



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Tahoe Sale 341-03-26

District: Tillamook

Date: 10/3/02

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$56,927.70	\$0.00	\$56,927.70
		<b>Project Work</b>	\$0.00
		<b>Advertised Value</b>	\$56,927.70



# Timber Sale Appraisal Timber Description Tahoe Sale 341-03-26

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Section 31, T2S, R7W, WM, Tillamook County, OR

Date: 10/3/02

Stand Stocking: 20%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	11	0	97

Volume by Grade	Douglas - Fir	Total
3S	222	222
4S	36	36
<b>Total</b>	<b>258</b>	<b>258</b>

Comments: Pond Values Used: 3rd Quarter 2002

Other (add profit & risk): \$516 Total  
 Brand & Paint: \$2/MBF x 258MBF = \$516

Other (Profit & risk included): \$6,850 Total  
 Construction of Non-project roads: 14sta x \$150/sta = \$2,100  
 Landing Construction: 8 landings x \$500/landing = \$4000  
 Rocking road approaches: 5 approaches x 30cy x \$5/cy = \$750

Alder pond value of \$475/MBF was obtained from Northwest Hardwoods in June 2002.  
 Alder stumpage: \$475/MBF - \$290.98 logging cost = \$184.02/MBF



# Timber Sale Appraisal

## Logging Conditions

### Tahoe

### Sale 341-03-26

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<b>Combination#:</b> 1	Douglas - Fir	30.00%	
<b>Yarding Distance:</b>	Medium (800 ft)		<b>Downhill Yarding:</b> Yes
<b>Logging System:</b>	Track Skidder		<b>Process:</b> Manual Falling/Delimiting
<b>Tree Size:</b>	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
<b>Loads/Day:</b>	5		<b>Bd. Ft./Load:</b> 3,400
<b>Cost/MBF:</b>	\$192.08		
<b>Machines:</b>			
	Log Loader (B)		
	Track Skidder		
<b>Combination#:</b> 2	Douglas - Fir	70.00%	
<b>Yarding Distance:</b>	Short (400 ft)		<b>Downhill Yarding:</b> Yes
<b>Logging System:</b>	Track Skidder		<b>Process:</b> Manual Falling/Delimiting
<b>Tree Size:</b>	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
<b>Loads/Day:</b>	7		<b>Bd. Ft./Load:</b> 3,400
<b>Cost/MBF:</b>	\$147.76		
<b>Machines:</b>			
	Log Loader (B)		
	Track Skidder		



# Timber Sale Appraisal

## Logging Costs

### Tahoe

### Sale 341-03-26

"STEWARDSHIP IN FORESTRY"

Date: 10/3/02

Operating Seasons: 1.0

Profit & Risk: 20%

Project Costs: \$0

Other Costs (P/R): \$512

Slash Disposal: \$0

Other Costs: \$6,850

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

Road Maintenance: \$0.00

#### Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	3.0	3.4



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# Timber Sale Appraisal Logging Costs Breakdown Tahoe Sale 341-03-26

Costs	Douglas - Fir
<b>Logging</b>	161.06
<b>Road Maintenance</b>	0.00
<b>Fire Protection</b>	10.50
<b>Hauling</b>	45.15
<b>Other (P/R appl.)</b>	1.98
<b>Profit &amp; Risk</b>	43.74
<b>Slash Disposal</b>	0.00
<b>Scaling</b>	2.00
<b>Other</b>	26.55
<b>Total</b>	290.98

<b>Amortization</b>	0.00
<b>Pond Value</b>	511.63
<b>Stumpage</b>	220.65
<b>Amortized</b>	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Tahoe Sale 341-03-26

## Amortized

	Douglas - Fir
MBF	0.00
Value	0.00
Total	0.00

## Unamortized

	Douglas - Fir
MBF	258.00
Value	220.65
Total	56,927.70

## Gross Timber Sale Value

**Recovery \$56,927.70**

Prepared by: Bob Gustavson

Date: 10/3/02

District: Tillamook

Phone: (503) 842-2524



**OREGON DEPARTMENT OF FORESTRY  
CRUISE REPORT**

**TAHOE**

1. **Type of Sale:** Thinning – Recovery
2. **Legal Description:** Portions of Section 31, T2S, R7W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:** The sale boundary was plotted on a digital orthophotograph and the acreage was calculated with GIS.

	<b>ACRES</b>		
	<b><u>Sale</u></b>	<b><u>Total</u></b>	<b><u>Net</u></b>
<b>Sale Area (Partial Cut)</b>	<b>92</b>	<b>69</b>	<b>69</b>

**Sale Acres**

Area within the Timber Sale Boundary signs

**Total acres**

*For accomplishment reporting*

**Clearcut harvest** - Sale acres; plus green tree retention acres outside the sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Partial Cut** - Sale acres less areas of low stocking, hardwoods, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Net acres**

*Used for calculating the advertised volume.*

**Clearcut** - Sale acres, less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Partial Cut** - Same as total acres

4. **Cruising Procedures:**
  - A. **Cruising Method:** Twenty-seven variable-radius full point plots were established in representative portions of the stands on the sale area to develop a stand table for conifer volume computations. Residual and surplus trees were designated to calculate a residual basal area of 140 square feet per acre.
  - B. **Plot Size:** A variable-radius plot cruise was done using a basal area factor of 20. The point of observation was at 4.5 feet.
  - C. **Diameter Standards:** All conifer diameters were measured to the nearest 1" at a height of 4.5 feet. Diameters under 9" were not recorded.

- D. **Grading System:** Sixteen conifer trees representative of take trees were measured for V-BAR (Volume-Basal Area Ratio) and grade during the cruise. Cruised grades are similar to results from previous cruises in similar size timber.
- E. **Defect and Breakage:** A 5% defect and breakage reduction was applied to the conifer volume.
- F. **Cruiser Names / Dates:** Ed Keith and Steve Langer, December 2000. Steve Langer and John Pine, May 2002.
5. **Computation Procedures:** Basal area and density information was using plot data taken. The residual basal area for the sale is to be within the range of 140 square feet to 160 square feet per acre. For computation purposes the sale volume was calculated using a residual basal area of 140 square feet. V-BAR and grade for the take trees was computed using SuperAce (see attached Volume Computation Summary).
6. **Timber Description:** This area was burned in the 1939 Saddle Mountain Fire and 1951 North Fork/Elkhorn Fire. The current stand structure is closed-canopy. The desired future stand structure is layered. The sale contains a Douglas-fir stand 35 years of age on Douglas-fir Site Index 130 soils. Hardwoods are present in draws and along abandoned roads. The sale area was pre-commercial thinned (PCT'd) in 1990. The non-thinning acres include areas of hardwood, a small area of steep slopes where ground yarding is not feasible and posted buffer zones around water features. The current average and expected stand characteristics for thinning areas are shown in the attached stand table.
7. **Revenue Distribution:**  
100% FDF  
Tax Code: 8-1  
Deed No. 295  
100% Rehabilitation Obligated
8. **Appendices:**  
- Volume Summary  
- Stand Table  
- Logging Plan/Thinning Acres





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# Tahoe

## Volume Summary

TIMBERSALE AREA						
69 acres						
SPECIES	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	52	76	3.9	272	5%	258
<b>TOTAL</b>				272		258

TOTAL SALE VOLUME		
SPECIES	MBF	Net Vol (MBF)
Douglas-fir	272	258
<b>TOTAL</b>	272	258



# Tahoe

## Stand Table

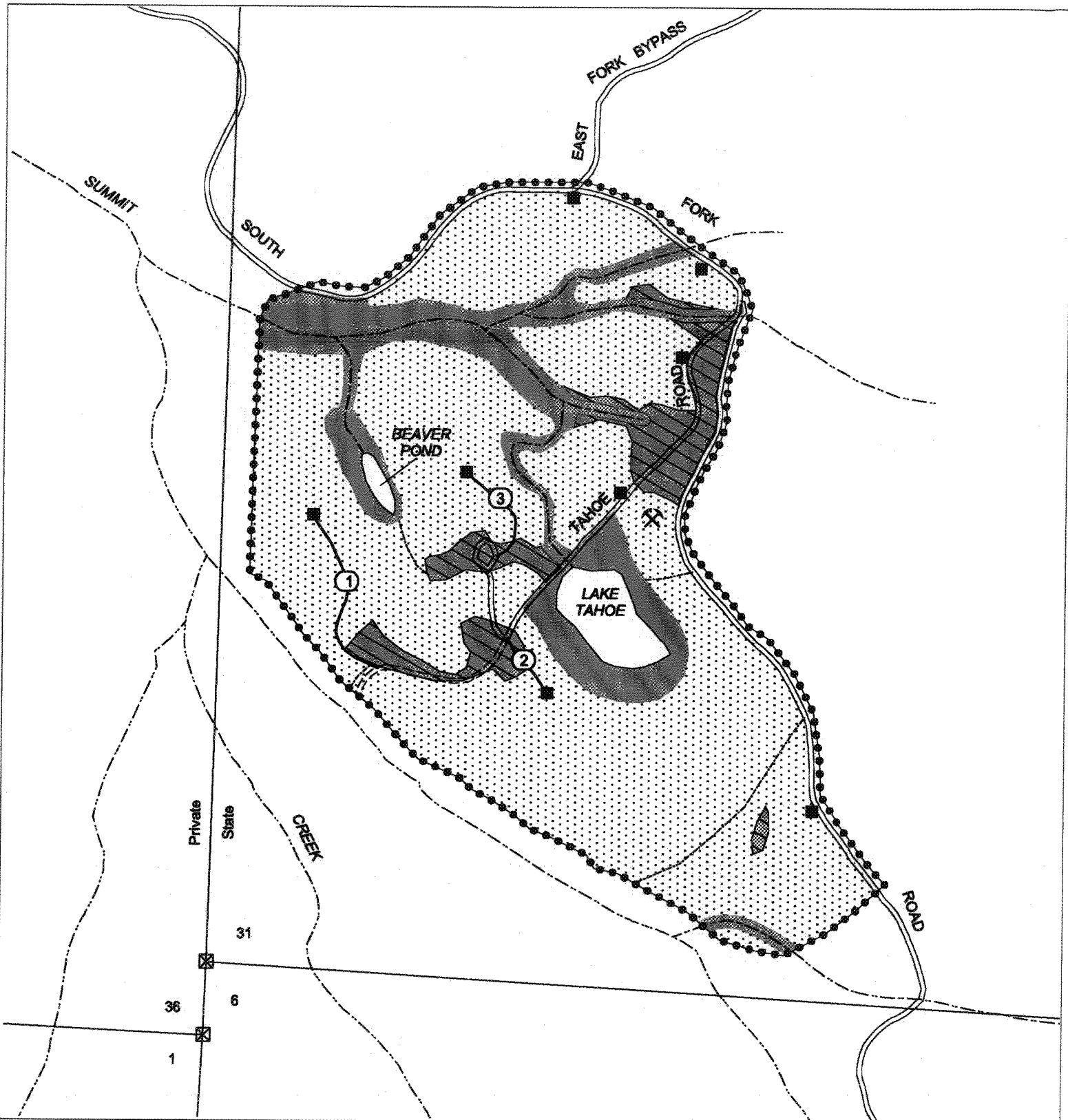
140 Target Basal Area

DBH	Take Trees	Leave Trees	Number of Plots	Take Trees per Acre	Leave Trees per Acre	Trees per Acre
8"	0	0	27	0.0	0.0	0.0
9"	0	0	27	0.0	0.0	0.0
10"	42	25	27	57.6	34.3	91.8
11"	0	0	27	0.0	0.0	0.0
12"	23	60	27	22.1	57.8	79.9
13"	0	0	27	0.0	0.0	0.0
14"	5	54	27	3.5	38.0	41.5
15"	0	0	27	0.0	0.0	0.0
16"	0	27	27	0.0	14.0	14.0
17"	0	0	27	0.0	0.0	0.0
18"	0	11	27	0.0	4.5	4.5
19"	0	0	27	0.0	0.0	0.0
20"	0	9	27	0.0	3.0	3.0
21"	0	0	27	0.0	0.0	0.0
22"	0	1	27	0.0	0.3	0.3
24"	0	0	27	0.0	0.0	0.0
26"	0	0	27	0.0	0.0	0.0
28"	0	0	27	0.0	0.0	0.0
30"	0	0	27	0.0	0.0	0.0
32"	0	0	27	0.0	0.0	0.0
34"	0	0	27	0.0	0.0	0.0
36"	0	1	27	0.0	0.1	0.1
Total	70	188		83	152	235

Trees/plt	9.6	Trees/ac	235
Tk trs/plt	2.6	Tk trs/ac	83
Lv trs/plt	7.0	Lv trs/ac	152

BA(acre)	19.1	Current Ave Stand Diameter	12.2
BA(tree)	0.81	Leave Stand - QM Diameter	13.0
Lv BA/ac	140	Take trees - QM Diameter	10.7
Tk BA/ac	52		

Relative Density	55
Relative Den. - Leave	39



**LOGGING PLAN**  
 Timber Sale Contract 341-03-26  
 Tahoe  
 Section 31, T2S, R7W, W.M.  
 Tillamook County, Oregon



Acres  
 Sale 92  
 Net 69

- |   |                       |       |                  |
|---|-----------------------|-------|------------------|
| ☒ | Survey corner         | ----- | Setting boundary |
| ⚡ | Rock source           | ----- | Area boundary    |
| Ⓢ | Stock pile            | ●●●●● | Sale boundary    |
| Ⓜ | Waste area            | ———   | Type-F stream    |
| ● | Cable landing         | ----- | Type-N stream    |
| ■ | Tractor landing       | ====  | Surfaced road    |
| □ | Cable yarding         | ----  | Unsurfaced road  |
| ▤ | Ground yarding        | ===== | State highway    |
| ▨ | Buffer zone           | ———   | County road      |
| ▩ | Non-required thinning | —①—   | Non-project road |
|   |                       | ----- | Swing road       |
|   |                       | ----- | Abandoned road   |