



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Steep Puppy
Sale KL-341-2018-33-

District: Klamath/Lake

Date: August 24, 2017

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$821,529.46	\$0.00	\$821,529.46
		Project Work:	(\$96,756.05)
		Advertised Value:	\$724,773.41



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District: Klamath/Lake

Date: August 24, 2017

Timber Description

Location: Portions of Sections 34 and 35, T32S, R7½E, and portions of Sections 2, 3, and 11, T33S, R7½E, W.M., Klamath County, Oregon.

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	27	0	97
White Fir	15	0	98
Incense Cedar	13	0	95
Sugar Pine	13	0	96
Ponderosa Pine	16	0	98

Volume by Grade	CR 8" - 14"	CR 14" - 22"	CR 6" - 8"	CR 22"+	Total
Douglas - Fir	8	87	0	0	95
White Fir	1,085	717	416	0	2,218
Incense Cedar	0	0	9	0	9
Sugar Pine	331	223	82	0	636
Ponderosa Pine	514	395	208	19	1,136
Total	1,938	1,422	715	19	4,094

Comments: Pond Values Used: Local Pond Values, June 2017.

Log Markets: Klamath Falls and Medford.

SCALING COST ALLOWANCE = \$5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$780 daily truck cost.

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

Dust Abatement: \$10,331.15

TOTAL Other Costs (with Profit & Risk to be added) = \$10,331.15

Other Costs (No Profit & Risk added):

None.



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Logging Conditions

Combination#: 1

White Fir	93.00%
Incense Cedar	100.00%
Sugar Pine	30.00%
Ponderosa Pine	54.00%

Logging System: Wheel Skidder **Process:** Feller Buncher
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 9 **bd. ft / load:** 4200
cost / mbf: \$100.44
machines: Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Tire Skidder

Combination#: 2

Douglas - Fir	100.00%
White Fir	7.00%
Sugar Pine	70.00%
Ponderosa Pine	46.00%

Logging System: Track Skidder **Process:** Manual Falling/Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 9 **bd. ft / load:** 4200
cost / mbf: \$116.69
machines: Log Loader (B)
Track Skidder



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Logging Costs

Operating Seasons: 1.00	Profit Risk: 15%
Project Costs: \$96,756.05	Other Costs (P/R): \$10,331.15
Slash Disposal: \$0.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$0.28

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.3
White Fir	\$0.00	3.0	4.5
Incense Cedar	\$0.00	3.0	4.2
Sugar Pine	\$0.00	3.0	4.2
Ponderosa Pine	\$0.00	3.0	4.5



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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling / Brand & Paint	Other	Total
Douglas - Fir									
\$116.69	\$0.29	\$1.07	\$62.28	\$2.52	\$27.43	\$0.00	\$7.00	\$0.00	\$217.28
White Fir									
\$101.58	\$0.29	\$1.07	\$58.94	\$2.52	\$24.66	\$0.00	\$7.00	\$0.00	\$196.06
Incense Cedar									
\$100.44	\$0.29	\$1.07	\$65.00	\$2.52	\$25.40	\$0.00	\$7.00	\$0.00	\$201.72
Sugar Pine									
\$111.82	\$0.29	\$1.07	\$64.38	\$2.52	\$27.01	\$0.00	\$7.00	\$0.00	\$214.09
Ponderosa Pine									
\$107.92	\$0.29	\$1.07	\$58.94	\$2.52	\$25.61	\$0.00	\$7.00	\$0.00	\$203.35

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$562.62	\$345.34	\$0.00
White Fir	\$0.00	\$437.26	\$241.20	\$0.00
Incense Cedar	\$0.00	\$300.00	\$98.28	\$0.00
Sugar Pine	\$0.00	\$349.40	\$135.31	\$0.00
Ponderosa Pine	\$0.00	\$350.18	\$146.83	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
White Fir	0	\$0.00	\$0.00
Incense Cedar	0	\$0.00	\$0.00
Sugar Pine	0	\$0.00	\$0.00
Ponderosa Pine	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	95	\$345.34	\$32,807.30
White Fir	2,218	\$241.20	\$534,981.60
Incense Cedar	9	\$98.28	\$884.52
Sugar Pine	636	\$135.31	\$86,057.16
Ponderosa Pine	1,136	\$146.83	\$166,798.88

Gross Timber Sale Value

Recovery: \$821,529.46

Prepared By: Chris Weekly

Phone: 541-883-5681

Summary of Project Work

Steep Puppy 341-18-33



Project No. 1: Road Improvement and Contruction	\$5,265.05
Project No. 2: Fell, Skid, and Pile Submerch. Material	\$21,970.00
Project No. 3: Road closures and Waterbarring	\$9,805.00
Project No. 4: Slash and Brush Piling	\$5,600.00
Project No. 5: Road Improvement to 232 Road	\$54,116.00
Total:	\$96,756.05

Steep Puppy

341-18-33

Other Costs

Road Maintenance

Move-in cost (grader):	\$500.00
Number of Miles to be Bladed:	1.5
Number of Bladings:	2
Total Miles	3.0
Miles / Hour for equipment:	0.5
Cost / Hour (grader with operator):	\$105.50
Total Grading Hours:	6
Grading Cost:	\$633.00
	\$1,133.00
Total Cost:	\$1,133.00
Cost / Mbf:	\$0.28

Dust Abatement (Profit & Risk to be added in Appraisal)

WF	2217 Mbf	54.2%	Average Load	4.5 Mbf	No. of Loads	493
PP	1136 Mbf	27.7%	Average Load	4.5 Mbf	No. of Loads	252
SP	637 Mbf	15.6%	Average Load	4.2 Mbf	No. of Loads	152
DF	95 Mbf	2.3%	Average Load	4.3 Mbf	No. of Loads	22
IC	9 Mbf	0.2%	Average Load	4.2 Mbf	No. of Loads	2
Total:	4094 Mbf				Total Loads	921

Assume: 4 Trucks/Day
3 Trips/Day
12 Loads per Day
77 Hauling Days

77 Days of Dust Abatement
1.5 Hours/Day
\$88.00 Cost/Hour
115 Total Hours
\$200.00 Move in for Water Truck
\$10,331.15 Dust Abatement Cost
\$10,331.15 Total Cost
\$2.52 Cost/Mbf

Other Costs Summary (Profit and Risk to be added in Appraisal)

\$1,133.00	Total cost for Road Maintenance	\$0.28 per MBF
\$10,331.15	Total cost for Dust Abatement	\$2.52 per MBF
\$11,464.15	Total Other Costs	\$2.80 per Mbf

Steep Puppy

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Project Costs

Project #1 Road Improvement and Construction

Move in Cost Dozer: \$500.00

Improvement

	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	C to D	1138	750	1.5	\$132.50	\$201.05
Open/Clear/Shape	E to G	9893	750	13.2	\$132.50	\$1,747.76
Open/Clear/Shape	F to H	2311	750	3.1	\$132.50	\$408.28
Open/Clear/Shape	I to J	658	750	0.9	\$132.50	\$116.25
Open/Clear/Shape	J to K	2693	750	3.6	\$132.50	\$475.76
Open/Clear/Shape	J to L	3094	750	4.1	\$132.50	\$546.61
	Total	19787			Total	\$3,495.70

Construction

	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	O to P	2775	500	5.6	\$132.50	\$735.38
Open/Clear/Shape	M to N	1300	500	2.6	\$132.50	\$344.50
Open/Clear/Shape	A to B	715	500	1.4	\$132.50	\$189.48
	Total	715			Total	\$1,269.35

Project #1 Summary

Equipment Costs	\$500.00
Improvement Cost	\$3,495.70
Construction Cost	\$1,269.35
Project #1 Total	\$5,265.05
per MBF	\$1.29

Steep Puppy

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Project Costs

Project #2 Felling, Skidding, and Piling of Submerchantable Trees

Total Sub-Sawlog Volume: 246 MBF

Fell and Skid/MBF: \$50.00

Sort/MBF: \$10.00

Total \$14,760.00

per MBF \$3.61

Landing Slash Piling

Number of Landings: 28

Shovel Time: 1 Hour per Landing Cost per Hour: \$125.00

Total Cost \$3,500.00

Cat Time: 1 Hour per Landing Cost per Hour: \$132.50

Total Cost \$3,710.00

Total \$7,210.00

per MBF \$1.76

Project #2 Summary

Fell/Pile/Skid: \$14,760.00

Landing Cleanup: \$7,210.00

Total: \$21,970.00

per Mbf: \$5.37

Steep Puppy

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Project Costs

Project #3 Road Closure and Waterbarring

Road Closures

4	Number of Closure Points - Point A, C, I, O
\$132.50	Cost per Hour (Cat)
\$530.00	Total
\$0.13	per Mbf

Skid Trail Waterbarring

28	Number of Landings
2.5	Hours per Landing
\$132.50	Cost per Hour (Cat)
\$9,275.00	Total
\$2.27	per Mbf

Project #3 Summary

Road Closure:	\$530.00
Waterbarring:	\$9,275.00
Total:	\$9,805.00
per Mbf:	\$2.39

Project #4 Slash and Brush Piling

Equipment Move In: \$500.00

Acres to be Piled	30
Hours per Acre	2
Cost per Hour	\$85.00
Cost of Piling	\$5,100.00
Total Cost	\$5,600.00
per Mbf	\$1.37

Steep Puppy

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Project Costs

Project #5 Road Improvement to 232 Road

Grubbing and ReShaping Cut Slope

Move in Cost Excavator (C235 or equivalent): \$500.00

Improvement	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	Q to R	11000	500	22.00	#####	\$3,080.00

Total Grubbing and ReShaping: **\$3,580.00**
per Mbf \$0.87

Rock Spreading, Grading, and Compacting

Move in Cost Grader: \$500.00
Move in Cost Roller: \$500.00
Move in Cost Water Truck: \$300.00
Total Move in Cost: \$1,300.00

2" lift - Delivered
3/4 - Rock Size
1360 Cubic Yards
1.5 Tons per Cubic Yard
2040 Tons
\$15.00 cost per ton (delivered)
\$30,600.00 Total
\$7.47 per Mbf

Rock Grading and Compacting
Grade and Roll \$8.10 per ton
Rock 2040 tons
Total Grade/Compac **\$16,524.00**
per Mbf \$4.04

24	Total Water Truck Hours
\$88.00	Cost per Hour
<u>\$2,112.00</u>	Total

Total Move in Cost	\$1,300.00
Total Equipment Time	\$18,636.00
Total	\$19,936.00
per Mbf	\$4.87

Total Grubbing and Reshaping	\$3,580.00
Total cost Rock	\$30,600.00
Total cost Spreading and Compacting	\$19,936.00
Total	\$54,116.00
per Mbf	\$13.22

Steep Puppy

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Project Costs

Cost Summary All Projects

Project No. 1 - Road Construction and Improvement	\$5,265.05
Project No. 2 - Fell, Skid, and Pile Submerchantable Material	\$21,970.00
Project No. 3 - Road Closures and Waterbarring	\$9,805.00
Project No. 4 - Slash and Brush Piling	\$5,600.00
Project No.5 - Road Improvement to 232 Road	\$54,116.00
Total Cost	\$96,756.05
per Mbf	\$23.63

Steep Puppy

341-18-33

Cruise Report



"STEWARDSHIP IN FORESTRY"

SALE NAME: Steep Puppy

LEGAL DESCRIPTION:

Portions of Sections 34 and 35, T32S, R7½E, and Portions of Sections 2, 3, and 11, T33S, R7½E, W.M., Klamath County, Oregon.

BOUNDARY LINES:

Area 1 boundary is posted with "Timber Sale Boundary" signs, marked with fluorescent orange paint and fluorescent orange flagging.

Area 2 boundaries are unmarked.

FUND:

100% BOF

ACREAGE:

Area 1:	323 Acres
<u>Area 2:</u>	<u>7 Acres</u>
Total:	330 Acres

Gross Acres:	330 Acres
<u>Exclusions:</u>	<u>5 Acres</u>
Net Acres:	325 Acres

Mapping was accomplished using a handheld Global Positioning System unit with the data run on the district Geographical Information System Program.

TREATMENT:

The Timber Sale is a single tree selection harvest. In Area 1 leave trees have been marked with an orange band at DBH. In Area 2 cut trees have been marked with a blue band at DBH. All trees less than 5.0 inches DBH are reserved from cutting in the sale area.

CRUISE METHOD:

Variable plot cruise with a ratio of a count plot for every measure plot. Fixed plot cruise for all sub-merchantable material (5.0" to 10.0") DBH for all Areas.

BASAL AREA FACTOR:

Area	BAF	Type Acreage
Area 1	13 BAF	318

PLOT DESIGNATION:

Plot centers were established at every plot with blue flag wire stakes with the corresponding plot number. Orange flagging was attached to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

AREA	CV%	DESIRED SE%	ACRES
Area 1	100	12	318

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

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

Area 1 $N = \frac{(1)^2(95)^2}{(12)^2} = 62 \text{ plots}$

Measurements and Grading:

- Ratio of a count plot for every measure plot.
- DBH and Height were measured on all "in" trees for measure plots.
- Pulp volume and sawlog volume cruised.
- See attached species and grade tables for minimum requirements.
- All trees were graded using the segment system.
- Separate fixed plot cruise for all submerchantable material (5" to 10" 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 DBH:

9.0" DBH for sawlog volume. 5.0" DBH for submerchantable material.

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 SuperAce program.

FINAL CRUISE RESULTS:

AREA	CV%	SE%	ACRES
Area 1	54	6.9	318

TIMBER DESCRIPTION

SAWLOG VOLUME:

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

AREA 1 SAWLOG VOLUME

Species	Average DBH	Gross Volume per acre (bf/acre)	Net Volume per acre (bf/acre)	Gross Volume per area (Mbf)	Net Volume per area (Mbf)
White fir	14.5	7,078	6,972	2,251	2,217
Ponderosa pine	15.7	3,627	3,573	1,154	1,136
Sugar pine	17.5	2,034	2,004	647	637
Douglas-fir	27.1	300	300	95	95
Incense cedar	12.9	27	27	9	9
Combined	15.4	13,065	12,875	4,156	4,094

AREA 2 SAWLOG VOLUME

Area 2 was not cruised but is estimated to contain approximately 40 Mbf sawlog volume. The area contains primarily white fir with minor components of ponderosa and sugar pine.

TOTAL NET SAWLOG VOLUME: 4,094 MBF

GREEN PULP VOLUME

This volume was obtained by combining the green pulp volume from the variable plot cruise with the fixed plot cruise (5.0" – 9.0" DBH). All material was graded green pulp, see grade table for minimum standards.

Cruise	Volume per Acre (bf/ac)	Gross Volume (Mbf)
Variable	42	13
Fixed	732	233
Total	774	246

TOTAL GREEN PULP VOLUME: 246 MBF

TC		PLOGSTVB		Log Stock Table - MBF															
T032 R007 S02 TyVARI318.00				Project: STPPUP Acres318.00														Page1	
																		Date7/18/2017	
																		Time8:19:30AM	
S T Spp	Gr rt So	Log Len de		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+
WF	1	CR	17	117		117	5.3			84	26		7						
WF	1	CR	26	239		237	10.7			131	84		13	9					
WF	1	CR	31	20		20	.9								20				
WF	1	CR	34	1,875	1.7	1,843	83.1			201	270		294	381	275	365	57		
WF	Totals			2,251	1.5	2,217	54.0			416	380		308	397	295	365	57		
SP	1	CR	16	73	3.3	70	11.0			18	13		27		8	4			
SP	1	CR	17	7		7	1.1			5	2								
SP	1	CR	24	7		7	1.1				7								
SP	1	CR	26	54		54	8.5			24	10		9	11					
SP	1	CR	32	506	1.4	499	78.3			35	42		118	92	90	87	34		
SP	Totals			647	1.5	637	15.5			82	74		154	103	98	91	34		
PP	1	CR	16	14		14	1.2						8		5				
PP	1	CR	17	83		83	7.3			65	18								
PP	1	CR	18	5		5	.4						5						
PP	1	CR	20	19		19	1.6									19			
PP	1	CR	24	14	27.3	10	.9										10		
PP	1	CR	26	129		129	11.3			77	36						15		
PP	1	CR	27	4		4	.4				4								
PP	1	CR	28	15		15	1.3									15			
PP	1	CR	32	562	2.2	550	48.3				18		74	109	132	143	57	19	
PP	1	CR	34	309		307	27.0			66	112		75	55					
PP	1	GP	14	4		4	.4				4								
PP	Totals			1,158	1.5	1,140	27.8			208	192		154	172	137	176	82	19	
IC	1	CR	20	3		3	15.5			3									
IC	1	CR	24	3		3	19.1			3									
IC	1	CR	30	3		3	15.2			3									
IC	1	GP	13	1		1	4.1		1										
IC	1	GP	14	4		4	20.4						4						
IC	1	GP	16	4		4	25.7		4										
IC	Totals			17		17	.4		5	9			4						
DF	1	CR	26	8		8	8.9				8								
DF	1	CR	34	87		87	91.1								19	31	37		
DF	Totals			95		95	2.3				8				19	31	37		
Total	All Species			4,168	1.5	4,108	100.0		5	715	654		620	672	549	664	210	19	

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page		1			
				Project: STPPUP												Date		7/18/2017			
																Time		8:19:38AM			
T032 R007 S02 TVARI												T032 R007 S02 TVARI									
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt			
032		007		02		200		VARI		318.00		61		235		1		E			
S So Gr T rt ad Spp				% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
									Log Scale Dia.				Log Length				Ln Dia		Bd CF/ Ft In Ft Lf		
WF				1	CR	100	1.5	7,078	6,972	2,217	50	38	12	5	11	84	29	9	114	0.85	61.4
WF				Totals		54	1.5	7,078	6,972	2,217	50	38	12	5	11	84	29	9	114	0.85	61.4
PP				1	CR	99	1.5	3,627	3,573	1,136	48	31	21	11	14	76	26	9	106	0.88	33.6
PP				1	GP	1		14	14	4	100			100			13	6	10	0.35	1.4
PP				Totals		28	1.5	3,640	3,586	1,140	49	31	21	11	14	75	26	9	102	0.87	35.0
SP				1	CR	100	1.5	2,034	2,004	637	49	39	12	12	10	78	25	9	113	1.04	17.7
SP				Totals		16	1.5	2,034	2,004	637	49	39	12	12	10	78	25	9	113	1.04	17.7
DF				1	CR	100		300	300	95	9	53	39		9	91	32	15	384	2.20	.8
DF				Totals		2		300	300	95	9	53	39		9	91	32	15	384	2.20	.8
IC				1	CR	49		27	27	9	100			31	69		24	7	34	0.67	.8
IC				1	GP	51		28	28	9	59	41		100			15	6	24	0.46	1.2
IC				Totals		0		55	55	17	30	70		66	34		19	6	28	0.57	2.0
Type Totals						1.5	13,107	12,917	4,108	0	48	36	15	8	11	80	27	9	111	0.89	116.8

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	STPPUP	DATE 7/18/2017				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
032	007	02	200	VARI	318.00	61	504	1	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		61	504	8.3						
CRUISE		30	235	7.8		27,792	.8			
DBH COUNT										
REFOREST										
COUNT		31	269	8.7						
BLANKS										
100 %										
STAND SUMMARY										
SAMPLE		TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
TREES		/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
WHITE F		104	46.7	14.5	46	14.0	53.3	7,078	6,972	1,499
PPINE		77	25.7	15.7	42	8.7	34.6	3,640	3,586	786
SUG PINE		47	12.8	17.5	46	5.1	21.4	2,034	2,004	468
INC CED		5	1.7	12.9	23	0.4	1.6	55	55	21
DOUG-FIR		2	.4	27.1	76	0.3	1.6	300	300	54
TOTAL		235	87.4	15.4	45	28.7	112.4	13,107	12,917	2,828
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	
WHITE F		91.1	8.9	233	256	278				
PPINE		109.0	12.4	249	284	320				
SUG PINE		79.4	11.6	229	259	289				
INC CED		43.2	21.5	30	38	46				
DOUG-FIR		56.6	53.0	400	850	1,300				
TOTAL		98.4	6.4	249	266	283	387	97	43	
CL:	68.1 %	COEFF		SAMPLE TREES - CF			# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
WHITE F		77.6	7.6	48	52	55				
PPINE		91.2	10.4	52	58	64				
SUG PINE		69.3	10.1	53	58	64				
INC CED		62.2	30.9	11	16	21				
DOUG-FIR		46.8	43.8	85	151	217				
TOTAL		82.7	5.4	52	55	58	273	68	30	
CL:	68.1 %	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
WHITE F		99.9	12.8	41	47	53				
PPINE		68.4	8.7	23	26	28				
SUG PINE		105.9	13.5	11	13	15				
INC CED		328.0	42.0	1	2	2				
DOUG-FIR		324.4	41.5	0	0	1				
TOTAL		52.9	6.8	81	87	93	112	28	12	
CL:	68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
WHITE F		91.3	11.7	47	53	60				
PPINE		62.5	8.0	32	35	37				
SUG PINE		101.4	13.0	19	21	24				
INC CED		322.1	41.2	1	2	2				
DOUG-FIR		322.1	41.2	1	2	2				
TOTAL		45.0	5.8	106	112	119	81	20	9	

TC TSTATS				STATISTICS			PAGE	2	
				PROJECT	STPPUP	DATE 7/18/2017			
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
032	007	02	200	VARI	318.00	61	504	1	E
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHITE F		93.9	12.0	6,134	6,972	7,809			
PPINE		75.3	9.6	3,241	3,586	3,932			
SUG PINE		101.0	12.9	1,745	2,004	2,263			
INC CED		310.5	39.7	33	55	77			
DOUG-FIR		323.3	41.4	176	300	424			
TOTAL		53.6	6.9	12,031	12,917	13,803	115	29	13
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
WHITE F		93.0	11.9	1,320	1,499	1,677			
PPINE		68.3	8.7	717	786	855			
SUG PINE		99.5	12.7	409	468	528			
INC CED		328.6	42.0	12	21	29			
DOUG-FIR		322.5	41.3	32	54	77			
TOTAL		51.3	6.6	2,643	2,828	3,014	105	26	12

LOGGING PLAN

Of Timber Sale Contract 341-18-33
 Steep Puppy
 Township 32S, Range 7½ E, Portions
 of Sections 34 and 35 Township 33S
 Range 7½ E, Portions of Sections 2, 3,
 and 11, W.M., Klamath County, OR.

