



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Cooked Goose Combination Sale 341-02-06

District: Astoria

Date: 12/31/01

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$2,156,618.02	\$359,050.32	\$2,515,668.34
		Project Work	(\$481,799.00)
		Advertised Value	\$2,033,869.34



Timber Sale Appraisal Timber Description Cooked Goose Combination Sale 341-02-06

"STEWARDSHIP IN FORESTRY"

District: Astoria

Location: Portions of Sections 1, 2, and 12, T6N, R7W, W.M., Clatsop County, OR

Date: 12/31/01

Stand Stocking: 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	18	0	97
Western Hemlock / Fir	14	0	97
Alder (Red)	13	0	95

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
2S	3,607	2,162	0	5,769
3S	1,196	1,622	872	3,690
4S	106	440	736	1,282
Total	4,909	4,224	1,608	10,741

Comments: Pond Values Used: 4th Quarter 2001

Log Markets: Mist, Claskanine, Tillamook

Additional costs for Areas 1,3, 4, 5, 6 (CC) and 2 (PC).

Costs with P&R:

100% branding and painting: $\$1/\text{MBF} \times 10,741 \text{ MBF} = \$10,741$

Total Cost w/P&R = \$10,741

Costs without P&R:

Pile slash at Area 1, 3, & 4 cable landings @ \$130/landing x 14 landings = \$1,820

Excavator move-in/move out = \$500

Site-prep slash piling for Areas 1, 3, & 4 - 66 hours @\$95/hour = \$6,270

Total Non-P&R Costs = \$8,590



Timber Sale Appraisal Logging Conditions Cooked Goose Combination Sale 341-02-06

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	25.43%	
	Western Hemlock / Fir	55.22%	
Yarding Distance:	Short (400 ft)		Downhill Yarding No
Logging System:	Cable: Medium Tower >40 - <70		Process: Manual Delimiting
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	6		Bd. Ft./Load: 3,700
Cost/MBF:	\$149.40		
Machines:			
	Log Loader (A)		
	Tower Yarder (Medium)		
Combination#: 2	Douglas - Fir	0.52%	
	Western Hemlock / Fir	1.13%	
Yarding Distance:	Short (400 ft)		Downhill Yarding Yes
Logging System:	Track Skidder		Process: Manual Felling/Delimiting
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	7		Bd. Ft./Load: 3,700
Cost/MBF:	\$126.08		
Machines:			
	Log Loader (B)		
	Track Skidder		
Combination#: 3	Douglas - Fir	64.65%	
	Western Hemlock / Fir	38.12%	
	Alder (Red)	88.00%	
Yarding Distance:	Short (400 ft)		Downhill Yarding No
Logging System:	Cable: Large Tower >=70		Process: Stroke Delimber
Tree Size:	Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF		
Loads/Day:	10		Bd. Ft./Load: 4,000
Cost/MBF:	\$93.62		
Machines:			
	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Large)		
Combination#: 4	Douglas - Fir	9.40%	
	Western Hemlock / Fir	5.54%	
	Alder (Red)	12.00%	

Yarding Distance: Short (400 ft)

Downhill Yarding Yes

Logging System: Shovel

Process: Manual Delimiting

Tree Size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

Loads/Day: 7

Bd. Ft./Load: 4,800

Cost/MBF: \$69.10

Machines:

Shovel Logger



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Cooked Goose Combination Sale 341-02-06

Date: 12/31/01

Operating Seasons: 2.0

Profit & Risk: 18%

Project Costs: \$481,799

Other Costs (P/R): \$10,741

Slash Disposal: \$0

Other Costs: \$8,590

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

Road Maintenance: \$3.82

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	3.0	4.0
Western Hemlock / Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	2.0	3.0

Local Pond Values

Date	Species	Grade	Value
12/31/01	Douglas - Fir	2S	\$530.00
12/31/01	Douglas - Fir	3S	\$495.00
12/31/01	Douglas - Fir	4S	\$430.00
12/31/01	Western Hemlock / Fir	2S	\$360.00
12/31/01	Western Hemlock / Fir	3S	\$330.00
12/31/01	Western Hemlock / Fir	4S	\$295.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Cooked Goose Combination Sale 341-02-06

Costs	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
Logging	105.67	123.43	90.68
Road Maintenance	3.94	3.94	4.02
Fire Protection	0.50	0.50	0.50
Hauling	39.54	59.28	80.84
Other (P/R appl.)	1.00	1.00	1.00
Profit & Risk	27.12	33.87	31.87
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	0.80	0.80	0.80
Total	180.57	224.82	211.71

Amortization	0.00	0.00	0.00
Pond Value	519.31	341.71	435.00
Stumpage	338.74	116.89	223.29
Amortized	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary

Cooked Goose Combination Sale 341-02-06

Amortized

	Douglas - Fir	Western Hem lock / Fir	Alder (Red)
MBF	0.00	0.00	0.00
Value	0.00	0.00	0.00
Total	0.00	0.00	0.00

Unamortized

	Douglas - Fir	Western Hem lock / Fir	Alder (Red)
MBF	4,909.00	4,224.00	1,608.00
Value	338.74	116.89	223.29
Total	1,662,874.66	493,743.36	359,050.32

Gross Timber Sale Value

Recovery \$2,515,668.34

Prepared by: Alan Kelso

Date: 12/31/01

District: Astoria

Phone: (503) 325-5451

SUMMARY OF ALL PROJECT COSTS

SALE NAME: COOKED GOOSE COMBINATION

NEW CONSTRUCTION:

PROJECT NO. 1

<u>Road segment</u>	<u>Length/Sta</u>	<u>Cost</u>
1A-1B, 1C-1D, 1M-1N	39.1	\$44,653
2A-2B, 2C-2D, 2E-2F, 2M-2N		
1G-1H, 1I-1J, 1K-1L, 2G-2H, 2I-2J, 2K-2L, 2O-2P, 2Q-2R, 3A-3B, 4A-4B	15	\$21,849
TOTALS	54.1	\$66,502

ROAD IMPROVEMENT:

PROJECT NO. 1

<u>Road segment</u>	<u>Length/Sta</u>	<u>Cost</u>
I1-I2	380.0	\$86,588
TOTALS	380.0	\$86,588

SPECIAL PROJECTS:

	<u>Description</u>	<u>Cost</u>
	Road Maintenance (Project Work)	\$22,780
PROJECT NO. 2	Rock Crushing (35,014 cy)	\$249,004
PROJECT NO. 3	Upper Trailover Road Construction	\$47,921
PROJECT NO. 4	Roadside Brushing	\$3,283
TOTALS		\$322,988

MOVE IN:

	<u>Equipment</u>	<u>Cost</u>
	D-7 Cat	\$560
	Dump Trucks (6)	\$764
	F E Loader	\$560
	Grader	\$540
	Skidder	\$520
	Vibratory Roller	\$540
	Water Truck	\$132
	Excavator (2)	\$1,880
	Road Brusher	\$225
TOTAL		\$5,721

GRAND TOTAL **\$481,799**

Compiled By: Ty Williams

Date: 6/14/01

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TIMBER CRUISE REPORT
Cooked Goose Combination FY 2001

1. **Sale Area Location:** Areas 1, 2, 3, 4, and 5 (In-sale R/W) – Located in portions of Sections 1 and 2, T6N,R7W; and Area 6 (Out-of-Sale R/W) is located in portions of Section 12, T6N, R7W, W.M., Clatsop County, Oregon.

2. **Fund Distribution:** Fund: BOF – 100%
 Tax Code: 100% 8-01.

3. **Sale Acreage by Area:**

Area	Treatment	Gross Acres	Existing R/W	New R/W	Stream Buffer	Net Acres	Acreage Comp. Method
1	Regeneration Harvest	89.0	-3.0	-2.0	---	84.0	GIS
2	Commercial Thinning	278.0	-16.0	-4.0	-7.0	251.0	GIS
3	Regeneration Harvest	64.5	---	-1.0	-4.0	59.5	GIS
4	Regeneration Harvest	65.0	-2.0	-1.0	---	62.0	GIS
5	In sale R/W	0	---	---	---	8.0	Length x Width
6	Outside sale R/W	4	---	---	---	4.0	Length x Width
Total		500.5	-21.0		-4.0	468.5	

4. **Cruisers and Cruise Dates:** Areas 1 – 5 were cruised by Dave Beck, Jon Long, Ty Williams, Lanny Freeman, Diane Logan, Ron Zilli, Allen Kelso in September and October, 2000. Area 6 was cruised by Dave Beck and Lanny Freeman in June, 2001.

5. **Cruise Method and Computation:** Areas 1, 3, and 4 were cruised using a 54.44 BAF, and plot spacing of 7 chains by 7 chains. 46 plots were cruised, and 24 of those were graded and measured. Area 2 was cruised using a 40 BAF and a plot spacing of 8 chains by 8 chains. 37 plots were cruised, and 19 of those were graded and measured, with the biggest and best trees selected for “leave” trees at a target residual basal area of 160 ft.²/ acre. Area 5 In Sale R/W: The “take” and “leave” tree board foot volume per acre for Areas 1,3, and 4 was expanded by the total right-of-way acres in their respective area to determine the total board foot volume. Area 6 Outside Sale R/W was cruised using a 40 BAF and plots were 7.5 chains apart. Eight plots were cruised, and all were graded and measured. All cruisers used Corvallis MicroTechnology (CMT) data collectors, which were downloaded to the Atterbury Super A.C.E. program in the Astoria District office for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria district office as follows:

AREA	PROJECT	CRUISE TYPE
2	COOKGOOS	6N7WSEC2 TYPE: CONL, LVAL, PC, TAKE
1,2,3	Areas 1,2,3--Master	6N7WSEC2 TYPE: CC, REG
5 R/W	In-Sale R/W	6N7WSEC2 TYPE: R/W
6 R/W	Out-of-Sale R/W	6N7WSEC2 TYPE: PRD

Current downed wood amounts in decay classes one and two for Areas 1, 3, and 4 were estimated during layout reconnaissance. It was estimated that there is currently 100 CuFt/Acre in decay class one and two. An additional 100 CuFt/Acre will be generated from non-merchantable material left in the units (approximately 520 board feet per acre). To meet the target of 650 CuFt/Acre of downed wood in decay class one and two for Areas 1, 3, and 4, a contribution of an additional of 450

CuFt/Acre is required. Volume required for large down wood requirements was not subtracted from the cruise volume due to anticipated additional volume generated from cable corridors, skid trails, and landings.

The wildlife trees in Areas 1, 3, and 4 that were cruised were subtracted from the cruise volume.

6. Timber Description: Area 2 is a partial cut thinning of approximately 55 year old Western hemlock, and Douglas-fir, of good quality, with a small component of 55 year old Sitka spruce, Red cedar, and hardwoods. Harvesting approximately 106 trees/acre, 117 ft² basal area/acre, and 14.6 MBF/acre. The average "take" tree size is 14.2" dbh, and 53 feet to a merchantable top (6" d.i.b.). The residual stand will be thinned down to 160 ft² of basal area per acre.

Areas 1, 3, and 4 are regeneration harvest units. The timber description is similar to the thinning area, but with larger areas of Red Alder, *Phellinus weirri*, and pockets of vinemaple. The average tree size is 15.6" dbh, and 47 feet to a merchantable top (6" d.i.b.). Approximately 33.4 MBF/acre will be harvested.

Area 5 (in-sale R/W): There is approximately 212 MBF in the in-sale right-of-way, which is predominantly Douglas fir.

Area 6 (outside sale R/W): There is approximately 122 MBF in the outside sale right-of-way, which is approximately 55 year old Douglas-fir and Western hemlock, of good quality, with a small component of hardwoods.

7. Statistical Analysis and Stand Summary:


Area	Target CV%	Target SE%	Actual CV%	Actual SE%
Areas 1,3,4	55	10	42	6.1
Area 2*	40	10	40	6.5
Area 6	50	10	35	12.5


*Total Stand Statistics (both Take and Leave stands.)

8. Cruised Timber Volumes and Grades (Total MBF of all sale areas)

Species	Avg. DBH	Net MBF	2 Saw	3 Saw	4 Saw	D&B	Species %
Douglas -fir	18	4,909	3,607	1,196	106	97	46
Hemlock and true fir	14	4,224	2,162	1,622	440	97	38
Hardwood	13	1,608		872	736	26	16
Totals		10,741					100

9. Approvals:

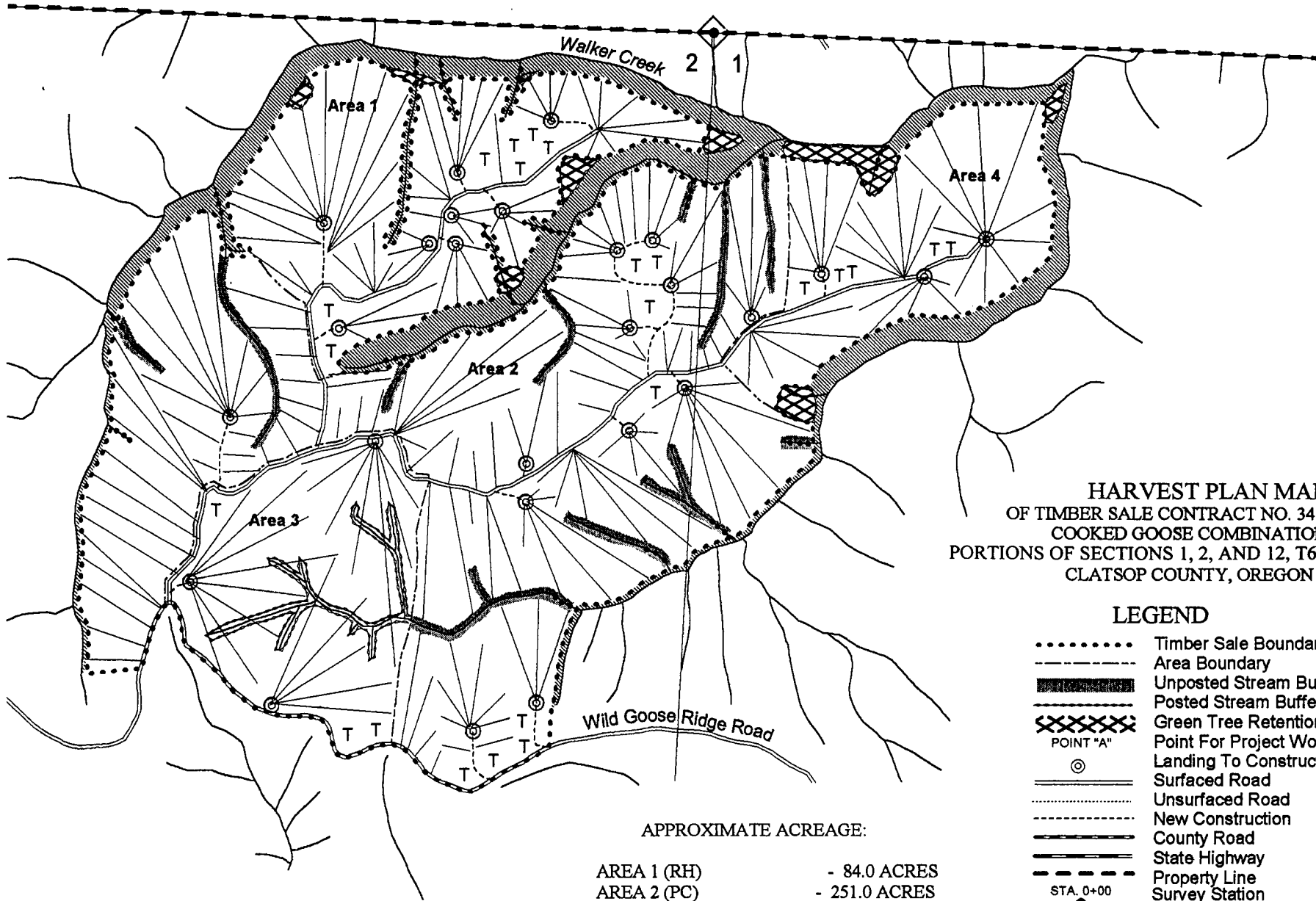
Prepared by:  Date: 6/20/01

Approved by:  Date: 6/20/01
Unit Forester

Attachments:

- A) Cruise design and maps (9 pages)
- B) Volume & Grade Reports (6 pages)
- C) Statistics Report (9 pages)
- D) Stand Table Report (2 pages)

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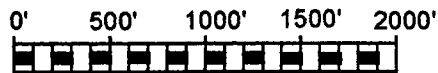
HARVEST PLAN MAP
 OF TIMBER SALE CONTRACT NO. 341-02-06
 COOKED GOOSE COMBINATION
 PORTIONS OF SECTIONS 1, 2, AND 12, T6N, R7W, W.M.
 CLATSOP COUNTY, OREGON

LEGEND

- Timber Sale Boundary
- Area Boundary
- ██████████ Unposted Stream Buffer
- Posted Stream Buffer Boundary
- XXXXXX Green Tree Retention Area (GTI)
- ⊙ POINT "A" Point For Project Work
- ⊙ Landing To Construct
- ==== Surfaced Road
- Unsurfaced Road
- New Construction
- ==== County Road
- ==== State Highway
- Property Line
- ◆ STA. 0+00 Survey Station
- ◆ Known Land Survey Corner
- ~ Type F Stream
- ~ Type N Stream
- ⋈ Tractor Ground
- ⋈ Cable Ground
- ▨ Stream Buffer

APPROXIMATE ACREAGE:

AREA 1 (RH)	- 84.0 ACRES
AREA 2 (PC)	- 251.0 ACRES
AREA 3 (RH)	- 59.5 ACRES
AREA 4 (RH)	- 62.0 ACRES
AREA 5 (INSALE R/W)	- 8.0 ACRES
AREA 6 (OUT OF SALE R/W)	- 4.0 ACRES
TOTAL	- 468.5 ACRES



APPROXIMATE SCALE = 1"=1,000'

**FOREST PRACTICES ACT "Written Plan"
For Harvest of Cooked Goose Combination
Portions of Section 1 & 2, T6N, R7W, W.M.
Clatsop County, Oregon**

Landowner: Oregon Department of Forestry
92219 Hwy 202
Astoria, OR 97103
(503) 325-5451

Protected Resources:

1. Walker Creek, which is designated as a large/medium Type F stream, is located along the north boundary of Areas 1 and 4, and the northwest boundary of Areas 1 and 2. A small Type F tributary to Walker Creek is located adjacent to the southern boundary of Area 1 and the northern boundary of Areas 2 and 4. Another medium/small Type F tributary to Walker Creek is located adjacent to southern boundary of Area 2 and Area 4. Approximately 900 feet of the stream extends inside Area 2. These streams are located in Sections 1 and 2, T6N, R7W, W.M., Clatsop County, Oregon. Length of the affected streams requiring protection is approximately 19,200 feet.
2. Scattered High Risk Sites on Areas 3 and 4. These are small inclusions within the timber sale area that have slopes greater than 60%.

Specific Site Characteristics:

1. Walker Creek: The streambed is approximately 12 feet wide, with moderate streambank slopes. Streamside vegetation is dominated by mature alder, with a significant component of conifer trees which are located above the flood plain. Type F tributaries to Walker Creek: The streambeds are approximately 7-9 feet wide, with moderate streambank slopes. Streamside vegetation is also dominated by mature alder, with a significant component of conifer trees which are located above the flood plain of both streams.
2. There are portions of aspects in Areas 3 and 4 that have slopes exceeding 60%. The general overstory vegetation is mixed conifer and alder, with salmonberry and sword fern as the dominant understory vegetation.

Tree and Vegetation Retention:

1. Walker Creek: The FPA defines the RMA width of a large Type F stream at 100 feet and a medium Type F stream at 70 feet. The timber sale boundary for Areas 1, 3, and 4, are posted a minimum 100 feet from the stream. For Area 2, All trees within 25 feet (each side) of interior perennial streams, will be retained. Full log suspension will be done, over these streams, in accordance with FPA rules and guidelines.

Walker Creek Tributaries: The FPA defines the RMA width of a medium Type F stream at 70 feet and a small Type F stream at 50 feet. The timber sale boundary for Areas 1, 3, and 4, are posted a minimum 100 feet from the stream. For Area 2, All trees within 25 feet (each side) of interior perennial streams, will be retained. Full log suspension will be done, over these streams, in accordance with FPA rules and guidelines.

Areas 1, 3, and 4: Scattered "wildlife" trees, trees within posted Green Tree Retention Areas, and trees within posted stream buffers, will be retained.

2. Scattered "wildlife" trees will be retained along portions of slopes of the sale areas.

Practices:

1. Directional felling will be required parallel to the stream to prevent trees from entering the aquatic area. No ground based logging equipment will be permitted inside the posted RMA. Cable corridors may be strung through the RMA and will be located no closer than 100' feet apart. Cable lines will not be lowered into the RMA during yarding.
2. This sale area was reviewed in regard to the FPA Clearcut Deferral Criteria by Astoria District personnel. The sale area was determined to not fit the deferral criteria as defined by ODF Forest Practices Staff. However, to minimize ground gouging on high risk sites, the operator is required to **one-end suspend** all logs across the high risk sites, as indicated by slopes exceeding 60%. Gouging shall not exceed one foot in depth on any cable road within any high risk site area.

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act. I agree to the protection measures listed on this plan:

Submitted: _____
Purchaser/Operator Contract Representative

Date: _____

Approved: Dan Goady
State Lands Forester

Date: 6/15/01

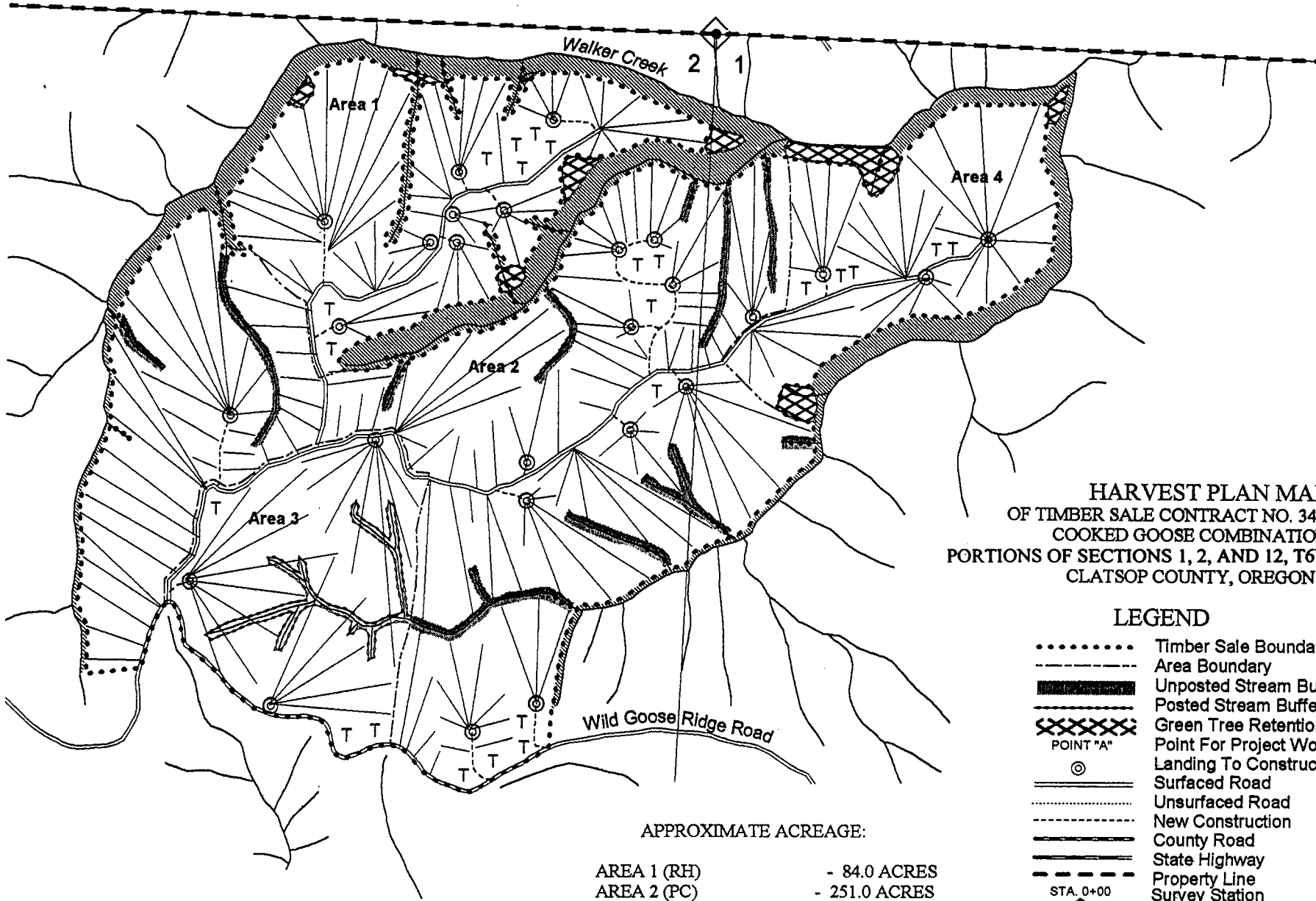
Approved: SW
Forest Practices Forester

Date: _____

Attachment: Exhibit "A"

CC: Salem, Astoria District File, Jewell Unit, Operator, Purchaser

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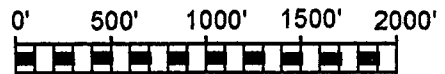
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 CLATSOP COUNTY, OREGON

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- Known Land Survey Corner
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