTALS			3112	0	3112	0	0	0	3112	

TOTAL SALE VOLUME BY SPECIES

Douglas-fir 2944 MBF
 Hemlock 108 MBF
 Hdwd 60 MBF

Report by: J. HAYNES

Date: 12/29/2003

Unit For. None Date Dec 29, 03

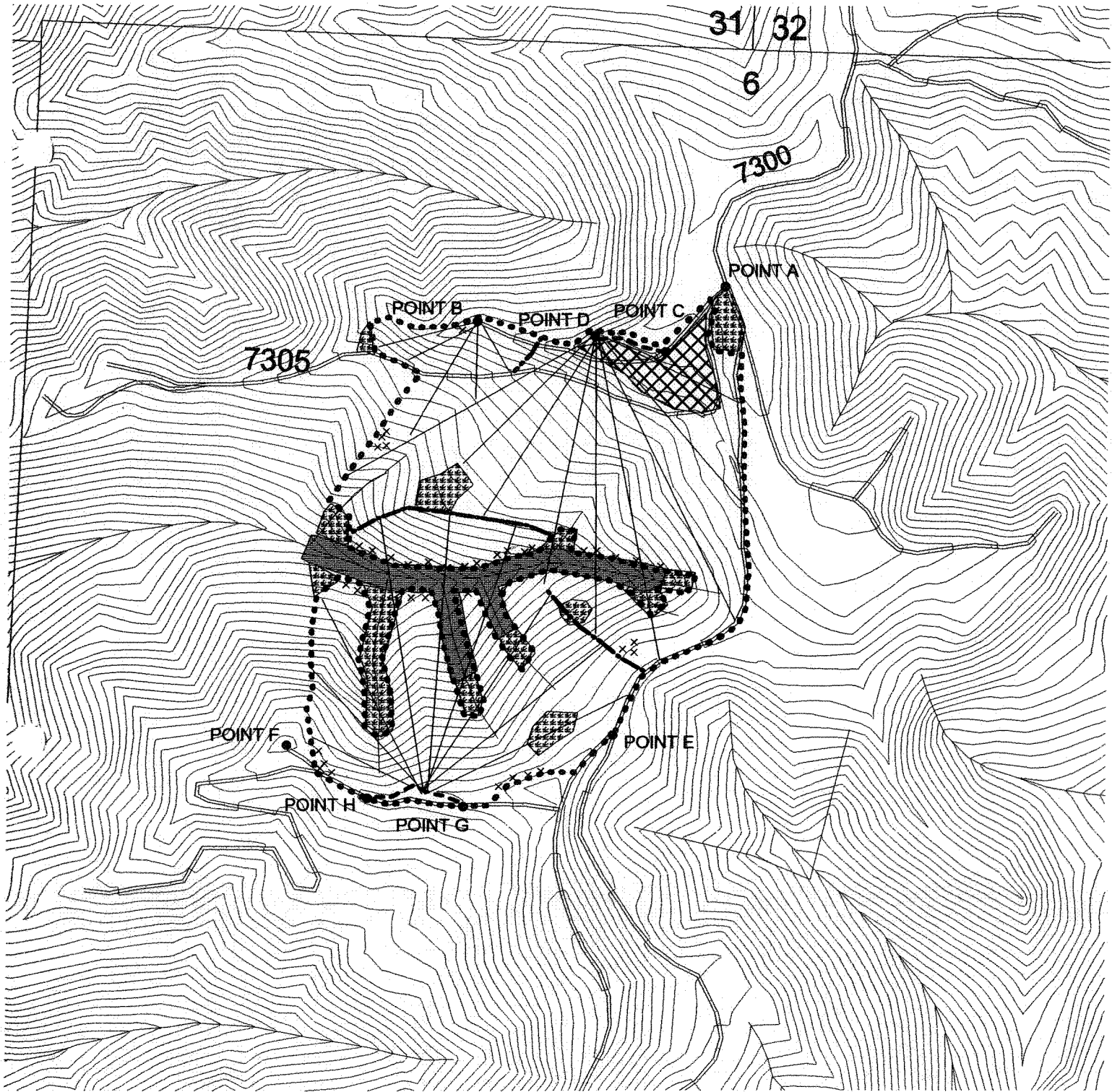
Asst. Dist. For. _____ Date _____








**WILDLIFE EMPHASIS UNIT. RED CEDAR AND BIGLEAF MAPLE EXCEPT FROM FELLING.
 NO INGROWTH INCLUDED.**

NET HARVEST ACREAGE BY COUNTY (to nearest acre)

Sale Area	Coos County						Douglas County						TOTAL ACRES
	FRA			FDF			FRA			FDF			
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods	
	cc	pc		cc	pc		cc	pc		cc	pc		
	42												42
SUM	42	0	0	0	0	0	0	0	0	0	0	0	42

cc- clearcut pc- partial cut FDF- Forest Development Fund FRA- Forest Revenue Account



-  Sale boundary
-  Setting boundary
-  Cable landing or project point
-  Tractor yard
-  New road construction
-  Roads
-  Streams and drainages
- Green tree retention area
- Individual green tree retention

Fish Knife No. 2 Logging Plan

500 0 500 Feet



scale 1" = 500 feet

20 foot contour interval

