



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Sullivan Ridge No. 4 Sale 341-02-63

District: Coos

Date: 12/31/01

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$944,751.33	\$19,745.28	\$964,496.61
		Project Work	(\$29,928.70)
		Advertised Value	\$934,567.91



Timber Sale Appraisal Timber Description Sullivan Ridge No. 4 Sale 341-02-63

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of 14 and 23 T24S, R12W, W.M., Coos County, Oregon.

Date: 12/31/01

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	25	0	95
Alder (Red)	15	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
3P	23	0	23
SM	97	0	97
2S	1,453	0	1,453
3S	596	0	596
Camprun	0	64	64
Total	2,169	64	2,233

Comments: Pond Values Used: 4th Quarter 2001



Timber Sale Appraisal

Logging Conditions

Sullivan Ridge No. 4

Sale 341-02-63

"STEWARDSHIP IN FORESTRY"

Combination#: 1 Douglas - Fir 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: 14 **Bd. Ft./Load:** 4,500

Cost/MBF: \$56.35

Machines:

- Log Loader (A)
- Tower Yarder (Large)

Combination#: 2 Alder (Red) 100.00%

Yarding Distance: Medium (800 ft) **Downhill Yarding** No

Logging System: Cable: Large Tower >=70 **Process:** Manual Delimiting

Tree Size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

Loads/Day: 14 **Bd. Ft./Load:** 3,500

Cost/MBF: \$72.45

Machines:

- Log Loader (A)
- Tower Yarder (Large)



Timber Sale Appraisal Logging Costs Sullivan Ridge No. 4 Sale 341-02-63

"STEWARDSHIP IN FORESTRY"

Date: 12/31/01

Operating Seasons: 0.8

Profit & Risk: 15%

Project Costs: \$29,929

Other Costs (P/R): \$16,068

Slash Disposal: \$0

Other Costs: \$0

Road Maintenance: \$0.00

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

Hauling Costs

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



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Sullivan Ridge No. 4 Sale 341-02-63

Costs	Douglas - Fir	Alder (Red)
Logging	56.35	72.45
Road Maintenance	0.16	0.17
Fire Protection	1.00	0.00
Hauling	35.89	48.67
Other (P/R appl.)	7.41	0.00
Profit & Risk	15.12	18.19
Slash Disposal	0.00	0.00
Scaling	2.00	2.00
Other	0.00	0.00
Total	117.93	141.48

Amortization	0.00	0.00
Pond Value	553.50	450.00
Stumpage	435.57	308.52
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Sullivan Ridge No. 4 Sale 341-02-63

Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

Unamortized

	Douglas - Fir	Alder (Red)
MBF	2,169.00	64.00
Value	435.57	308.52
Total	944,751.33	19,745.28

Gross Timber Sale Value

Recovery \$964,496.61

Prepared by: Norma Kline

Date: 12/31/01

District: Coos

Phone: (541) 269-0959

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Sullivan Ridge No. 4

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				
Directional Felling	MBF	2417	\$ 2.00	\$ 4,834.00
Yarding and Loading				
Artificial guyline support	anchor	6	\$ 500.00	\$ 3,000.00
Brand and paint logs	MBF	2417	\$ 2.00	\$ 4,834.00
Loader time for firewood stacking	Hours	4	\$ 75.00	\$ 300.00
Tree Topping	tree	31	\$ 100.00	\$ 3,100.00
Total additional "Other Cost" with additional profit and risk to be added				\$ 16,068

SUMMARY OF CONSTRUCTION COST

Project No. 1a: Road Construction

Points: A to B
 Length: 825'
 Type: 14', no ditch

Clearing and Grubbing

0.6 acres at \$560.00 \$ per acre = \$336.00

Total clearing and grubbing \$336.00

Excavation

Drill and Shoot	140	cubic yds at	\$3.00	per cu yd	\$420.00
Cat excavation (2+00 - 6+00)	4	hrs at	\$125.00	per hr	\$500.00
Cat excavation (6+00 - 8+25)	730	yds at	\$1.37	per yd	\$1,000.10
Excavation (0+00 - 2+00)	500	cubic yds at	\$1.30	per cu yd	\$650.00
Laborer	10	hrs at	\$30.00	per hr	\$300.00

Total Excavation \$2,870.10

Hauling

Endhaul to waste area Pt. H (0+00 - 2+00) 500 yds at \$0.80 per yd \$400.00

Total Hauling \$400.00

Grade Road Surface

1 hrs Grade @ \$75.00 per hour \$75.00

Total Grading \$75.00

Project 1a Cost \$3,681.10

Project No. 1b: Road Construction

Points: D to E
 Length: 395'
 Type: 14', no ditch

Clearing and Grubbing

0.25 acres at \$560.00 \$ per acre = \$140.00

Total clearing and grubbing \$140.00

Excavation

Drill and Shoot	350	cubic yds at	\$3.00	per cu yd	\$1,050.00
Cat excavation and shape waste area	5	hrs at	\$125.00	per hr	\$625.00
Excavation	2672	cubic yds at	\$1.22	per cu yd	\$3,259.84
Laborer	5	hrs at	\$30.00	per hr	\$150.00

Total Excavation \$5,084.84

SUMMARY OF CONSTRUCTION COST

Hauling

Endhaul to waste area 2632 cubic yds at \$0.75 per cu yd \$1,974.00

Total Hauling \$1,974.00

Grade Road Surface

1 hrs Grade @ \$75.00 per hour \$75.00

Total Grading \$75.00

Waste Area Preparation

Cat time to prep waste area 10 hrs at \$125.00 per hr \$1,250.00

Total Waste Area \$1,250.00

Project 1b Cost \$8,523.84

Move-in

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	30	0.66	\$533.00	\$351.78
D8 Cat	30	0.66	\$533.00	\$351.78
Grader	30	0.66	\$241.00	\$159.06
Drill & Comp	30	0.66	\$241.00	\$159.06
Dump Truck	30	0.66	\$144.00	\$95.04
Dump Truck	30	0.66	\$144.00	\$95.04

Total Move-in \$1,211.76

Total Project 1 Cost \$13,416.70

Project 2a: Road and Landing Improvement

Points: C to D
 Length: 1985'
 Type: 14', no ditch

Clearing and Grubbing

Saw time to clear roadside brush 4 hrs at \$30.00 per hr \$120.00

Total clearing and grubbing \$120.00

Excavation

Cat time to remove cutbank slough, and
 disperse in road bed 5 hrs at \$125.00 per hr \$625.00

Total Excavation \$625.00

SUMMARY OF CONSTRUCTION COST

Grade Road Surface

	1	hrs Grade @	\$75.00	per hour	\$75.00
Total Grading					\$75.00
Project 2a Cost					\$820.00

Project 2b: Road and Landing Improvement

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

Clearing and Grubbing

Saw time clear brush	2	hrs at	\$30.00	per hr	\$60.00
Total clearing and grubbing					\$60.00

Excavation

Cat time for improvements	1	hrs at	\$125.00	per hr	\$125.00
Total Excavation					\$125.00

Grade Road Surface

	1	hrs Grade @	\$75.00	per hour	\$75.00
Total Grading					\$75.00
Project 2b Cost					\$260.00
Total Project 2 Cost					\$1,080.00

Project No. 3: Stockpile

Location: Tenmile Butte (3500 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):	\$5.33	per cu yd	
Piling and shaping cost per cubic yard:	\$0.53	per cu yd	
Total cost per cubic yard:	\$12.86	per cu yd	
Total cubic yards:	1200	cubic yards	

Total Cost for Stockpile rock:	\$15,432.00	
		Project 3 cost \$15,432.00

Total Project Costs \$29,928.70

TIMBER SALE SUMMARY

SULLIVAN RIDGE NO. 4

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:** This sale is 100% on CSL fund lands in Coos County.
4. **Sale Acreage:** The sale acreage is 63 acres. The acreage for the timber sale area was determined using orthophoto imagery on the ARCVIEW Geogrphic Information System program.
5. **Volume by Species, Fund, and County:** See attached table.

6. Grade (by percent):

Species	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp	Utility
Douglas-fir	1%	5%	67%	27%	---	---
Hardwood	---	---	---	---	100%	---

7. **Cruise:** The sale area was variable plot cruised using the Big BAF cruise design, which consisted of 82 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 the stand basal area. The 360 BAF plot was used to obtain height, grade and defect. 33 Big BAF trees were cruised at form point for diameter, height, grade and defect.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	Top Cr Dia.	CV %	SE %
D4H	6" or 25% DBH	Conifer: 16' Hardwood: 4'	Estimated or measured on all trees	Con:6",25% Hdwd:8"	57	9

B. Stand Summary:

Unit I and II Variable Plot Cruise

Species	D4H	Trees per Acre	Basal Area (ft ² /ac)	MBF per acre
Douglas-fir	25	39	129	36
Hardwood	14	14	2	1.2

- C. **Green Tree Retention:** Green trees were designated by posting outside of the timber sale.

D. Minor Species: Minor species were left as reserve trees on both units. The following table summarizes their approximate volume from the variable plot cruise reports.

Units I and II	Hemlock	Cedar	Sitka Spruce
Tree Count	57	6	19
Average Diameter	21	36	36

8. Timber Description: The timber in this sale area is moderately stocked second-growth Douglas-fir approximately 120 years old.

9. Topography: The unit has steep, dissected slopes over 65%.

10. Logging Method: The sale will be cable logged uphill with single-end suspension required on most of the unit with full suspension required over designated streams. A motorized carriage may be required to obtain the necessary suspension. Artificial guyline anchors may need to be installed for yarding portions of the sale area as approved in the operations plan

11. Access: From Coos Bay, proceed to North Bay Drive, proceed 2.3 miles to Larson Way, proceed 3.7 miles to the 3000 road, proceed 3.8 miles to the 3400 road. Turn left on the 3170 road, this intersection is Point C on Exhibit "A".

12. Projects:

Project No. 1: Road Construction

Project No. 2: Road and Landing Improvement

Project No. 3: Rock Stockpile

Project No. 4: Top 31 Trees

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			2055			0	2055	32	
	Hdwd			60			0	60	1	
II	D-fir			114			0	114	2	
	Hdwd			4			0	4	<1	
TOTALS				2233			0	2233		

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	2169	MBF
Hemlock	0	MBF
RedCedar	0	MBF
Hardwoods	64	MBF

Report by: Sullivan Ridge No. 4

Date: 12/19/2001

Unit For. Alan P. King 12/21/01
Date

Asst. Dist. For. Greg Kremer 12/21/2001
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	60												60
II	3												3
SUM	63	0	0	0	0	0	0	0	0	0	0	0	63

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land

WRITTEN PLAN

SALE NAME: Sullivan Ridge No. 4

LOCATION: Portions of Sections 14 and 23, T24S R12W, Coos County, Oregon

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

CONTRACT PURCHASER: _____

NOTIFICATION NO: _____

FILE: I:\Timber Sales\FPAPLANS\Sullivan Ridge No. 4.doc (2/6/02)

SITUATION AND PROTECTED RESOURCE

The Sullivan Ridge No. 4 timber sale is located in the *Tyee Core Area*. Slope and headwalls within the sale area are in excess of 70% gradient and so are classed as high risk sites. The protected resources is a downstream Type F tributary to Larson Creek and Larson Creek proper.

LAYOUT

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

FELLING AND BUCKING

1. Felling will be done during the dry season of the year between April 1 and October 15, annually, unless other wise approved by STATE because of dry weather.
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 minimize accumulation of logs in stream channels.

YARDING

1. Operator will use a machine and logging system capable of fully suspending logs..
2. Yarding will be done during the dry season of the year between April 15 and October 15, annually, unless other wise approved by STATE because of dry weather.
3. Operator will fully suspend logs when sufficient deflection is available.

OPERATIONS PLAN. Purchaser shall attach a yarding plan indicating landing locations, machinery and procedures to be used obtain adequate suspension in the sale area and to minimize impacts during the felling process.

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: _____