



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Joe Buck Sale 341-05-02

District: Coos

Date: 5/17/04

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$776,419.78	\$33,305.70	\$809,725.48
		<b>Project Work</b>	(\$105,143.00)
		<b>Advertised Value</b>	\$704,582.48



# Timber Sale Appraisal Timber Description Joe Buck Sale 341-05-02

"STEWARDSHIP IN FORESTRY"

**District:** Coos

**Location:** Portions of sections 14 and 15  
T23S, R11W WM. Coos County, Oregon

**Date:** 5/17/04

**Stand Stocking:** 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	31	0	95
Western Hemlock / Fir	21	0	95
Alder (Red)	20	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	62	0	0	62
SM	125	0	0	125
2S	906	33	22	961
3S	453	42	31	526
4S	16	0	14	30
<b>Total</b>	<b>1,562</b>	<b>75</b>	<b>67</b>	<b>1,704</b>

**Comments:** Pond Values Used: 1st Quarter 2004.

30 acre regeneration harvest. Predominately 123-130 year old Douglas-fir sawtimber.



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal

## Logging Conditions

### Joe Buck

### Sale 341-05-02

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<b>Combination#:</b> 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
<b>Yarding Distance:</b>	Medium (800 ft)		<b>Downhill Yarding:</b> No
<b>Logging System:</b>	Cable: Large Tower >=70		<b>Process:</b> Manual Delimiting
<b>Tree Size:</b>	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
<b>Loads/Day:</b>	14		<b>Bd. Ft./Load:</b> 4,500
<b>Cost/MBF:</b>	\$56.35		
<b>Machines:</b>			
	Log Loader (A)		
	Tower Yarder (Large)		



**Timber Sale Appraisal  
Logging Costs  
Joe Buck  
Sale 341-05-02**

"STEWARDSHIP IN FORESTRY"

Date: 5/17/04

Operating Seasons: 0.2

Profit & Risk: 15%

Project Costs: \$105,143

Other Costs (P/R): \$5,654

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.3	0.7	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 Joe Buck Sale 341-05-02

<b>Costs</b>	<b>Douglas - Fir</b>	<b>Western Hemlock / Fir</b>	<b>Alder (Red)</b>
<b>Logging</b>	56.35	56.35	56.35
<b>Road Maintenance</b>	0.48	0.48	0.50
<b>Fire Protection</b>	0.32	0.32	0.32
<b>Hauling</b>	53.79	53.79	48.67
<b>Other (P/R appl.)</b>	3.32	3.32	3.32
<b>Profit &amp; Risk</b>	17.14	17.14	16.37
<b>Slash Disposal</b>	0.00	0.00	0.00
<b>Scaling</b>	2.00	2.00	2.00
<b>Other</b>	0.00	0.00	0.00
<b>Total</b>	133.40	133.40	127.53

<b>Amortization</b>	0.00	0.00	0.00
<b>Pond Value</b>	617.59	401.60	624.63
<b>Stumpage</b>	484.19	268.20	497.10
<b>Amortized</b>	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Joe Buck Sale 341-05-02

**Amortized**

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
<b>MBF</b>	0.00	0.00	0.00
<b>Value</b>	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00

**Unamortized**

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
<b>MBF</b>	1,562.00	75.00	67.00
<b>Value</b>	484.19	268.20	497.10
<b>Total</b>	756,304.78	20,115.00	33,305.70

### Gross Timber Sale Value

**Recovery \$809,725.48**

Prepared by: Jon Haynes

Date: 5/17/04

District: Coos

Phone: (541) 267-1758

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

Sale Name: Joe Buck

### 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		\$ 10.00	\$ -
Directional Felling/Tree Jacking	MBF	200	\$ 2.00	\$ 400.00
Felling of unmerch material	MBF		\$ 1.00	\$ -
<b>Yarding and Loading</b>				
Clear chute at cable settings	MBF		\$ 3.00	\$ -
Brand and paint logs	MBF	1704	\$ 1.00	\$ 1,704.00
Cull sorting/slash piling on landings	landing	2	\$ 125.00	\$ 250.00
Rig lift trees	lift tree	3	\$ 100.00	\$ 300.00
Artificial guy anchors(dozer, skidder)	anchor	3	\$ 500.00	\$ 1,500.00
Log Processing at landing	MBF		\$ 10.00	\$ -
Skid Road Layout	MBF		\$ 5.00	\$ -
Non required Road Construction	Stations			\$ -
<b>Miscellaneous Costs</b>				
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	15	\$ 100.00	\$ 1,500.00
<b>Total additional "Other Cost" with additional profit and risk to be added</b>				<b>\$ 5,654.00</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	\$ -
Grass Seeding and Fertilizing	Ac			\$ -
<b>Total additional "Other Cost" with no additional profit and Risk</b>				<b>\$ -</b>

**SUMMARY OF CONSTRUCTION COST**

**Joe Buck**

**Project No. 1A: Road and Landing Construction**

Points: B to C Length: 680' Type: 14' no ditch

**Clearing and Grubbing**

0.6 acres at \$650.00 \$ per acre = \$390.00

**Total clearing and grubbing \$390.00**

**Excavation**

Drill and Shoot	900	cubic yds at	\$3.00	per cu yd	\$2,700.00
Cat excavation & waste area prep (Pt H)	40	hrs at	\$95.00	per hr	\$3,800.00
Excavator time	45	hrs at	\$110.00	per hr	\$4,950.00
Laborer	45	hrs at	\$30.00	per hr	\$1,350.00

**Total Excavation \$10,100.00**

**Hauling**

Endhaul to waste area at Pt H (0.4 mi RT) 3592 cubic yds at \$0.90 per cu yd \$3,232.80

**Total Hauling \$3,232.80**

**Grade Road Surface**

1 hrs at \$75.00 per hour \$75.00

**Total Grading \$75.00**

**Project 1A Total \$13,798.00**

**Project No. 1B: Road and Landing Construction**

Points: D to E Length: 590' Type: 14' no ditch

**Clearing and Grubbing**

0.6 acres at \$790.00 \$ per acre = \$474.00

**Total clearing and grubbing \$474.00**

**Excavation**

Drill and Shoot	1290	cubic yds at	\$3.00	per cu yd	\$3,870.00
Cat time (construction and waste at G)	40	hrs at	\$95.00	per hr	\$3,800.00
Excavator time	40	hrs at	\$110.00	per hr	\$4,400.00
Laborer	40	hrs at	\$30.00	per hr	\$1,200.00

**Total Excavation \$13,270.00**



## SUMMARY OF CONSTRUCTION COST

### Joe Buck

#### Hauling

Endhaul to waste area at Pt G (0.4 mi RT)	500	cubic yds at	\$0.85	per cu yd	\$425.00
Endhaul to waste area at Pt H (0.7 mi RT)	2817	cubic yds at	\$1.15	per cu yd	\$3,239.55

**Total Hauling** \$3,664.55

#### Grade Road Surface

	1	hrs at	\$75.00	per hour	\$75.00
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**Total Grading** \$75.00

**Project 1B Total** \$17,483.55

#### 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
Dump Truck	35	0.74	\$241.00	\$178.34
Dump Truck	35	0.74	\$241.00	\$178.34

**Total Move-in** \$1,502.20

**Project 1 Cost** \$32,784.00

#### Project 2A: Road Improvement

Points: A to D      Length: 2500'      Type: 14' no ditch

Cat time for re-shaping road surfaces	4	hrs at	\$95.00	per hour	\$380.00
Excavator for slough removal	5	hrs at	\$110.00	per hour	\$550.00
Dump Truck to haul away slough to Pt H	5	hrs at	\$95.00	per hour	\$475.00
Smooth Road Surfaces (Grader)	4	hrs at	\$75.00	per hour	\$300.00

**Project 2A Total** \$1,705.00

#### Project 2B: Road Improvement

Points: F to G      Length: 810'      Type: 14' no ditch

Excavator for Pull-Back	10	hrs at	\$110.00	per hour	\$1,100.00
Dump truck to haul pull-back material to G	10	hrs at	\$95.00	per hour	\$950.00
Cat to spread waste at Pt G	5	hrs at	\$95.00	per hour	\$475.00

**Project 2B Total** \$2,525.00

**SUMMARY OF CONSTRUCTION COST**

**Joe Buck**

**Project 2C: Road Improvement**

Point: J

Excavator for Pull-Back	10	hrs at	\$110.00	per hour	\$1,100.00
Dump truck to haul pull-back material to H	10	hrs at	\$95.00	per hour	\$950.00

**Project 2C Total            \$2,050.00**

**Project 2 Cost                 \$6,280.00**

**Project 3: Road Surfacing**

**Rock delivered to Re-load pile at the 2000/2400 Jct (2.2 hr Round Trip)**

2 1/2" - 0" Rock Total Amount	2268	yds at	\$14.45	per yd	\$32,772.60
Jaw Run Rock Total Amount	144	yds at	\$14.45	per yd	\$2,080.80

**Rock hauled from Re-load pile to Project Area (Includes loading cost at Re-load pile)**

Points:        A to D                    Length:    2500'  
Depth:        10"                            Yds/STA:   61

Load/Haul Cost from re-load pile	1566	yds at	\$2.15	per yd	\$3,366.90
Processing (grader and roller)	1566	yds at	\$1.50	per yd	\$2,349.00

Points:        B to C                        Length:    525'  
Depth:        10"                            Yds/STA:   61

Load/Haul Cost from re-load pile	342	yds at	\$1.90	per yd	\$649.80
Processing (grader and roller)	342	yds at	\$1.50	per yd	\$513.00

Points:        D to E                        Length:    590'  
Depth:        10"                            Yds/STA:   61

Load/Haul Cost from re-load pile	360	yds at	\$2.30	per yd	\$828.00
Processing (grader and roller)	360	yds at	\$1.50	per yd	\$540.00

Points:        C and E (Landings)  
Depth:        10"  
Yds/landing:    72

Load/Haul Cost from re-load pile to Pt C	72	yds at	\$1.90	per yd	\$136.80
Load/Haul Cost from re-load pile to Pt E	72	yds at	\$2.30	per yd	\$165.60
Processing (grader and roller)	144	yds at	\$1.50	per yd	\$216.00

**Move-in**

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Grader	35	0.74	\$241.00	\$178.34
Roller	35	0.74	\$241.00	\$178.34
Loader	35	0.74	\$241.00	\$178.34

**Total Move-in                 \$536.00**

**SUMMARY OF CONSTRUCTION COST**

**Joe Buck**

**Project 3 Cost                    \$44,155.00**

**Project 4: Headwaters Rock Stockpile**

Location:                    16 mi on 1000 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 (3.0 hr. RT):	\$10.67	per cu yd
Piling and shaping cost per cubic yard:	<u>\$0.60</u>	per cu yd

Total cost per cubic yard:	\$18.27	per cu yd
Total cubic yards:	1200	cubic yards

**Total Cost for Stockpile rock:                    \$21,924.00**

**Project 4 Cost                    \$21,924.00**

**Total Project Costs                    \$105,143.00**

## TIMBER SALE SUMMARY

**Joe Buck**

**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 30 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
32.0	2.2	29.8	29.8

**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	4 %	8 %	58 %	29 %	1 %
Hemlock			44 %	56 %	0 %
Hardwoods			33 %	46 %	21 %

**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 80 feet apart on cruise lines spaced 250 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 32 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 108 count plots were measured. The three (3) acres of younger timber in the SW corner was conventional cruised with a 20 BAF. Seven plots were measured along a single line with a ratio of 4 measured plots to 3 count plots. Cruising was done in February 2004 by ODF foresters J. Haynes, C. Rudd, G. Clary, A. Dexter, B. Fields and N. Kline.

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	42 %	7.4 %

B. Defect and Breakage Summary:

BY PERCENT

SPECIES	CRUISED DEFECT	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	3	3	4	10
HEMLOCK	9	1	2	12
HARDWOODS	4	6	5	15

C. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	31	41	208	52
HEMLOCK	21	5	13	3
HARDWOODS	20	13	28	2

D. Green Tree Retention: There are nine (9) green tree reserve areas associated with this sale. The reserve areas consist primarily of trees left along the seasonal drainages. There are three pods of reserve trees outside the sale area and some scattered trees along the northwest boundary. Approximately half of the green tree retention tree counts are posted outside the sale boundary. The other half consists of individually blue or red painted trees whose volume has been removed from the cruise.

GTR Area	D-fir Count	D-fir MBF	Hemlock Count	Hemlock MBF	Hdwd Count	Hdwd MBF
AREA A	3	5.6	2	.3	1	.3
AREA B	19	38.1	2	1.6	3	1.9
AREA C	13	21.7	1	.4	4	.3
AREA D	13	16.9	--			
AREA E	13	21.4	1	.3		

**8. Timber Description:** Timber in sale area is even-aged and medium stocked with mature 123-130 year-old Douglas-fir sawtimber with minor amounts of western hemlock and patches of red alder. Timber quality is good. Approximately 2.7 acres of 38 year-old Douglas-fir will also be removed to facilitate the construction of a road and landing in the southeast corner of the sale area.

**9. Topography:** The sale area occupies the headwaters of a two unnamed Type N tributaries to Joe's Creek. An existing road bisects the sale area. The western 1/3 of the sale is deeply dissected with multiple east-west seasonal drainages. The eastern 2/3 of the sale has multiple north-south seasonal drainages. Slopes range from 60 percent to over 90 percent. The streams and drainages within the sale area are classed as Type N seasonals. In accordance to the Northwest Riparian Strategy, stream buffers have been posted along most drainages exhibiting a channel whether flowing or dry. Buffer lengths extend to encompass at least 75 percent of the length of most drainages. Buffer widths per side can range in size from 50 feet to over 100 feet in order to capture the required number of trees (15 trees/1000 feet of reach for Type N seasonals). In accordance to the Elliott HCP, all buffer trees on Type N seasonals are counted as green tree retention. Additional green tree retention is scattered along the northwest boundary 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 sale area will be cable logged uphill from new landings at Points C and E. A new short spur will be constructed to access Point C. An existing road grade will be reconstructed to access Point E. 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. The eastern 2/3 of the sale is within .25 miles of a Marbled Murrelet and will be seasonally restricted.

**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 7.0 miles to the 4900 road. Continue south on the 4900 which turns into the 2000. Continue south on the 2000 for approximately 1.7 miles to the junction of the 2470 road. Turn east on the 2470 road for approximately .4 miles into the sale area. To access from the south take the Coos River Highway east to the West Fork Millicoma County Road. Continue north on the West Fork road to the 2000 road. Continue north on the 2000 road for approximately 9.5 miles to the junction of the 2470 road.

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

**Project No. 1:** Road and Landing Construction

**Project No. 2:** Road Improvement

**Project No. 3:** Road Surfacing

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

## NET VOLUMES AND ACREAGE

Joe Buck

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		1562		1562			0	1562	52.1
	Hem		75		75			0	75	2.5
	Hdwd		67		67			0	67	2.2
<b>TOTALS</b>			1704	0	1704	0	0	0	1704	

**TOTAL SALE VOLUME BY SPECIES**

Douglas-fir     1562 MBF  
 Hemlock         75 MBF  
 Hdwd              67 MBF

Report by: J. Haynes

Date: 3/30/2004

Unit For. *[Signature]*

Asst. Dist. For. *[Signature]*

*April 29, 04*  
 Date  
*5/7/2004*  
 Date

**RED CEDAR AND SPRUCE EXEMPT 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		
	30												30
<b>SUM</b>	30	0	0	0	0	0	0	0	0	0	0	0	30

cc- clearcut

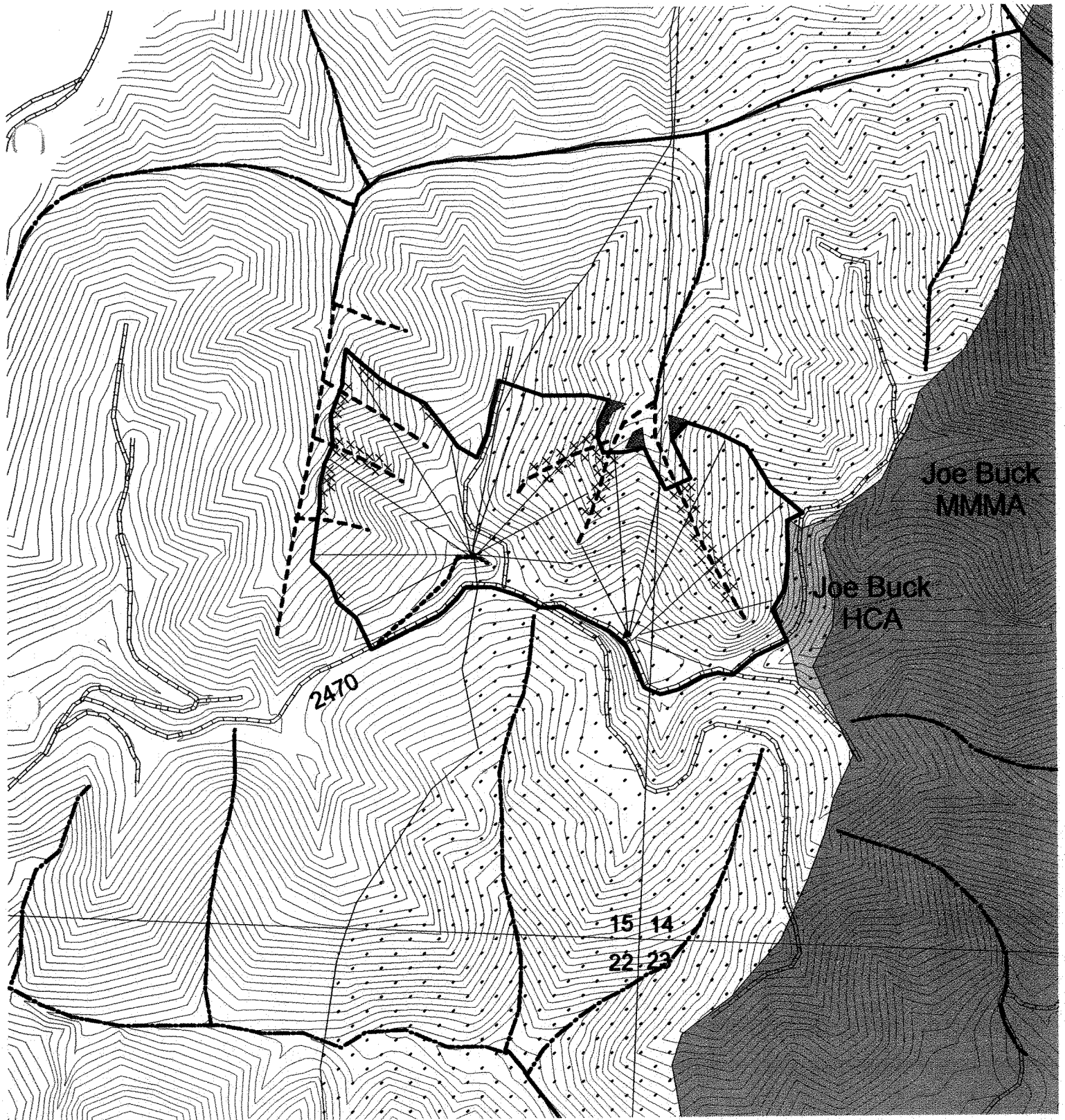
pc- partial cut













FDF- Forest Development Fund

FRA- Forest Revenue Account







-  Posted sale boundary
-  New road construction
-  Cable landings
-  Individual green tree retention
-  Green tree retention area
-  Existing roads
-  Type F stream
-  Type N perennial stream
-  Seasonal other channels
-  Marbled murrelet management area
-  Habitat conservation area
-  Seasonally restricted

**Logging Plan**  
**Timber Sale No. 341-05-02**  
**Joe Buck**



scale 1" = 500 feet  
 contour interval 20 feet

