Timber Sale Appraisal
Bear With Us
Sale KL-341-2025-GF7723-01

District: Klamath/Lake **Date: December 09, 2024**

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$103,882.71	$0.00	$103,882.71
		Project Work:	($86,869.51)
		Advertised Value:	$17,013.20

Timber Sale Appraisal
Bear With Us
Sale KL-341-2025-GF7723-01

District: Klamath/Lake **Date: December 09, 2024**

Timber Description

Location:

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
White Fir	15	0	98
Lodgepole Pine	11	0	95

Volume by Grade	3S & 4S 6"-11"	Camprun	Total
White Fir	245	0	245
Lodgepole Pine	0	1,886	1,886
Total	245	1,886	2,131

Comments: Pond Values Used: Local Pond Values, January 2025

Log Markets: Klamath Falls and Medford.

Other Costs (no Profit & Risk): None

Other Costs (with Profit & Risk to be added): None

ROAD MAINTENANCE
Move-in: $400.00

General Road Maintenance: 8 miles x $270 per mile x 1 bladings = $2,160.00

Total Road Maintenance: $2,560.00, $1.18 per Mbf

Timber Sale Appraisal
Bear With Us
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District: Klamath/Lake **Date: December 09, 2024**

Logging Conditions

Combination#: 1	White Fir	100.00%
	Lodgepole Pine	100.00%

Logging System: Wheel Skidder **Process:** Feller Buncher

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF

loads / day: 14 **bd. ft / load:** 4200

cost / mbf: $170.07

machines:
Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Tire Skidder

Timber Sale Appraisal
Bear With Us
Sale KL-341-2025-GF7723-01

District: Klamath/Lake **Date: December 09, 2024**

Logging Costs

Operating Seasons:	1.00	**Profit Risk:**	7%
Project Costs:	$86,869.51	**Other Costs (P/R):**	$0.00
Slash Disposal:	$0.00	**Other Costs:**	$0.00

Miles of Road

Road Maintenance: $1.24

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

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
White Fir	$0.00	3.0	4.3
Lodgepole Pine	$0.00	4.0	4.0

Timber Sale Appraisal
Bear With Us
Sale KL-341-2025-GF7723-01

District: Klamath/Lake **Date: December 09, 2024**

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
White Fir									
$170.07	$1.26	$2.06	$98.84	$0.00	$19.06	$0.00	$2.00	$0.00	$293.29
Lodgepole Pine									
$170.07	$1.30	$2.06	$82.03	$0.00	$17.88	$0.00	$2.00	$0.00	$275.34

Specie	Amortization	Pond Value	Stumpage	Amortized
White Fir	$0.00	$412.00	$118.71	$0.00
Lodgepole Pine	$0.00	$315.00	$39.66	$0.00

Timber Sale Appraisal
Bear With Us
Sale KL-341-2025-GF7723-01

District: Klamath/Lake **Date: December 09, 2024**

Summary

Amortized

Specie	MBF	Value	Total
White Fir	0	$0.00	$0.00
Lodgepole Pine	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
White Fir	245	$118.71	$29,083.95
Lodgepole Pine	1,886	$39.66	$74,798.76

Gross Timber Sale Value

Recovery: $103,882.71

Prepared By: Brady Wood **Phone:** 541-883-5681

Bear With Us
KL-341-2025-GF7723-01
Other Costs

Road Maintenance

Move-in cost (grader):	$400.00
Number of Miles to be Bladed:	8
Number of Bladings:	1
Total Miles:	8
Miles/Hour for Equipment:	0.5
Cost/Hour (grader with operator):	$135.00
Total Grading Hours:	16
Grading Cost:	$2,160.00
Total Cost:	**$2,560.00**
Cost/Mbf:	$1.20

LP	1,886	Mbf	89%	Average Load	4.0	Mbf	No. of Loads	472
WF	245	Mbf	11%	Average Load	4.0	Mbf	No. of Loads	61
Total:	**2,131**	**Mbf**					**Total Loads**	**533**

Assume:	4	Trucks/Day
	4	Trips/Day
	16	**Loads per Day**
	33	**Hauling Days**

Bear With Us

KL-341-2025-GF7723-01

Project Costs

Project #1 Road Improvement

Improvement

Move in Cost Cat: $500

	Points	Distance(ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	A to B	6248.11876	1000	6.25	$150.00	$937.22
Open/Clear/Shape	C to D	7982.21097	1000	7.98	$150.00	$1,197.33
Open/Clear/Shape	H to I	1965.93878	1000	1.97	$150.00	$294.89
Open/Clear/Shape	J to K	7520.66543	1000	7.52	$150.00	$1,128.10
Open/Clear/Shape	L to M	1188.84637	1000	1.19	$150.00	$178.33
Open/Clear/Shape	O to P	2115.16149	1000	2.12	$150.00	$317.27
Open/Clear/Shape	R to S	7037.4115	1000	7.04	$150.00	$1,055.61
Open/Clear/Shape	S to T	1734.83613	1000	1.73	$150.00	$260.23
Open/Clear/Shape	K to U	772.1268	1000	0.77	$150.00	$115.82
Open/Clear/Shape	V to X	9453.28448	1000	9.45	$150.00	$1,417.99
Open/Clear/Shape	V to Y	6420.558	1000	6.42	$150.00	$963.08
Open/Clear/Shape	Z to 2A	1553.41031	1000	1.55	$150.00	$233.01
Open/Clear/Shape	2B to 2C	1351.13943	1000	1.35	$150.00	$202.67
Open/Clear/Shape	2D to 2C	1506.50391	1000	1.51	$150.00	$225.98
Open/Clear/Shape	2F to S	7422.74755	1000	7.42	$150.00	$1,113.41
Open/Clear/Shape	2G to 2H	4298.13061	1000	4.30	$150.00	$644.72
Open/Clear/Shape	2I to 2J	4014.33753	1000	4.01	$150.00	$602.15
Open/Clear/Shape	2H to 2K	9623.44192	1000	9.62	$150.00	$1,443.52
Open/Clear/Shape	2L to 2M	1298.11569	1000	1.30	$150.00	$194.72
Open/Clear/Shape	2P to 2Q	1389.23303	1000	1.39	$150.00	$208.38
Open/Clear/Shape	2R to 2S	854.807583	1000	0.85	$150.00	$128.22
Open/Clear/Shape	2N to 2O	2515.54003	1000	2.52	$150.00	$377.33

Bear With Us
KL-341-2025-GF7723-01
Project Costs

Project #1 Road Construction

Open/Clear/Shape	P to Q	487.628738	500	0.98	$150.00	$146.29
Open/Clear/Shape	M to N	983.373681	500	1.97	$150.00	$295.01
Open/Clear/Shape	F to G	473.492885	500	0.95	$150.00	$142.05
Open/Clear/Shape	D to E	1153.92818	500	2.31	$150.00	$346.18
	Total	91,365		94.46		$14,169.51

Project #1 Summary

Move In Costs	$500.00
Improvement Cost	$14,169.51
Project # 1 Total	**$14,669.51**
per Mbf	$6.88

Project #2 Fell, Skid, and Pile Submerchantable Material

Total Sub-Sawlog Volume: 314 MBF

Fell and Skid/MBF:	$75.00
Sort/MBF:	$25.00
Total	**$31,400.00**
per MBF	$14.73

Landing Slash Piling

Number of Landings: 68

Shovel Time:	1 Hour per Landing	Cost per Hour:	$150.00	Total Cost	$10,200.00
Cat Time:	1 Hour per Landing	Cost per Hour:	$150.00	Total Cost	$10,200.00

Total	**$20,400.00**
per MBF	$9.57

Bear With Us
KL-341-2025-GF7623-01
Project Costs

Project #2 Summary

Fell, Skid, Pile Submerchantable Material	$31,400.00
Landing Slash Piling	$20,400.00
Total Cost	**$51,800.00**
per Mbf	$24.31

Project #3 Waterbarring

Skid Trail Waterbarring

68	Number of Landings
2	Hours per Landing
$150.00	Cost per Hour (Cat)
$20,400.00	**Total**
$9.57	per Mbf

Project #3 Summary

Waterbarring:	$20,400.00
Total:	**$20,400.00**
per Mbf:	$9.57

Cost Summary All Projects

Project No.1 - Road Improvement	$14,669.51
Project No.2 - Fell, Skid, and Pile Submerchantable Material	$51,800.00
Project No.3 - Waterbarring	$20,400.00
Total Cost	**$86,869.51**
per Mbf	$40.76

Bear With Us - GNA

KL-341-2025-GF7723-01

Cruise Report

"STEWARDSHIP IN FORESTRY"

SALE NAME: Bear With Us - GNA

LEGAL DESCRIPTION:

Located in Section(s) 1, 2 T26S, R11E; 6, 7 T26S, R12E; 27, 26, 25, 34 and 35 of T25S, R11E, Willamette Meridian, Klamath County, Oregon

BOUNDARY LINES:

Unit boundaries are unmarked.

ACREAGE:

Gross Sale Acreage:	1,852 Acres
Exclusion Acreage:	472 Acres
Net Sale Acreage:	1,380 Acres

Mapping was accomplished using Avenza pdf Maps with the data processed through ArcMap.

TREATMENT:

The Timber Sale is a purchaser select, partial cut harvest.

CRUISE METHOD:

Variable plot cruise with a ratio of two count plot for every measure plot. Fixed plot cruise for sub-merchantable material was 5 – 9 inch DBH for all species.

BASAL AREA FACTOR:

A basal area factor of 10 was used for all variable cruise plots. Fixed plots were cruised at $^{1}/_{50}$ of an acre

PLOT DESIGNATION:

Plot centers were established at every plot with pink flag wire stakes with the corresponding plot number. Blue and white stripped flagging was attached to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

AREA	CV%	DESIRED SE%	ACRES
Area 1	71.3%	9.5%	1,380

$$\textbf{Number of Plots} = \frac{T^2C^2}{A^2}$$

C = Coefficient of Variation in Percent (Taken from inventory data)
T = Number of Standard Errors
A = Desired Sampling Error for a sale of this size and value

$$N = \frac{(1)^2(100)^2}{(12)^2} = 56 \text{ plots}$$

Measurements and Grading:

- Ratio of two count plot for every measure plot.
- DBH and Height were measured on all "in" trees for measure plots.
- Pulp volume and sawlog volume cruised.
- All trees were graded using the segment system.
- Nested fixed plot cruise for all submerchantable material (5" to 9" DBH).

TREE HEIGHT:

All trees were measured to a fixed diameter outside bark. This height is usually taken as high up the bole as possible, where the cruiser can clearly see the bole, and the taper remains constant (usually 6 or 8 inches). The log segments are broken out and graded accordingly.

MINIMUM D.B.H:

5.0” DBH.

DIAMETER STANDARDS:

1” diameter class

BTR:

Standard ratios were used. See attached species tables.

FORM FACTOR:

Form factor was measured or estimated at 16’ for each tree. Each tree was assigned its own FF.

FORM POINT:

All trees were sighted at DBH.

VOLUME COMPUTATION:

All cruise data was input and run at the district on Atterbury’s Super Ace program.

FINAL CRUISE RESULTS:

CV%	SE%	ACRES
71.3	9.56	1,380

TIMBER DESCRIPTION

SAWLOG VOLUME:

This volume was obtained from the variable plot cruise. All material graded camprun. See grade table for minimum standards.

TOTAL SAWLOG VOLUME

Species	Ave. DBH	Acres	Gross Vol/Acre (bf)	Net Vol/Acre (bf)	Net Sale Vol (Mbf)
Lodgepole pine	11.4	1,380	1,378	1,367	1,886
White fir	14.6	1,380	178	178	245
		Total	1,556	1,545	2,131

TOTAL NET SAWLOG VOLUME: 2,131 Mbf

GREEN PULP VOLUME:

This volume was obtained by combining material from the fixed plot cruise with non-saw material from the variable plot cruise.

All material was graded green pulp, see grade table for minimum standards.

FIXED PLOT CRUISE

Species	Acres	Vol/Acre (bf)	Sale Vol (Mbf)
Lodgepole pine	1,380	47	65
Ponderosa	1,380	107	148
Total		154	213

VARIABLE PLOT CRUISE

Species	Acres	Vol/Acre (bf)	Sale Vol (Mbf)
Lodgepole pine	1,380	73	101
White fir	1,380	0	0
Total		73	101

TOTAL GREEN PULP VOLUME: 314 Mbf

TC PLOGSTVB

Log Stock Table - MBF

T025 R011 S35 TyVARI 1406.00

Project: BEARWUS
Acres 1,406.00

Page 1
Date 12/10/2024
Time 6:58:19AM

Spp	ST	Sort	Grade	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
LP		CR	CR	16	380	2.5	370	19.3			75	233	62							
LP		CR	CR	20	206		206	10.7			120	85								
LP		CR	CR	24	151		151	7.8			151									
LP		CR	CR	28	300		300	15.6			179	120								
LP		CR	CR	32	800		793	41.3			574	67	152							
LP		CR	GP	10	17		17	.9		17										
LP		CR	GP	12	51		51	2.7		17		33								
LP		CR	GP	13	35		35	1.8			35									
LP		Totals			1,938		1,922	88.5		34	1135	539	214							
WF		CR	CR	27	91		91	36.2				44	47							
WF		CR	CR	34	160		160	63.8				74	86							
WF		Totals			251		251	11.5				118	133							
Total		All Species			2,189		2,173	100.0		34	1135	657	347							

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: BEARWUS

Date 11/20/2024

Time 12:18:52PM

T025 R011 S35 TVARI

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
025	011	35	GNA	VARI	1406.00	56	42	1	E

T025 R011 S35 TVARI

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
LP		CR	CR	94	.8	1,305	1,294	1,820		100			32	25	44		24	7	48	0.55	27.0
LP		CR	GP	6		73	73	103	33	67			100				12	6	15	0.30	4.9
LP	**Totals**			88	.8	1,378	1,367	1,922	2	98			35	23	41		22	7	43	0.53	31.8
WF		CR	CR	100		178	178	251		100				36	64		30	9	106	0.87	1.7
WF	**Totals**			12		178	178	251		100				36	64		30	9	106	0.87	1.7
Type Totals					.7	1,557	1,546	2,173	2	98			31	25	44		22	7	46	0.55	33.5

TC TSTATS

STATISTICS

PROJECT **BEARWUS**

DATE 11/20/2024

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
025	**011**	**35**	**GNA**	**VARI**	1,406.00	56	129	1	E

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	56	129	2.3		
CRUISE	21	42	2.0	43,710	.1
DBH COUNT					
REFOREST					
COUNT	34	87	2.6		
BLANKS	1				
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
LP PINE	38	29.4	11.4	30	6.2	20.9	1,378	1,367	371	371
WHITE F	4	1.7	14.6	41	0.5	2.0	178	178	44	44
TOTAL	*42*	*31.1*	*11.6*	*31*	*6.7*	*22.9*	*1,557*	*1,546*	*415*	*415*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 % COEFF — **SAMPLE TREES - BF** — # OF TREES REQ. — INF. POP.

SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	56.2	9.1	48	53	57			
WHITE F	45.2	25.8	87	118	148			
TOTAL	*62.9*	*9.7*	*53*	*59*	*65*	*158*	*39*	*18*

CL: 68.1 % COEFF — **SAMPLE TREES - CF** — # OF TREES REQ. — INF. POP.

SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	53.5	8.7	13	14	16			
WHITE F	35.3	20.2	23	29	35			
TOTAL	*56.6*	*8.7*	*14*	*16*	*17*	*128*	*32*	*14*

CL: 68.1 % COEFF — **TREES/ACRE** — # OF PLOTS REQ. — INF. POP.

SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	78.6	10.5	26	29	32			
WHITE F	265.1	35.4	1	2	2			
TOTAL	*73.0*	*9.7*	*28*	*31*	*34*	*213*	*53*	*24*

CL: 68.1 % COEFF — **BASAL AREA/ACRE** — # OF PLOTS REQ. — INF. POP.

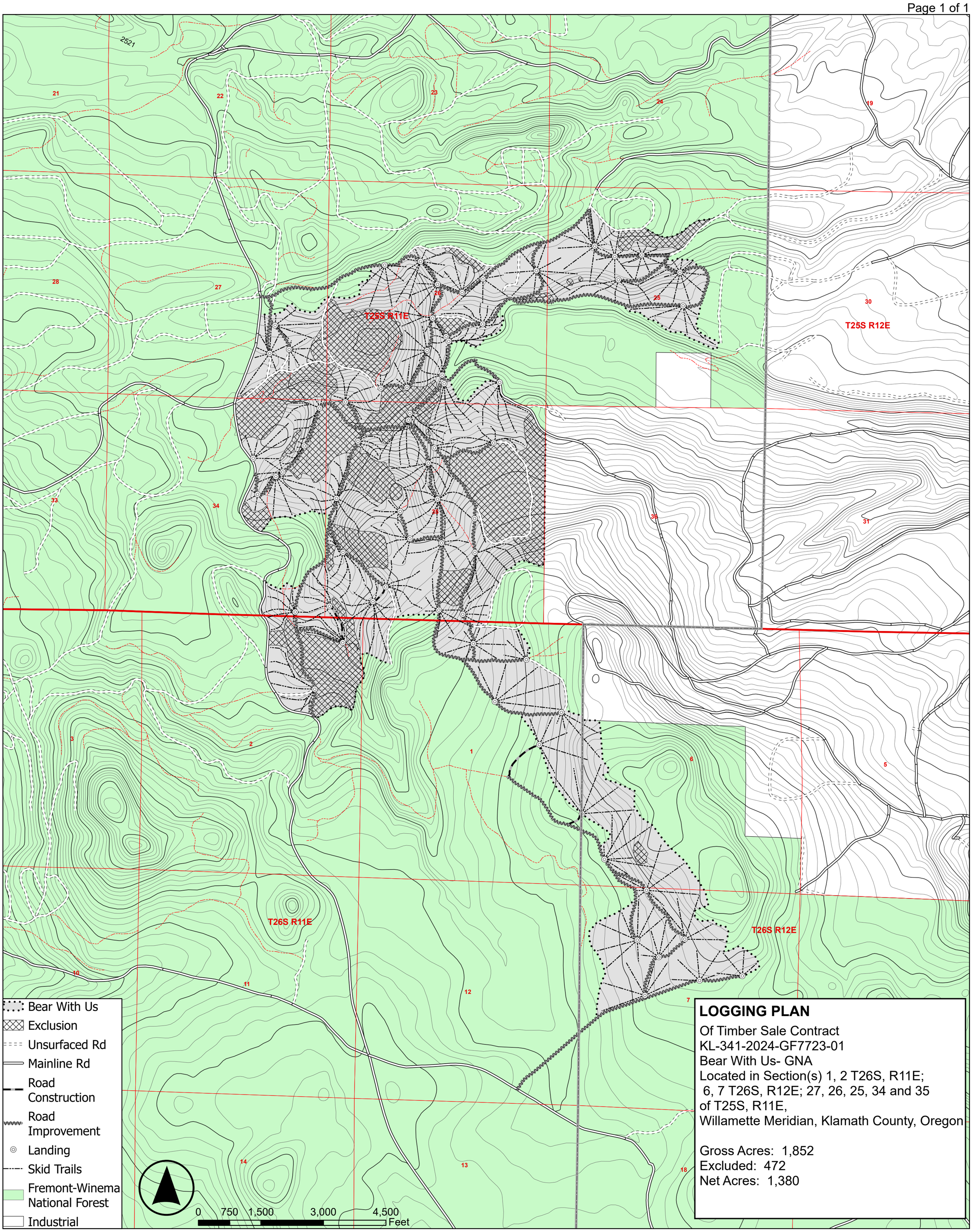
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	77.6	10.4	19	21	23			
WHITE F	264.4	35.3	1	2	3			
TOTAL	*70.2*	*9.4*	*21*	*23*	*25*	*197*	*49*	*22*

CL: 68.1 % COEFF — **NET BF/ACRE** — # OF PLOTS REQ. — INF. POP.

SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	78.6	10.5	1,224	1,367	1,511			
WHITE F	278.0	37.1	112	178	245			
TOTAL	*71.3*	*9.5*	*1,398*	*1,546*	*1,693*	*203*	*51*	*23*

CL: 68.1 % COEFF — **NET CUFT FT/ACRE** — # OF PLOTS REQ. — INF. POP.

SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
LP PINE	75.9	10.1	333	371	409			
WHITE F	270.3	36.1	28	44	60			
TOTAL	*68.9*	*9.2*	*377*	*415*	*454*	*190*	*47*	*21*


2521
T25S R11E
T25S R12E
T26S R11E
T26S R12E
Bear With Us
Exclusion
Unsurfaced Rd
Mainline Rd
Road Construction
Road Improvement
Landing
Skid Trails
Fremont-Winema National Forest
Industrial
0 750 1,500 3,000 4,500
Feet
LOGGING PLAN
Of Timber Sale Contract
KL-341-2024-GF7723-01
Bear With Us- GNA
Located in Section(s) 1, 2 T26S, R11E;
6, 7 T26S, R12E; 27, 26, 25, 34 and 35
of T25S, R11E,
Willamette Meridian, Klamath County, Oregon
Gross Acres: 1,852
Excluded: 472
Net Acres: 1,380