

District: Coos Date: April 15, 2013

# cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$30,778.79	\$16,848.50	\$47,627.29
		Project Work:	\$(2,310.00)
		Advertised Value:	\$45,317.29

4/15/13



District: Coos Date: April 15, 2013

# timber description

Location: Portions of Section 16, T22S, R9W, W.M., Douglas County, Oregon.

Stand Stocking: 40%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	15	0	95
Western Hemlock / Fir	13	0	95
Red Cedar	32	0	95
Alder (Red)	19	0	90
Maple	16	0	90

Volume by Grade	10" - 11"	12"+	2S	3S	3S 12"+	4S	6" - 7"	8" - 9"	Total
Douglas - Fir	0	0	34	72	10	10	0	0	126
Western Hemlock / Fir	0	0	0	11	0	2	0	0	13
Red Cedar	0	0	0	1	0	5	0	0	6
Alder (Red)	12	39	0	0	0	0	12	18	81
Maple	0	2	0	0	0	0	3	2	7
Total	12	41	34	84	10	17	15	20	233



"STEWARDSHIP IN FORESTRY"

District: Coos Date: April 15, 2013

comments: Pond Values Used: 1st Quarter Calendar Year 2013.

Regeneration harvest of 13 net acres of 93 year old second growth and 46 year old third growth Douglas-fir with a significant amount of red alder and minor amounts of western hemlock, western redcedar, and bigleaf maple.

Douglas-fir 2S, 3S, & 4S Pond Values = Local Pond Values

Bigleaf Maple Pond Values = Local Pond Values

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$780 daily truck cost.

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

FELLING:

Felling of Unmerchantable Material: 12 MBF @ \$1/MBF = \$12

Directional Felling: 5 MBF @ \$2/MBF = \$10

YARDING & LOADING:

Locate Corridors & Skid Roads: 2 MBF @ \$5/MBF = \$10

Artificial Guyline Support : 1 anchor @ \$500/anchor = \$500

Brand & Paint Logs: 233 MBF @ \$1/MBF = \$233

Loader Time for Slash Piling: 4 hours @ \$75/hour = \$300

Cover Slash Piles w/Sheeting: 2 piles @ \$50/pile = \$100

Rig Tail Tree: 2 trees @ \$100/tree = \$200

TOTAL Other Costs (with Profit & Risk to be added)) = \$1,365

Other Costs (No Profit & Risk added):

ROAD EASEMENTS:

Oxbow Timber I, LLC Rock Wear Fee: 233 MBF @ \$3.30/MBF = \$768.90

TOTAL Other Costs (No Profit & Risk added) = \$768.90



District: Coos Date: April 15, 2013

# logging conditions

**combination#: 1** Douglas - Fir 100.00%

 Western Hemlock / Fir
 100.00%

 Red Cedar
 100.00%

 Alder (Red)
 100.00%

 Maple
 100.00%

yarding distance:Long (1,500 ft)downhill yarding:Nologging system:Cable: Large Tower >=70Process: Manual Delimbingtree size:Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 6.0 bd. ft / load: 3,800

cost / mbf: \$161.99 machines: Log Loader (A)

Tower Yarder (Large)



District: Coos Date: April 15, 2013

# logging costs

Operating Seasons: 2.00 Profit Risk: 20.00%

**Project Costs:** \$2,310.00 **Other Costs (P/R):** \$1,365.00

Slash Disposal: \$0.00 Other Costs: \$768.90

## Miles of Road

**Road Maintenance:** \$0.00

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

# **Hauling Costs**

Species	\$/MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.8
Western Hemlock / Fir	\$0.00	2.0	3.8
Red Cedar	\$0.00	2.0	3.8
Alder (Red)	\$75.00	2.0	3.5
Maple	\$75.00	2.0	3.5

# Local Pond Values

Date	Specie	Grade	Value
4/10/13	Douglas - Fir	2S	\$600.00
4/10/13	Douglas - Fir	3S	\$580.00
4/10/13	Douglas - Fir	48	\$570.00
4/10/13	Maple	8" - 9"	\$410.00
4/10/13	Maple	12"+	\$520.00
4/10/13	Maple	6" - 7"	\$400.00



"STEWARDSHIP IN FORESTRY"

**District:** Coos Date: **April 15, 2013** 

# logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas -	Fir								
\$161.99	\$0.63	\$37.64	\$89.81	\$5.86	\$59.19	\$0.00	\$5.00	\$3.30	\$363.42
Western F	lemlock /	Fir							
\$161.99	\$0.63	\$37.64	\$89.81	\$5.86	\$59.19	\$0.00	\$5.00	\$3.30	\$363.42
Red Ceda	r								
\$161.99	\$0.63	\$37.64	\$89.81	\$5.86	\$59.19	\$0.00	\$5.00	\$3.30	\$363.42
Alder (Red	d)								
\$161.99	\$0.66	\$37.64	\$82.50	\$5.86	\$57.73	\$0.00	\$5.00	\$3.30	\$354.68
Maple									
\$161.99	\$0.66	\$37.64	\$82.50	\$5.86	\$57.73	\$0.00	\$5.00	\$3.30	\$354.68

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$567.14	\$203.72	\$0.00
Western Hemlock / Fir	\$0.00	\$508.85	\$145.43	\$0.00
Red Cedar	\$0.00	\$900.00	\$536.58	\$0.00
Alder (Red)	\$0.00	\$555.56	\$200.88	\$0.00
Maple	\$0.00	\$437.14	\$82.46	\$0.00

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District: Coos Date: April 15, 2013

# summary

# Amortized

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

# Unamortized

Specie	MBF	Value	Total
Douglas - Fir	126	\$203.72	\$25,668.72
Western Hemlock / Fir	13	\$145.43	\$1,890.59
Red Cedar	6	\$536.58	\$3,219.48
Alder (Red)	81	\$200.88	\$16,271.28
Maple	7	\$82.46	\$577.22

# **Gross Timber Sale Value**

**Recovery:** \$47,627.29

Prepared by: Joe Goldsby Phone: 541-267-1754

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

Sale Name: Purdy Slim

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

Falling	<u>Units</u>	Quantity	<u>(</u>	Cost/unit	1	otal Cost
Felling Felling of unmerch material	MBF	12	\$	1.00	\$	12.00
Directional Felling	MBF	5	\$	2.00	\$	10.00
Yarding and Loading						
Ground Based Equipment Wash	Hours	0	\$	65.00	\$	-
Locate Corridors and Skid Roads	MBF	2	\$	5.00	\$	10.00
Artificial guyline support (Dozer/Skidder)	anchor	1	\$	500.00	\$	500.00
Brand and paint logs	MBF	233	\$	1.00	\$	233.00
Loader time for firewood stacking & slash piling	Hours	4	\$	75.00	\$	300.00
Cover landing slash pile w/sheeting	pile	2	\$	50.00	\$	100.00
Rig tail trees	tree	2	\$	100.00	\$	200.00
Snag Creation						
Tree Topping @ 60 feet +	Trees	0	\$	100.00	\$	-
Tree Girdling @ 60 feet +	Trees	0	\$	125.00	\$	-
Tree Girdling @ DBH	Trees	0	\$	75.00	\$	-
Miscellaneous Costs						
Log Placement in Stream	Crossings	0	\$	-	\$	-
Additional Fire Equipment	Seasons	0	\$	1,500.00	\$	-
Maintenance rock per section 5	Cubic Yards	0	\$	18.00	\$	-
Safety Flagging and/or signing	per day	0	\$	110.00	\$	-
Total additional "Other Cost" with additional	profit and risk to	be added			\$	1,365.00

Additional "Other Cost" with no additional profit and Risk

	<u>Units</u>	Quantity	9	Cost/unit	Total Cost
Log Placement in Stream					
Non-required road construction	Stations				\$ -
Non-required road rocking	Cubic Yards				\$ -
Stream clearance	Feet				\$ -
Scaling (high piece count)	MBF		\$	1.00	\$ -
Road Easements:					
Oxbow Timber I Rock Wear Fee	MBF	233	\$	3.30	\$ 768.90

Total additional "Other Cost" with no additional profit and Risk \$ 768.90

# SUMMARY OF CONSTRUCTION COST Purdy Slim

**Project 1A: Road Improvement** 

Points: A to B Length: 9,070 Type: 16' w/ditch

Grader time 2 hrs at \$85.00 per hour \$170.00

Total Project 1A: \$170.00

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

Points: B to C Length: 5,330' Type: 14' no ditch

 Cat time
 5
 hrs at
 \$140.00
 per hour
 \$700.00

 Grader time
 4
 hrs at
 \$85.00
 per hour
 \$340.00

Total Project 1B: \$1,040.00

Move-in

 Equipment
 hrs/RT
 Rate/hr
 Total

 Cat
 6
 \$100.00
 \$600.00

 Grader
 5
 \$100.00
 \$500.00

Total Move-in: \$1,100.00

Total Project Costs \$2,310.00

# Operating Periods Restrictions Matrix for Purdy Slim 341-13-96

Harvesting	January	Febuary	March	April	Мау	June	ylul	August	September	October	November	December
			1st	1st	15th 16th		7th 8th	5th 6th	15th 16th	14th 15th		
Ground-based Yarding												
Cable Talung bil unsunaceu loads												
Hauling	January	Febuary	March	April	Мау	June	July	August	September	October	November	December
			1st	1st	15th 16th			5th 6th	15th 16th	15th		
Log Hauling on Unsurfaced Roads												
Project Work	January	Febuary	March	April	Мау	June	July	August	September	October	November	December
			1st	1st	15th 16th			5th 6th	15th 16th	15th		
Project 1												
		Operations Allowed	lowed		<u> </u>		Activity Restric sunset through	ZActivity Restricted 2 hours before sunset through 2 hours after sunrise	e rise			
	×	Operations Pr	Operations Prohibited - T & E		80000		Operations Prohibited for wee approved in writing by STATE	Operations Prohibited for weather conditions: unless otherwise approved in writing by STATE	er conditions: ur	iless otherwise		

### **TIMBER SALE SUMMARY**

### **Purdy Slim**

- **1. Type of Sale:** Final Harvest, Recovery, Sealed Bid.
- <u>2. Boundary Lines:</u> 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% Douglas County.
- <u>4. Sale Acreage:</u> The total sale area is 13 net acres. Sale acreage was determined from electronic digitizing of orthophoto imagery using the ArcMap 10 GIS program. Roads within the timber sale area were excluded from the cruise acreage.

#### 5. Volume by Species:

Species	Total Volume (MBF)	Volume (MBF) per Acre
Douglas-fir	126	9.69
Hemlock	13	1.00
Redcedar	6	0.46
Red Alder	81	6.23
Bigleaf Maple	7	0.54
Total	233	17.92

**<u>6. Grade:</u>** (by Percent, all areas)

Species	3 Peeler	Spec. Mill	2 Saw	3 Saw	Big 3 Saw	4 Saw
Douglas-fir			27%	57%	8%	8%
Hemlock				87%		13%
Redcedar				22%		78%
			12"+	10-11"	8-9"	6-7"
Red Alder			48%	15%	22%	15%
Bigleaf Maple			27%		32%	41%

- <u>7. Grading System:</u> All trees were graded according to the Southern Oregon Log Scaling and Grading Rules. All trees were graded favoring 40 foot logs.
- 8. Cruise: The timber sale area was originally cruised in July 2008 using a variable plot cruise with a nested Big Basal Area Factor (BAF) plot. The Big BAF method is a combination of count plots and individually measured trees. 40 BAF full plots at 16 feet were used to determine tree counts and to measure minor species. The 40 BAF plots were spaced 66 feet apart on cruise lines spaced 396 feet apart. A total of 22 count plots were measured. Nested 250 BAF full plots at 16 feet were used to determine which Douglas-fir trees would be fully measured for diameter at breast height, total height, grade, and defect. Nested plots were taken on every 40 BAF plot. A total of 3 Douglas-fir trees were measured. The cruise was analyzed using the SuperACE cruising program.

Additional plots were cruised in January 2012, using the same measurement specifications as the original cruise. A total of eight count plots and 4 Douglas-fir measure trees were added in this cruise.

All cruising was completed by ODF foresters.

Note: Old-growth trees were excluded from the cruise.

#### A. Summary data:

Diam	Stand Height	Form Point	Form Factor	CV %	SE %
DBH	Total Height	Conifer: 16'	Estimated or measured	79.2	14.46
		Hardwood: 16'	on all trees		

#### B. Stand Data:

SPECIES	D4H	TREES/ACRE	BASAL	NET
			AREA/AC	MBF/ACRE
Douglas-fir	15	67	86	9.69
Hemlock	13	12	11	1.00
Western Red Cedar	32	1	7	0.46
Red Alder	19	41	80	6.23
Bigleaf Maple	16	11	15	0.54

C. Green Tree Retention: Reserve areas consist of stream buffer extensions, trees left along seasonal and perennial drainages, and individually marked trees. Green trees individually marked are painted with red "W" and have been removed from the cruised volume. Stream buffers and GTR areas are mapped in Exhibit "A." The table below shows reserve trees whose volumes have been removed from the cruise.

Area	Douglas-fir	Red Alder
1	10.7 MBF	0.1 MBF

Note: Old-growth trees were not included in the cruise. As such, individually marked old-growth trees have not been removed from the cruised volume.

- <u>9. Timber Description:</u> The timber sale area is moderately to sparsely stocked with approximately 93 year-old second growth and 46 year-old third growth Douglas-fir with minor amounts of western hemlock, western redcedar, bigleaf maple, and red alder. The average cruised Douglas-fir is 15 inches with a total height of 95 feet. Timber is average quality.
- **10. Topography:** The timber sale area is long and narrow at just over 2,300 feet east to west and 300 feet north to south. A main ridge runs along the western edge of the sale boundary. Slopes range from 20% to 100%. Locations of stream buffers and green tree retention areas are indicated on Exhibit "A."
- 11. Logging Method: The timber sale is designed to be uphill cable yarded with a large yarder (>70 feet in height) from the landing at Point C1. Yarding distances are long at over 2000 feet. Due to the width of the sale a limited number of yarding corridors should be required. Tail trees may be necessary and have been accounted for in the timber sale appraisal. Limited guyline opportunities may exist. An artificial guyline anchor has been accounted for in the timber sale appraisal.

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 when yarding over drainages and stream buffers, and single end suspension will be required over the remainder of the sale area. This sale is intended for dry season operation. Roads and landings are indicated on Exhibit "A" and Logging Plan maps.

**12. Access:** From Coos Bay travel north on Highway 101 for 27 miles to Reedsport. Proceed east on Highway 38 for 21 miles to Burchard Creek Road. Project Point A1 is located at the bottom of Burchard Creek Road.

#### 13. Projects:

Project 1: Road and Landing Improvement

#### CRUISE VOLUME COMPUTATION REPORT

SALE NAME:

Purdy Slim

LEGAL LOCATION:

T22S, R9W Sec. 16

DATE:

03/04/2013

BY:

Joe Goldsby

GRO:	ss v	OLU	JME	MBF *

SPECIES>>	Doug-tir	Hemiock	Red Cedar	Bigleaf Maple	Red Alder	TOTAL
AREA						BY AREA
1	161	15	7	8	98	289
Less GTR Vol.	11	0	0	0	1	12
TOTAL	150	15	7	8	97	277

#### **DEFECT AND BREAKAGE \***

Species	Doug-fir	Hemlock	Red Cedar	Bigleaf Maple	Red Alder
Field cull	0.03	0.02	0.02	0.02	0.03
Hidden cull	0.05	0.05	0.05	0.05	0.06
Breakage	0.08	0.07	0.07	0.07	0.07
Total	0.16	0.14	0.14	0.14	0.16

#### **NET VOLUME BY MBF BY AREA\***

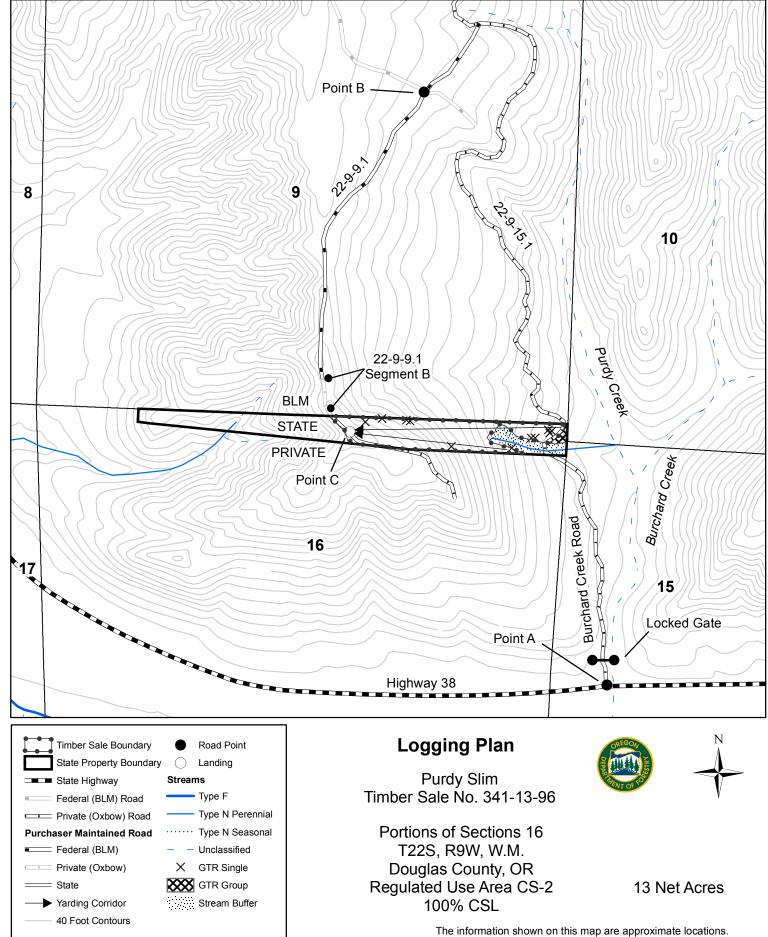
SPECIES	Doug-fir	Hemlock	Red Cedar	Bigleaf N	Maple Red	Alder	TOTALS
AREA						BY	AREA
1	126	13	6		7	81	233
TOTALS	126	13	6		7	81	233

#### NET VOLUME BY GRADE AND MBF \*

Grade	>>>>>>	2 PEE	3 PEE	SM	2\$	4W(12"+)	3SAW(12"+)	3SAW(10-11")	(RA) 4SAW(8-9")	(RA) (6-7")
	Species									· · · · · · · · · · · · · · · · · · ·
	Doug-Fir	0	0		0	34	10	72	10	0
	Red Alder	0	0		0	0	39	12	18	12
	Red Cedar	0	0		0	0	0	1	5	0
	Hemlock	0	0		0	0	0	11	2	0
	Bigleaf Maple	0	0		0	0	2	. 0	2	3

#### **GRADE DISTRIBUTION BY PERCENT**

Grade	>>>>>>	2 PEE	3 PEE	SM	2SAW(12"+)	3SAW(12"+)	3SAW(10-11")	4SAW(8-9")	(6-7")
	Doug-fir	0%	0%	0%	27%	8%	57%	8%	0%
	Red Alder	0%	0%	0%	0%	48%	15%	22%	15%
	Red Cedar	0%	0%	0%	0%	0%	22%	78%	0%
	Hemiock	0%	0%	0%	0%	0%	87%	13%	0%
	Bigleaf Maple	0%	0%	0%	0%	27%	0%	32%	41%



1,000

500

2,000

Feet

1:12,000

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