



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

---

**cost summary**

	<b>Conifer</b>	<b>Hardwood</b>	<b>Total</b>
<b>Gross Timber Sale Value</b>	\$1,016,801.92	\$11,844.18	\$1,028,646.10
		<b>Project Work:</b>	\$(241,379.00)
		<b>Advertised Value:</b>	\$787,267.10



Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

"STEWARDSHIP IN FORESTRY"

District: Coos

Date: June 03, 2009

**timber description**

Location: Portions of Sections 11 and 12, T23S, R11W, W.M., Coos County, Oregon.

Stand Stocking: 80%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	27	0	95
Western Hemlock / Fir	18	0	95
Alder (Red)	15	0	90

Volume by Grade	2S	2S 12'+	3P	3S	3S 10' -	4S 8" - 9'	6" - 7"	SM	Total
Douglas - Fir	2,636	0	78	891	0	0	0	271	3,876
Western Hemlock / Fir	0	0	0	98	0	0	0	0	98
Alder (Red)	0	20	0	0	9	13	16	0	58
Total	2,636	20	78	989	9	13	16	271	4,032



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

---

comments: Pond Values Used: 1st Quarter Calendar Year 2009 + Local Pond Values.

Regeneration harvest of approximately 65 acres of 80-127 year-old predominately Douglas-fir sawtimber.

Western Redcedar Stumpage Price = Pond Value minus Logging Cost  
 $\$556.65/\text{MBF} = \$710/\text{MBF} - \$153.35/\text{MBF}$

SCALING COST ALLOWANCE =  $\$5.00/\text{MBF}$

FUEL COST ALLOWANCE =  $\$3.00/\text{Gallon}$

HAULING COST ALLOWANCE

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

Other Costs (with Profit & Risk to be added):

FELLING:

Directional Felling/Tree Jacking: 150 trees @  $\$2/\text{each} = \$300$

YARDING & LOADING

Brand and Paint Logs:  $\$1/\text{MBF} \times 4,032 \text{ MBF} = \$4,032$

Cull Sorting/Slash Piling:  $\$200/\text{landing} \times 4 \text{ landings} = \$800$

Rig Lift Trees:  $\$100/\text{tree} \times 8 \text{ trees} = \$800$

Artificial Guy Anchors (Dozer/Skidder):  $\$500 \text{ each} \times 2 \text{ anchors} = \$1,000$

Log Placement into Streams (Exhibit I):  $\$576/\text{crossing} \times 7 \text{ crossings} = \$4,032$

MISCELLANEOUS COSTS:

Tree topping and girdling:  $\$100/\text{tree} \times 32 \text{ trees} = \$3,200$

Backhoe move-in for pullback & cleanup:  $\$100/\text{hr} \times 3 \text{ hrs} = \$300$

Backhoe time for pullback & cleanup:  $\$100/\text{hr} \times 4 \text{ hrs} = \$400$

TOTAL Other Costs (with Profit & Risk to be added) =  $\$14,864$

Other Costs (No Profit & Risk to be added):

None.



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

---

**logging conditions**

**combination#:** 1      Douglas - Fir      100.00%  
                                 Western Hemlock / Fir      100.00%  
                                 Alder (Red)      100.00%

**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:** 12.0      **bd. ft / load:** 5,000  
**cost / mbf:** \$61.56

**machines:** Log Loader (A)  
                 Tower Yarder (Large)



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

**logging costs**

Operating Seasons:	1.00	Profit Risk:	10.00%
Project Costs:	\$241,379.00	Other Costs (P/R):	\$14,864.00
Slash Disposal:	\$0.00	Other Costs:	\$0.00

**Miles of Road**

Road Maintenance: \$0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
1.0	1.0	0.0	0.0

**Hauling Costs**

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	5.0
Western Hemlock / Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	2.0	3.5

**Local Pond Values**

Date	Specie	Grade	Value
6/3/09	Douglas - Fir	3P	\$600.00
6/3/09	Douglas - Fir	SM	\$480.00
6/3/09	Douglas - Fir	2S	\$440.00
6/3/09	Douglas - Fir	3S	\$300.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

**logging costs breakdown**

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
<b>Douglas - Fir</b>									
\$61.56	\$1.70	\$1.09	\$66.82	\$3.69	\$13.49	\$0.00	\$5.00	\$0.00	\$153.35
<b>Western Hemlock / Fir</b>									
\$61.56	\$1.70	\$1.09	\$83.52	\$3.69	\$15.16	\$0.00	\$5.00	\$0.00	\$171.72
<b>Alder (Red)</b>									
\$61.56	\$1.78	\$1.09	\$100.00	\$3.69	\$16.81	\$0.00	\$5.00	\$0.00	\$189.93

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$413.83	\$260.48	\$0.00
Western Hemlock / Fir	\$0.00	\$245.00	\$73.28	\$0.00
Alder (Red)	\$0.00	\$394.14	\$204.21	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Lower Deer  
Sale 341-10-30

District: Coos

Date: June 03, 2009

**summary**

**Amortized**

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

**Unamortized**

Specie	MBF	Value	Total
Douglas - Fir	3,876	\$260.48	\$1,009,620.48
Western Hemlock / Fir	98	\$73.28	\$7,181.44
Alder (Red)	58	\$204.21	\$11,844.18

**Gross Timber Sale Value**

Recovery: \$1,028,646.10

Prepared by: Jon Haynes

Phone: 541-267-1758

## Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Lower Deer

**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>
<b>Felling</b>				
Locate Corridors and Skid Roads	MBF		\$ 5.00	\$ -
Select Trees and Fall to Lead	MBF		\$ 5.00	\$ -
Small Tree Volume Cost addition	MBF	0	\$ 10.00	\$ -
Directional Felling/Tree Jacking	MBF	150	\$ 2.00	\$ 300.00
Felling of unmerch material	acre	0	\$ 80.00	\$ -
<b>Yarding and Loading</b>				
Clear chute at cable settings	MBF		\$ 3.00	\$ -
Brand and paint logs	MBF	4032	\$ 1.00	\$ 4,032.00
Cull sorting/slash piling on landings	landing	4	\$ 200.00	\$ 800.00
Rig lift trees	lift tree	8	\$ 100.00	\$ 800.00
Artificial guy anchors(dozer, skidder)	anchor	2	\$ 500.00	\$ 1,000.00
Log placement into streams (Exhibit I)	crossing	7	\$ 576.00	\$ 4,032.00
Skid Road Layout	MBF		\$ 5.00	\$ -
Non required Road Construction	Stations			\$ -
<b>Miscellaneous Costs</b>				
Additional fire equipment (winter show)	Seasons	0	\$ 2,000.00	\$ -
Maintenance rock (Section 2130)	yards	0	\$ 25.00	\$ -
Safety Flaggers and signing	per day	0	\$ 150.00	\$ -
Tree topping/girdling	per tree	32	\$ 100.00	\$ 3,200.00
Equipment move-in for pullback & cleanup	per hr	3	\$ 100.00	\$ 300.00
Equipment time for pullback & cleanup	per hr	4	\$ 100.00	\$ 400.00
<b>Total additional "Other Cost" with additional profit and risk to be added</b>				<b>\$ 14,864.00</b>

**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	\$ -
				\$ -
<b>Total additional "Other Cost" with no additional profit and Risk</b>				<b>\$ -</b>



**SUMMARY OF CONSTRUCTION COST**  
**Lower Deer**

**Project 1A: Road and Landing Construction**

Points: A to B      Length: 1400'      Type: 14' w/ditch

Excavator (includes standby while drilling)	130	hrs at	\$125.00	per hour	\$16,250.00
Cat time (includes time for waste area)	120	hrs at	\$120.00	per hour	\$14,400.00
Drill and Shoot	60	hrs at	\$250.00	per hour	\$15,000.00
Dump Truck - haul 2.7 mi RT to Point H	120	hrs at	\$100.00	per hour	\$12,000.00
Dump Truck - haul 2.7 mi RT to Point H	120	hrs at	\$100.00	per hour	\$12,000.00
Grader	2	hrs at	\$80.00	per hour	\$160.00
Laborer	130	hrs at	\$35.00	per hour	\$4,550.00
3 - 18" culverts (includes installation)	100	ft at	\$17.00	per ft	\$680.00
18" bands	3	bands at	\$19.00	per band	\$19.00

**Total Project 1A:      \$75,059.00**

**Project 1B: Road and Landing Construction**

Points: C to D      Length: 200'      Type: 14' w/ditch

Excavator	50	hrs at	\$125.00	per hour	\$6,250.00
Cat time (includes time for waste area)	50	hrs at	\$120.00	per hour	\$6,000.00
Drill and Shoot	25	hrs at	\$250.00	per hour	\$6,250.00
Dump Truck - haul 2.7 mi RT to Point H	50	hrs at	\$100.00	per hour	\$5,000.00
Dump Truck - haul 2.7 mi RT to Point H	50	hrs at	\$100.00	per hour	\$5,000.00
Grader	1	hrs at	\$80.00	per hour	\$80.00
Laborer	50	hrs at	\$35.00	per hour	\$1,750.00

**Total Project 1B:      \$30,330.00**

**Project 1C: Landing Construction**

Point: E      Length: n/a      Type: n/a

Excavator	45	hrs at	\$125.00	per hour	\$5,625.00
Cat time (includes time for waste areas)	40	hrs at	\$120.00	per hour	\$4,800.00
Drill and Shoot	25	hrs at	\$250.00	per hour	\$6,250.00
Dump Truck - haul to Point F	15	hrs at	\$100.00	per hour	\$1,500.00
Dump Truck - haul 2.8 mi RT to Point H	40	hrs at	\$100.00	per hour	\$4,000.00
Dump Truck - haul 2.8 mi RT to Point H	40	hrs at	\$100.00	per hour	\$4,000.00
Laborer	45	hrs at	\$35.00	per hour	\$1,575.00

**Total Project 1C:      \$27,750.00**

**Project 1D: Waste Area Preparation (includes road from G to H)**

Point: H      Length: n/a      Type: n/a

Excavator	10	hrs at	\$125.00	per hour	\$1,250.00
Cat time	10	hrs at	\$120.00	per hour	\$1,200.00

**Total Project 1D:      \$2,450.00**

**SUMMARY OF CONSTRUCTION COST  
Lower Deer**

**Initial Move-in**

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Grader	40	3.5	\$95.00	\$332.50
Excavator	40	4.5	\$95.00	\$427.50
Cat	40	4.5	\$95.00	\$427.50
Drill & Comp	40	3.5	\$95.00	\$332.50
Dump Truck	40	3.5	\$95.00	\$332.50
Dump Truck	40	3.5	\$95.00	\$332.50

**Total Move-in: \$2,185.00**

**Project 1 Total \$137,774.00**

**Project 2A: Additional Mobilization**

Additional mobilization that may be necessary due to the seasonal restrictions in construction area.

.....\$3,706.00

**Total Project 2A: \$3,706.00**

**Project 2B: Additional Mobilization**

Additional mobilization that may be necessary due to the seasonal restrictions in construction area.

.....\$3,706.00

**Total Project 2B: \$3,706.00**

**Project 2 Total \$7,412.00**

**Project 3A: Road Surfacing**

Points: A to B      Rock Type: 2 1/2"-0" Hard Crushed Quarry  
Length: 1300'      Depth: 8" compacted      55.6 yds/STA

2 1/2"-0" Rock (3.2 hr RT)	738	yds at	.....\$26.46	per yd	.....\$19,527.48
Processing (Grader and Roller)	738	yds at	.....\$2.00	per yd	.....\$1,476.00

Points: C to D      Rock Type: 2 1/2"-0" Hard Crushed Quarry  
Length: 100'      Depth: 8" compacted      55.6 yds/STA

2 1/2"-0" Rock (3.2 hr RT)	54	yds at	.....\$26.46	per yd	.....\$1,428.84
Processing (Grader and Roller)	54	yds at	.....\$2.00	per yd	.....\$108.00

Points: Landings at B, D and E  
Rock Type: Jaw Run      Amount: 54 yds/landing

Jaw Run Rock (3.2 hr RT)	162	yds at	.....\$26.46	per yd	.....\$4,286.52
--------------------------	-----	--------	--------------	--------	-----------------

**SUMMARY OF CONSTRUCTION COST  
Lower Deer**

**Move-in**

Equipment	Miles	hrs	Lowboy Rate/hr	Total
Grader	40	3.5	\$95.00	\$332.50
Roller	40	3.5	\$95.00	\$332.50

**Total Move-in            \$665.00**

**Total Project 3A:            \$27,492.00**

**Project 3B: Road Surfacing for after construction**

Point:        E

1 1/2" rock for maintenance on 7100 rd        54        yds at        \$24.68        per yd        \$1,332.72  
for after new const at Pt E (2.8 hr RT)

**Total Project 3B:            \$1,333.00**

**Project 3C: Road Surfacing for after construction**

Points:        A to G

1 1/2" rock for maintenance on 7100 rd        300        yds at        \$24.68        per yd        \$7,404.00  
for after waste hauling to Pt H (2.8 hr RT)

**Total Project 3C:            \$7,404.00**

**Project 3D: Road Surfacing Haul Route during Log Haul**

Points:        I to J (7100 Rd)        Rock Type:        1 1/2"-0" Hard Crushed Quarry  
Length:        22,155'        Depth:            As needed during log hauling

1 1/2"-0" Rock for maintenance (2.8 hr RT)        1200        yds at        \$24.68        per yd        \$29,616.00

**Total Project 3D:            \$29,616.00**

**Project 3 Total                \$65,845.00**

**Project 4: Rock Stockpile**

Location:        Umpcoos (6000/7000 jct)  
Measured amount:        1200 cu yds  
Size:            1 1/2" - 0"

Cost per cu yd at crusher:                                \$12.24        per yd

Haul cost per cu yd (2.6 hr RT):                                \$11.55        per yd

Piling and shaping cost per cu yd:                                \$1.50        per yd

**Total cost per cu yd:                                \$25.29        per yd**

**Total cu yds:    1200        yards**

**Total Cost for Stockpile rock:                                \$30,348.00**

**Project 4 Total                \$30,348.00**

**Total Project Costs            \$241,379.00**

# TIMBER SALE SUMMARY

## Lower Deer

**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 approximately 65 acres. Sale acreage was determined from electronic digitizing using the ArcView GIS program and deductions were made for existing interior roads and rocky / non-stocked areas.

	Posted Acres	Interior Road Acres	Non-Stocked Acres	Net Cruise Acres	Net Harvest Acres
Sale Area	67.9	2.7	2.0	63.2	65

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

**6. Grade:** (by Percent,)

Species	3 Peeler %	Special Mill %	2 Saw (12"+) %	3 Saw %	10"-11" Hardwood	8"-9" Hardwood	6"-7" Hardwood
Douglas-fir	2 %	7 %	68 %	23 %			
Hemlock				100 %			
Hardwoods			35 %		16 %	22 %	27 %

**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. The plots were spaced 2 chains apart on cruise lines spaced 4 chains apart across the entire sale area. A 360 BAF full plot at 16 feet was taken to determine which Douglas-fir trees would be fully measured. A total of 57 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 for all species. Minor species were measured on every third plot. A total of 76 count plots were installed. Cruise data was gathered using Superace cruising technique. Cruising was done in October 2008 by ODF foresters M. Wells, J Haynes, G. Clary, and N. Kline.

A. Summary data (Sale Area):

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
D4H	6" DIB	All species: 16'	Recorded for all cruised trees by estimate and measure	46 %	6.0 %

B. Defect and Breakage Summary (Sale Area):

BY PERCENT

SPECIES	CRUISED DEFECT	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	3	5	6	14
HEMLOCK	0	7	7	14
HARDWOODS	0	8	7	15

C. Stand Data (Sale Area):

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	27	64	256	59.6
HEMLOCK	18	9	16	1.5
HARDWOODS	15	11	14	.9

D. Green Tree Retention: There are nine (9) green tree reserve areas associated with this sale that are reserved from cutting. These areas consist of perennial stream buffer extensions and intermittent stream buffers posted out of the sale boundary. These areas were not included in the cruise. Within the western portion of the sale area there are scattered individual trees marked with red paint. These scattered trees are primarily remnant trees from before the 1868 fire and are located adjacent to the stream buffers along the west and north boundaries. The older remnant trees marked for retention were not cruised and therefore were not subtracted from the cruise volume. In addition, this sale will be used as a source of logs for a fish log placement into Deer Creek. The volume of these fish logs has also been removed from the cruise. The table below summarizes the green tree retention areas and the volume that has been removed from the cruise.

GTR Area	D-fir Count	D-fir MBF removed from cruise	Hemlock/ Cedar Count	Hemlock/ Cedar MBF removed from cruise	Hdwd Count	Hdwd MBF removed from cruise
Intermittent Stream Buffers / Perennial Stream Buffer Extensions	164	3.0	38	.9	112	
Scattered Upland	9					
Fish Log Placement		22.0				
TOTALS	173	25.0	38	.9	112	

**8. Timber Description:** The sale area is 65 acres and is comprised of 4 different timber types ranging in age from 80 to 127 years old. The vast majority of the sale is well stocked with 96 year old Douglas-fir with an understory of western hemlock and patches of red alder. The western portion above Deer Creek contains a medium stocked strip of 127 year old Douglas-fir and a small portion of well stocked 80 year old Douglas-fir. The southeastern part of the sale contains several acres of medium stocked 85 year old Douglas-fir. Red alder, bigleaf maple and redcedar are scattered throughout the sale area and are concentrated in the stream buffers. Timber quality is average to good. Some conk was detected in the southwestern part of the sale area. The cruise expansion acres include only the timbered acres and not existing roads, rock, or non-stocked areas.

**9. Topography:** The sale area is primarily south and west facing with steep slopes over 70 percent. Deer Creek, a large Type F tributary of the West Fork Millicoma River borders the western edge of the sale area. Three (3) perennial Type N streams and five (5) intermittent Type N streams are within the sale area.

**10. Logging Method:** The sale area is designed to be cable logged uphill from new landings at Points B, D, and E. New road spurs will be built from Point A to Point B and from Point C to Point D. All landings are located within mature timber types and should have adequate guyline anchors. Full suspension will be required while yarding over posted stream buffers and drainages. Single end suspension will be maintained over the remainder of the sale area. The sale area abuts marbled murrelet management areas on three sides and approximately 32 acres or half the sale is within 330 feet of said marbled murrelet management areas and will be seasonally restricted. Summarily, the sale is planned for winter and wet weather operation with provisions for drainage and aggregate road surfacing. During the course of harvesting Purchaser shall identify trees to be used for fish log placement into Deer Creek, and fell, buck, and place them as specified in the contract.

**11. Access:** To access the timber sale area take North Lake Road out of Lakeside and follow the 4000 road (Benson Ridge Road) to the 4900 road. Continue on the 4900 for a short distance to the 2000 road. Follow the 2000 road south to the 8000 road. Follow the 8000 road downhill to the West Fork Millicoma River. Continue on the 8000 road to the 7100 road. The sale area starts a short distance up the 7100 road. The bottom of the sale area can be accessed on foot from the gated 8200 road grade.

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

**Projects No. 1 and 2:** Road and Landing Construction

**Project No. 3:** Road Surfacing

**Project No. 4:** Rock Stockpile Delivery

# NET VOLUMES AND ACREAGE

## Lower Deer

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							Vol. per Acre
			By County and Fund						Total Vols.	
Areas	Spec		Coos			Douglas				
		FRA	FDF	Total	FRA	FDF	Total			
	D-fir	3876		3876			0	3876	59.6	
	Hem	98		98			0	98	1.5	
	Hdwd	58		58			0	58	0.9	
<b>TOTALS</b>		4032	0	4032	0	0	0	4032		

**TOTAL SALE VOLUME BY SPECIES**

Douglas-fir    3876 MBF  
 Hemlock        98 MBF  
 Hdwd            58 MBF

Report by: J. Haynes

Date: 03/12/2009

Unit For. Home Plus 5/4/09

Asst. Dist. For. Doug Kreininger Date 5.8.2009

**EXISTING INTERIOR ROAD ACREAGE DEDUCTED.  
 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		
	65												65
<b>SUM</b>	65	0	0	0	0	0	0	0	0	0	0	0	65

cc- clearcut

pc- partial cut

FDF- Forest Development Fund

FRA- Forest Revenue Account

## CRUISE VOLUME COMPUTATION REPORT

SALE NAME:	Lower Deer	DATE:	03/12/2009
LEGAL LOCATION:	Secs. 11, 12, T23S, R11W	BY:	J. Haynes
	WM. Coos County, OR		

### FIELD CULL PERCENTAGE

Sale Area	Doug-fir	Hemlock	Cedar	Hardwds
Species				
Field cull	0.03	0	0	0

### NET FIELD VOLUME MBF (Gross vol. less field cull)

SPECIES>>>>>	Doug-fir	Hemlock	Hardwds	TOTAL
<b>Sale Area</b>	4380	115	68	4563
less GTR vol	3	1	0	4
less Fish Log placement vol.	22			22
<b>TOTAL</b>	4355	114	68	4537

### HIDDEN DEFECT AND BREAKAGE

Species	Doug-fir	Hemlock	Hardwds
Hidden cull	0.05	0.07	0.08
Breakage	0.06	0.07	0.07
<b>TOTAL</b>	0.11	0.14	0.15

### NET VOLUME BY MBF BY AREA

SPECIES>>>>>	Doug-fir	Hemlock	Hardwds	TOTALS
<b>Sale Area</b>	3876	98	58	4032
<b>TOTALS</b>	3876	98	58	4032

### NET VOLUME BY GRADE AND MBF

Grade >>>>>>>>>>	2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
<b>Sale Area</b>								
Doug-Fir	0	78	271	2636	891	0	0	0
Hemlock	0	0	0	0	98	0	0	0
Hdwds	0	0	0	20	9	0	13	16

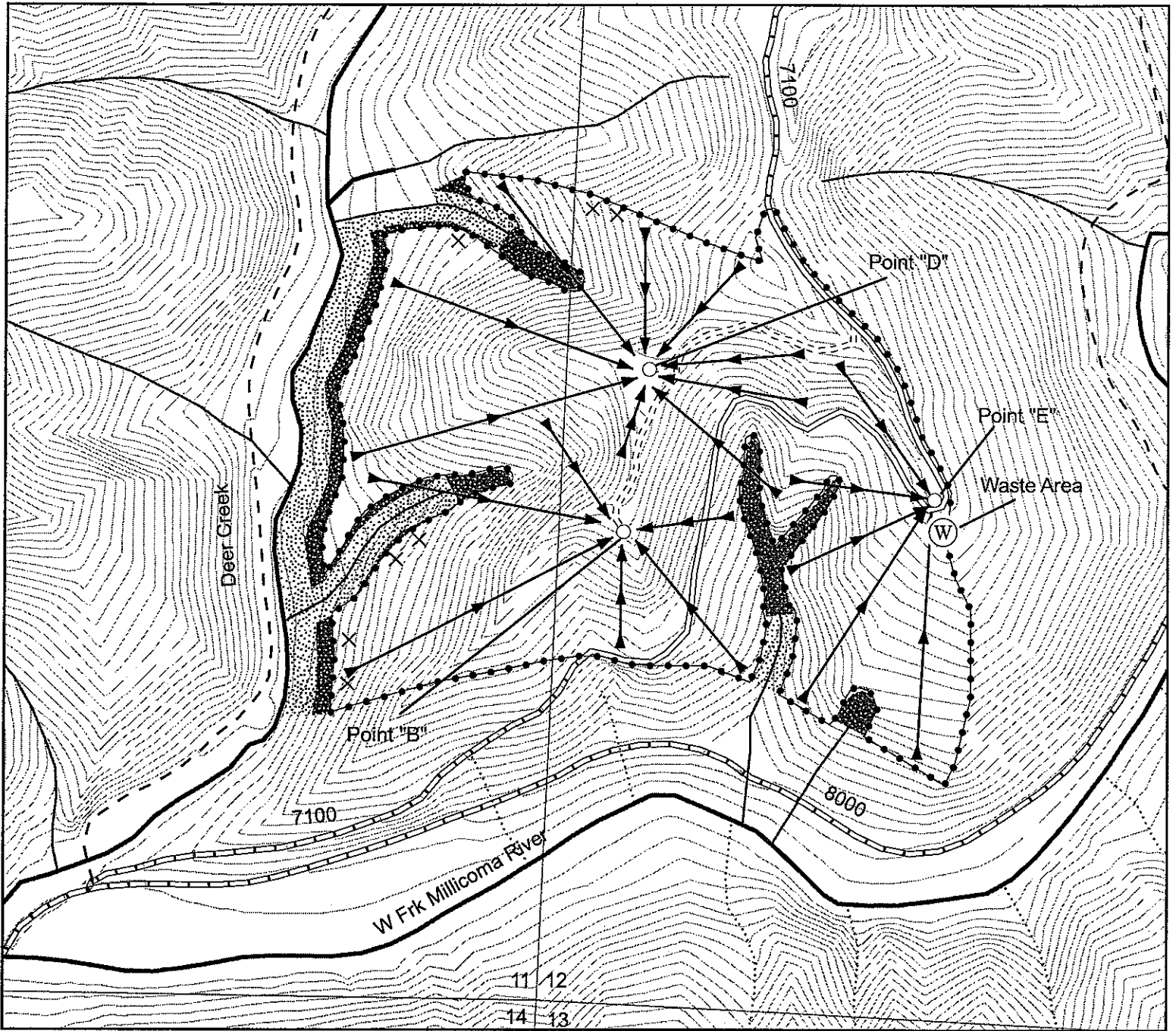
### GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>>	2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
<b>Sale Area</b>								
Doug-fir	0%	2%	7%	68%	23%	0%	0%	0%
Hemlock	0%	0%	0%	0%	100%	0%	0%	0%
Hdwds	0%	0%	0%	35%	16%	0%	22%	27%

### Log Grade Percents\*

	TOTAL	2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
Doug-Fir	100	0	2	7	68	23		0	
Hemlock	100	0	0	0	0	100	0	0	
Hardwood	100	0	0	0	35	16	0	22	27



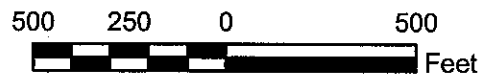


- Timber Sale Boundary
- Cable Landings
- Existing Roads - Purchaser Maintained
- Existing Roads - STATE Maintained
- New road construction
- Vacated road grades
- Type F Perennial Streams
- Type N Perennial Streams
- Type N Seasonal Streams
- Streambuffers
- Green Tree Retention Areas
- Individual Green Tree Retention

**LOGGING PLAN**  
 OF TIMBER SALE CONTRACT NO.  
 341-10-30  
 LOWER DEER

PORTIONS OF SECTIONS 11 AND 12  
 T23S, R11W W.M.  
 COOS COUNTY, OREGON  
 APPROXIMATELY 65 NET HARVEST ACRES

CONTOUR INTERVAL 20'  
 APPROX. SCALE: 1" = 500'



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