



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Top Panther Sale 341-04-89

District: Coos

Date: 4/2/04

|                                | Conifer        | Hardwood                | Total          |
|--------------------------------|----------------|-------------------------|----------------|
| <b>Gross Timber Sale Value</b> | \$1,946,189.32 | \$25,385.88             | \$1,971,575.20 |
|                                |                | <b>Project Work</b>     | (\$25,327.70)  |
|                                |                | <b>Advertised Value</b> | \$1,946,247.50 |



# Timber Sale Appraisal Timber Description Top Panther Sale 341-04-89

"STEWARDSHIP IN FORESTRY"

**District:** Coos

**Location:** Portions of Sections 16 & 17; T23S; R10W; W.M., Coos County, Oregon.

**Date:** 4/2/04

**Stand Stocking:** 60%

| Species               | Avg. DBH | Amortized% | Recovery% |
|-----------------------|----------|------------|-----------|
| Douglas - Fir         | 26       | 0          | 95        |
| Western Hemlock / Fir | 18       | 0          | 95        |
| Alder (Red)           | 16       | 0          | 90        |

| Volume by Grade | Douglas - Fir | Western Hemlock / Fir | Alder (Red) | Total        |
|-----------------|---------------|-----------------------|-------------|--------------|
| 3P              | 63            | 0                     | 0           | 63           |
| SM              | 314           | 0                     | 0           | 314          |
| 2S              | 2,603         | 0                     | 0           | 2,603        |
| 3S              | 705           | 0                     | 0           | 705          |
| 4S              | 146           | 0                     | 0           | 146          |
| Camprun         | 0             | 139                   | 52          | 191          |
| <b>Total</b>    | <b>3,831</b>  | <b>139</b>            | <b>52</b>   | <b>4,022</b> |

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



# Timber Sale Appraisal

## Logging Conditions

### Top Panther

### Sale 341-04-89

"STEWARDSHIP IN FORESTRY"

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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 $\geq 70$                    |         | <b>Process:</b> Manual Delimiting |
| <b>Tree Size:</b>        | Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF |         |                                   |
| <b>Loads/Day:</b>        | 12  |         | <b>Bd. Ft./Load:</b> 4,500        |
| <b>Cost/MBF:</b>         | \$65.74   |         |                                   |
| <b>Machines:</b>         |   |         |                                   |
|                          | Log Loader (A)                                  |         |                                   |
|                          | Tower Yarder (Large)                            |         |                                   |



# Timber Sale Appraisal

## Logging Costs

### Top Panther

### Sale 341-04-89

"STEWARDSHIP IN FORESTRY"

Date: 4/2/04

Operating Seasons: 0.9

Profit & Risk: 10%

Project Costs: \$25,328

Other Costs (P/R): \$12,822

Slash Disposal: \$0

Other Costs: \$0

| Miles of Road |                      |                 |       |
|---------------|----------------------|-----------------|-------|
| Dirt          | Rock<br>(Contractor) | Rock<br>(State) | Paved |
| 1.7           | 0.0                  | 0.0             | 0.0   |

Road Maintenance: \$0.00

#### Hauling Costs

| Species               | \$/MBF | Trips/Day | MBF/Load |
|-----------------------|--------|-----------|----------|
| Douglas - Fir         | \$0.00 | 3.0       | 4.5      |
| Western Hemlock / Fir | \$0.00 | 3.0       | 4.0      |
| Alder (Red)           | \$0.00 | 3.0       | 4.0      |



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Logging Costs Breakdown Top Panther Sale 341-04-89



| Costs                    | Douglas - Fir | Westem<br>Hemlock / Fir | Alder (Red) |
|--------------------------|---------------|-------------------------|-------------|
| <b>Logging</b>           | 65.74         | 65.74                   | 65.74       |
| <b>Road Maintenance</b>  | 0.54          | 0.54                    | 0.57        |
| <b>Fire Protection</b>   | 0.61          | 0.61                    | 0.00        |
| <b>Hauling</b>           | 35.89         | 40.37                   | 42.61       |
| <b>Other (P/R appl.)</b> | 3.23          | 3.23                    | 0.00        |
| <b>Profit &amp; Risk</b> | 10.60         | 11.05                   | 10.89       |
| <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>             | 118.61        | 123.54                  | 121.81      |

|                     |        |        |        |
|---------------------|--------|--------|--------|
| <b>Amortization</b> | 0.00   | 0.00   | 0.00   |
| <b>Pond Value</b>   | 616.59 | 400.00 | 610.00 |
| <b>Stumpage</b>     | 497.98 | 276.46 | 488.19 |
| <b>Amortized</b>    | 0.00   | 0.00   | 0.00   |



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Top Panther Sale 341-04-89

**Amortized**

|              | Douglas - Fir | Western<br>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<br>Hemlock / Fir | Alder (Red) |
|--------------|---------------|--------------------------|-------------|
| <b>MBF</b>   | 3,831.00      | 139.00                   | 52.00       |
| <b>Value</b> | 497.98        | 276.46                   | 488.19      |
| <b>Total</b> | 1,907,761.38  | 38,427.94                | 25,385.88   |

**Gross Timber Sale Value**

**Recovery \$1,971,575.20**

Prepared by: Robert Fields

Date: 4/2/04

District: Coos

Phone: (541) 267-1755

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

Sale Name: Top Panther

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

|                                   | <u>Quantity</u> | <u>Units</u> | <u>Cost/unit</u> | <u>Total Cost</u> |
|-----------------------------------|-----------------|--------------|------------------|-------------------|
| <b>Felling</b>                    |                 |              |                  |                   |
| Directional Felling               | 1125            | MBF \$       | 2.00 \$          | 2,250.00          |
| <b>Yarding and Loading</b>        |                 |              |                  |                   |
| Brand and paint logs              | 4022            | MBF \$       | 1.00 \$          | 4,022.00          |
| Loader time for firewood stacking | 16              | Hours \$     | 75.00 \$         | 1,200.00          |
| <b>Snag Creation</b>              |                 |              |                  |                   |
| Tree Topping                      | 31              | Trees \$     | 100.00 \$        | 3,100.00          |
| <b>Miscellaneous Costs</b>        |                 |              |                  |                   |
| Safety Flagging and/or signing    | 75              | per day \$   | 15.00 \$         | 1,125.00          |
| Additional Fire Equipment         | 75              | per day \$   | 15.00 \$         | 1,125.00          |

**Total additional "Other Cost" with additional profit and risk to be added**

**\$ 12,822.00**



**SUMMARY OF CONSTRUCTION COST  
Top Panther**

**Project 1A: Road Improvement**

|                              |        |          |        |                |                        |                         |                 |
|------------------------------|--------|----------|--------|----------------|------------------------|-------------------------|-----------------|
| Points:                      | A to B | Length:  | 3450'  | Type:          | 14' subgrade, w/ ditch |                         |                 |
| Smooth road surface - Grader |        | <u>2</u> | hrs at | <u>\$75.00</u> | per hour               | <u>\$150.00</u>         |                 |
|                              |        |          |        |                |                        | <b>Project 1A Total</b> | <b>\$150.00</b> |

**Project 1B: Road Improvement**

|                              |        |          |        |                |                        |                         |                 |
|------------------------------|--------|----------|--------|----------------|------------------------|-------------------------|-----------------|
| Points:                      | B to C | Length:  | 3095'  | Type:          | 14' subgrade, w/ ditch |                         |                 |
| Smooth road surface - Grader |        | <u>2</u> | hrs at | <u>\$75.00</u> | per hour               | <u>\$150.00</u>         |                 |
|                              |        |          |        |                |                        | <b>Project 1B Total</b> | <b>\$150.00</b> |

**Project 1C: Road Improvement**

|         |        |         |       |       |              |  |  |
|---------|--------|---------|-------|-------|--------------|--|--|
| Points: | B to G | Length: | 2920' | Type: | 14' subgrade |  |  |
|---------|--------|---------|-------|-------|--------------|--|--|

**Excavation**

|                           |  |          |        |                |        |                         |                 |
|---------------------------|--|----------|--------|----------------|--------|-------------------------|-----------------|
| Cat time for improvements |  | <u>4</u> | hrs at | <u>\$95.00</u> | per hr | <u>\$380.00</u>         |                 |
|                           |  |          |        |                |        | <b>Total Excavation</b> | <b>\$380.00</b> |

**Grade Road Surface**

|                              |  |          |        |                |          |                      |                 |
|------------------------------|--|----------|--------|----------------|----------|----------------------|-----------------|
| Smooth road surface - Grader |  | <u>4</u> | hrs at | <u>\$75.00</u> | per hour | <u>\$300.00</u>      |                 |
|                              |  |          |        |                |          | <b>Total Grading</b> | <b>\$300.00</b> |

**Project 1C Total                    \$680.00**

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

|         |        |         |      |       |              |  |  |
|---------|--------|---------|------|-------|--------------|--|--|
| Points: | E to F | Length: | 255' | Type: | 14' subgrade |  |  |
|---------|--------|---------|------|-------|--------------|--|--|

**Excavation**

|                           |  |           |        |                |        |                         |                   |
|---------------------------|--|-----------|--------|----------------|--------|-------------------------|-------------------|
| Cat time for improvements |  | <u>10</u> | hrs at | <u>\$95.00</u> | per hr | <u>\$950.00</u>         |                   |
| Laborer                   |  | <u>10</u> | hrs at | <u>\$30.00</u> | per hr | <u>\$300.00</u>         |                   |
|                           |  |           |        |                |        | <b>Total Excavation</b> | <b>\$1,250.00</b> |

**Grade Road Surface**

|                              |  |          |        |                |          |                      |                |
|------------------------------|--|----------|--------|----------------|----------|----------------------|----------------|
| Smooth road surface - Grader |  | <u>1</u> | hrs at | <u>\$75.00</u> | per hour | <u>\$75.00</u>       |                |
|                              |  |          |        |                |          | <b>Total Grading</b> | <b>\$75.00</b> |

**Project 1D Total                    \$1,325.00**

**Project 1 Cost                    \$2,305.00**



**SUMMARY OF CONSTRUCTION COST**

**Top Panther**

**Project 2: Landing Construction and Road Improvement**

Points: C to D

|  |    |        |          |        |            |
|--|----|--------|----------|--------|------------|
| Excavator to remove stumps & load trucks | 10 | hrs at | \$110.00 | per hr | \$1,100.00 |
| Cat time for improvements                | 10 | hrs at | \$95.00  | per hr | \$950.00   |
| Dump Truck to haul material              | 10 | hrs at | \$60.00  | per hr | \$600.00   |
| Laborer                                  | 10 | hrs at | \$30.00  | per hr | \$300.00   |
| Grader                                   | 1  | hrs at | \$75.00  | per hr | \$75.00    |

**Project 2 Total**                      \$3,025.00

**Move-in**

| Equipment  | Miles | Mileage<br>Factor | Equipment<br>Allowance | Total    |
|------------|-------|-------------------|------------------------|----------|
| Excavator  | 35    | 0.74              | \$533.00               | \$394.42 |
| D7 Cat     | 35    | 0.74              | \$387.00               | \$286.38 |
| Grader     | 35    | 0.74              | \$241.00               | \$178.34 |
| Dump Truck | 35    | 0.74              | \$144.00               | \$106.56 |

**Total Move-in**                      \$965.70

**Project 2 Cost**                      \$3,990.70

**Project No. 3: Umpcoos Stockpile**

Location: 7000/6000 Rd Jct.  
 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):  | \$8.33             | per cu yd   |
| Piling and shaping cost per cubic yard: | \$0.53             | per cu yd   |
| <b>Total cost per cubic yard:</b>       | <b>\$15.86</b>     | per cu yd   |
| <b>Total cubic yards:</b>               | <b>1200</b>        | cubic yards |
| <b>Total Cost for Stockpile rock:</b>   | <b>\$19,032.00</b> |             |

**Project 3 Cost**                      \$19,032.00

**Total Project Costs**                      \$25,327.70

## TIMBER SALE SUMMARY

Top Panther

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:** 100% CSL, 0% BOF.
4. **Sale Acreage:** The net harvested area is 61 acres. The acreage was determined using ArcView software by digitizing the boundary over an orthophoto image and then calculating the area using a measuring tool in an ArcView program extension.
5. **Volume by Species, Fund, and County:** See table on page 3.
6. **Grade by Percent:**

| Species<br>(by Area) | 3 Peeler | Special<br>Mill | 2 Saw | 3 Saw | 4<br>Saw/Camp |
|----------------------|----------|-----------------|-------|-------|---------------|
| Douglas-fir          | 2        | 8               | 68    | 18    | 4             |

7. **Cruise:** The sale area was variable plot cruised using the Big BAF cruise design, which consisted of 61 nested plots. Each plot consists of both a full 40 BAF count plot and a full 360 BAF measure plot. The 40 BAF count plot was used to tally the number of trees by species to determine stand basal area. The 360 BAF plot was used to obtain height, grade and defect. Thirty-eight Big BAF trees were cruised for diameter, height, grade and defect. Cruising was done by ODF Foresters and compiled using Superace and Excel, in December 2003. The combined sampling error for board foot volume was 6.47%.

### A. Cruise Summary Data:

| Diameter | Top<br>Diameter | Form Point   | Form Factor                           | CV<br>% | SE<br>% |
|----------|-----------------|--------------|---------------------------------------|---------|---------|
| D4H      | Total Height    | Conifer: 16' | Recorded or estimated on<br>all trees | 24      | 6.47    |

B. Stand Summary:

| Species<br>(By Area) | D4H | Trees per Acre | Basal Area<br>(ft <sup>2</sup> /ac) | Net BF per<br>acre |
|----------------------|-----|----------------|-------------------------------------|--------------------|
| Douglas-fir          | 26  | 60             | 228                                 | 63                 |

C. Green Tree Retention Summary: There are 239 trees designated as GTR associated with this sale. The trees are marked with red painted "W"s or located in stream buffers. The following table summarizes the number of trees by species.

| Green Tree<br>Retention | Total # of<br>Stems | Douglas<br>Fir | Hemlock | Red Cedar | Hardwoods |
|-------------------------|---------------------|----------------|---------|-----------|-----------|
| Total                   | 239                 | 135            | 18      | 0         | 86        |

8. **Timber Description:** The majority of the sale areas are composed of 95 - 121 year old second growth Douglas Fir of good to average quality, intermixed with small amounts of Western hemlock and scattered Red Alder plus a few red cedar. Any red cedar tree is to be left uncut.
9. **Topography:** The sale areas are moderately steep (>50%) with some gentler bench areas in Area 1. Soil depth is reasonably deep on most of the sale areas with only a few draws and small rock outcrops.
10. **Logging Method:** The sale areas will be cable logged uphill with single-end suspension over the unit. Lift trees may be necessary in some locations to facilitate suspension of payloads. Full suspension will be required as necessary to protect streams and RMAs. A motorized carriage may be needed to obtain the necessary suspension.
11. **Access:** From Coos Bay, take Coos River Route past Allegany to the mouth of Marlow Creek (approximately 16 miles). Turn northeast (left) onto State Forest 1000 Road (Elk Ridge Road) take this road approximately 16 miles and turn north (left) onto the State Forest 8000 Road. Travel approximately 0.25 mile north on the 8000 Road, then continue northerly (left) turning onto State Forest 8800 Road approximately 0.5 mile to Area 1.
12. **Projects:**
  - Project No. 1: Road and Landing Improvement
  - Project No. 2: Landing Construction and Road Improvement
  - Project No. 3: Rock Stockpile

## NET VOLUMES AND ACREAGE

| SALE AREA & SPECIES |       | Tree cnt. 100% Units | NET VOLUMES (MBF)  |     |       |         |     |       |             |               |
|---------------------|-------|----------------------|--------------------|-----|-------|---------|-----|-------|-------------|---------------|
|                     |       |                      | By County and Fund |     |       |         |     |       | Total Vols. | Vol. per Acre |
|                     |       |                      | Coos               |     |       | Douglas |     |       |             |               |
| Area                | Spec  |                      | CSL                | BOF | Total | CSL     | BOF | Total |             |               |
| I                   | D-fir |                      | 3203               |     | 3203  |         |     | 0     | 3203        | 62.8          |
|                     | Hem   |                      | 116                |     | 116   |         |     | 0     | 116         | 2.3           |
|                     | Hdwd  |                      | 43                 |     | 43    |         |     | 0     | 43          | 0.8           |
| II                  | D-fir |                      | 628                |     | 628   |         |     | 0     | 628         | 62.8          |
|                     | Hem   |                      | 23                 |     | 23    |         |     | 0     | 23          | 2.3           |
|                     | Hdwd  |                      | 9                  |     | 9     |         |     | 0     | 9           | 0.9           |
| <b>TOTALS</b>       |       |                      | 4022               | 0   | 4022  | 0       | 0   | 0     | 4022        |               |

**TOTAL SALE VOLUME BY SPECIES**

|             |      |     |
|-------------|------|-----|
| Douglas-fir | 3831 | MBF |
| Hemlock     | 139  | MBF |
| Hardwoods   | 52   | MBF |

Report by: RE Lilds

Date: 1/7/2004

Unit For: Monmouthline Jan 30, 04  
Date

Asst. Dist. For: Greg Kermeyer 2/28/2004  
Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS  
NO INGROWTH INCLUDED**

**ACREAGE BY COUNTY (to nearest acre)**

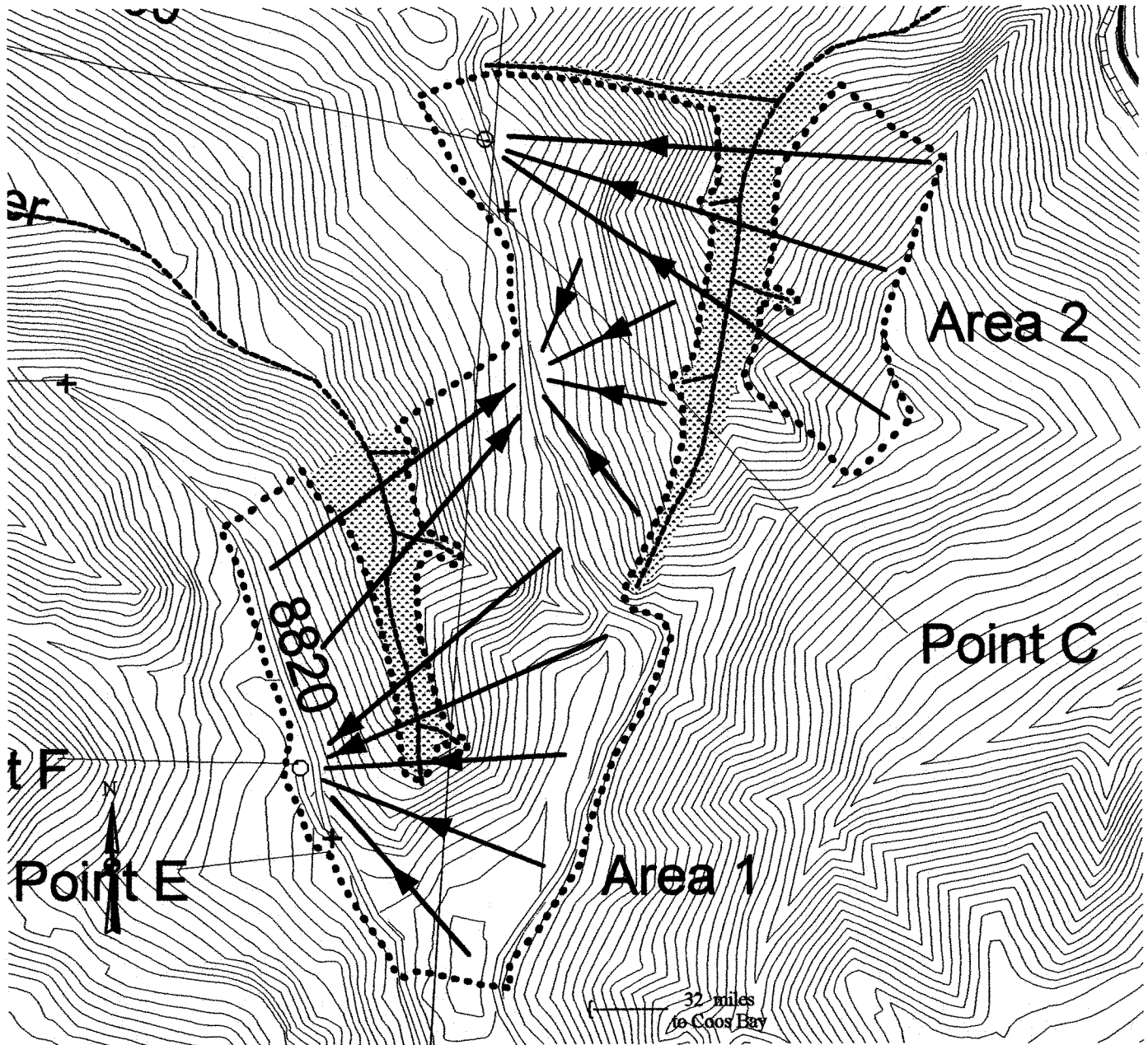
| Sale Area | Coos County |            |           |            |            |            | Douglas County |            |            |            |            |            | TOTAL ACRES |
|-----------|-------------|------------|-----------|------------|------------|------------|----------------|------------|------------|------------|------------|------------|-------------|
|           | CSL         |            |           | BOF        |            |            | CSL            |            |            | BOF        |            |            |             |
|           | Conifer cc  | Conifer pc | Hard wood | Conifer cc | Conifer pc | Hard woods | Conifer cc     | Conifer pc | Hard woods | Conifer cc | Conifer pc | Hard woods |             |
| I         | 51          |            |           |            |            |            |                |            |            |            |            |            | 51          |
| II        | 10          |            |           |            |            |            |                |            |            |            |            |            | 10          |
| SUM       | 61          | 0          | 0         | 0          | 0          | 0          | 0              | 0          | 0          | 0          | 0          | 0          | 61          |

cc- clearcut












pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



**LEGEND**

-  **General Yarding Plan**
-  **Section Lines**
-  **Timber Sale Boundary**
- Project Points**
-  **Landing**
-  **Point for Project Work**
- Access Roads**
-  **Purchaser Maintained**
-  **State Maintained**
- Streams**
-  **Fish Bearing**
-  **Non Fish Bearing**
-  **Stream Buffer**
-  **20 ft contours**

TOP PANTHER LOGGING PLAN  
OF TIMBER SALE CONTRACT NO.  
341-04-89

TOP PANTHER  
PORTIONS OF SECTIONS 16 & 17, T23S, R10W, W.M.  
COOS COUNTY, OREGON

**APPROXIMATE NET ACREAGE**

AREA 1 = 51  
AREA 2 = 10  
TOTAL = 61

APPROX. SCALE 1" = 500'

