

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

S
PLANS - Umatilla
Timber Management
Heppner Working Circle

Pendleton, Oregon

August 5, 1948

TIMBER DISPOSAL PLAN
HEPPNER WORKING CIRCLE

Approved:

Carl Ewing
Forest Supervisor

Asst. Region Forester

(Date)

Prepared by:

GLENN B. PARSONS, District Ranger

By: ___ Acting

Glen Jorgensen
Forester

SUMMARY FOR HEPNER WORKING CIRCLE NATIONAL FOREST LANDS ONLY

Total Gross Acreage	197,702 Acres
Total Net Available Operable Acreage	152,163 Acres
Total Gross Volume All Species	900,694 M.B.M.
Total Net Available Operable Volume:	

Ponderosa pine	650,811 M.B.M.
Douglas fir	132,413 M.B.M.
Western larch	44,123 M.B.M.
White fir	27,246 M.B.M.
Engelmann spruce	3,973 M.B.M.
Others	<u>867 M.B.M.</u>
TOTAL	859,433 M.B.M.

First cutting cycle 45 years ending January 1, 1988.

Allowable Annual Cut -- First Cutting Cycle:

Ponderosa pine	9.2 Million
Associated species	<u>2.8 Million</u>
	12.0 Million

TIMBER DISPOSAL PROGRAM FOR THE NATIONAL FOREST RESOURCES OF THE HEPNER WORKING CIRCLE

I. Introduction

The Heppner Working Circle includes all of the national forest land in the Heppner Ranger District. Topography in this working circle is characterized by a spur of the Blue Mountains extending in a northeasterly-southwesterly direction. The area to the north of this ridge drains into the Willow, Rhea and Rock Creek drainages. Drainage to the south is made up of numerous small streams that flow into the North Fork and main John Day Rivers. All of these streams ultimately empty into the Columbia River. Timber in the working circle is tributary to the communities of Heppner, Kinzua, Fossil, Spray, Kimberly and Monument.

Commercial cutting of national forest timber started in 1937 with a small sale to Kinzua Pine Mills Company. In 1939 a sale was made to the company for 12 million feet of national forest timber. This represented the first sale of any consequence in the Heppner Working Circle.

In 1943 a land exchange agreement was executed with the Wallowa Timber Company whereby this company acquired cutting rights on the Heppner Working Circle for 172 million feet of ponderosa pine. These cutting rights were then assigned to the Kinzua Pine Mills Company. This exchange was made for offered lands on the Whitman Forest. Title to the offered lands was accepted by the United States in 1947. By reason of the fact that the title to one small tract of offered land could not be cleared the volume of selection timber granted was later reduced to 170,150 M.B.F.

Cutting operations on the exchange selection timber began in 1945 and has continued intermittently. As of January 1, 1948, the company had removed 13.6 million feet of ponderosa pine. The exchange contract stipulates that all timber shall be cut before December 31, 1962; provided that if the Kinzua Pine Mills Company restricts its cut of timber from **all** lands within the Heppner Working Circle to a total of not more than 325 million feet in the 15-year period from August, 1945, to August, 1960, cutting of the designated national forest timber need not be completed until December 31, 1967. Also, under the terms of the exchange agreement, an average of not more than 12.5 million feet of pine will be cut per year in any 10-year period.

The exchange agreement does not authorize the cutting of any associated species on the selection area. For this reason it has been necessary to make the associated species available to the company on a sale basis. To date two sales are in effect to the company. As cutting progresses on the selection area it is planned to make sales of associated species by amounts of three million feet to be removed concurrently with the pine and from any part of the selection area. Each such sale can be expected to be in effect for approximately two years. This method of administering sales of associated species appears to be most desirable from the standpoint of both the company and the Forest Service.

A summary of past cutting within the working circle includes:

Volume in MBF			Company
PP	Assoc.	Block	
18,682	854	Lonerock-Winlock-Wall Creek	Kinzua Pine Mills Co.
13,629		Lonerock-Wall Creek	Wallowa Tbr. Co. exch.
	3,196	Wall Creek	Kinzua Pine Mills Co.
11,363	726	Willow Creek	Heppner Lbr. Co.
1,527	95	do	Scritsmier Bros.
480	51	Spray	Crawford Lumber Co.
977	2,300	(Cut on other small sales include. S-22)	
<hr/>	<hr/>		
46,658	7,222		

There has been no cutting in recent decades on the Service Creek Block, and only S-22 cutting on the Ditch Creek and Potamus Blocks. Most of the cutting to date has been on the Lonerock, Winlock, Wall Creek, and Willow Creek Blocks.

Following is a list of operating mills contiguous to the Heppner Working Circle:

Mill	Ann. Cap. MM	Location	Date Estab.
Kinzua Pine Mills Co.	40	Kinzua, Oregon	1927
Heppner Lumber Co.	15	Heppner, Oregon	1938
Hudspeth Lumber Co.	14	Spray, Oregon	1941
Scritsmier Bros.	4	Heppner, Oregon	1939
Big Four Lumber Co.	4	do	1946

In addition to the above existing mills the following plants are being constructed, the capacities of which are estimated:

Mill	Ann. Cap. MM	Location
Heppner Lumber Co.	8	Monument, Oregon
Carpenter Lbr. Co.	3	Condon, Oregon
Silver Creek Lbr. Co.	4	Fossil, Oregon
Oscar Adams	3	Winlock, Oregon

None of these mills has sufficient private timber to insure a sustained life. The expected length of life of these mills operating entirely on private timber is:

Kinzua Pine Mills Co.	20 years
Heppner Lumber Co.	15 years
Hudspeth Lumber Co.	8 years
Scritsmier Bros.	2 years
Big Four Lumber Co.	1 year
Heppner Lumber Co.	10 years
Carpenter Lbr. Co.	?
Silver Creek Lbr. Co.	?
Oscar Adams	?

There is not sufficient public timber to support all of the dependent mills, and it is expected that only the Kinzua Pine Mill will survive as a sawmill after the privately owned timber is cut.

No other commitments have been made for the sale of national forest timber in the working circle.

II. Management Objectives

The objective of management for the period 1948-1962 (the life of the Wallowa exchange agreement) is to complete the cutting of selection timber under the existing exchange agreement, consummate other small exchanges with various owners, and make such salvage sales that are absolutely necessary to harvest high risk trees that would otherwise be lost. During this ensuing 14-19 year period sufficiently study should be made to determine the disposal of the unobligated timber resources during the

remainder of the cutting cycle in order to obtain maximum public and community benefits.

Considerable groundwork has already been laid with the Kinzua Pine Mills Company toward developing a sustained yield unit. Mr. Rasmussen recommended in his Timber Management Planning Project report of April 1, 1944, that a cooperative sustained yield unit be considered. At the time it was calculated that such a unit was feasible based on the availability of the following resources:

1. Company ownership of 455 million feet of timber;
2. All national forest timber in the Heppner Working Circle;
3. Acquisition by the company of approximately 313 million feet of small private holdings.

Since that data a number of factors have changed the picture considerably. The high price of lumber and the apparent very favorable margin in logging and milling of ponderosa pine have resulted in a number of new competitors who have made large inroads on the private stumpage formerly considered available to Kinzua. It is estimated that as much as 100 million feet of private stumpage formerly thought available to Kinzua is now controlled by other operators. This factor alone indicates that a detailed study is necessary to determine the private situation.

Should it develop that a cooperative sustained yield unit is not possible in the working circle, the alternative appears to be to negotiate a land exchange with the Kinzua Pine Mills Company for their forested lands in and adjacent to the national forest.

The company in a letter of intent to the Regional Forester dated May 18, 1944, made the following commitments as to its own lands:

Leave a residual stand of 25% of the ponderosa pine volume in trees 12" and over d.b.h., company reserving the right to determine character of trees to be left. If feasible plan for permanent sustained operation can be adopted, the residual stands will be kept for utilization in second or successive cutting cycles. If plan cannot be worked out, a program of exchanges might take place. Subsequent to definite determination that a sustained yield plan of management is not feasible, the company will continue to leave a residual stand of 25% for a period of six months and will refrain from logging residual stands for a period of two years. If exchanges cannot be developed, there will be no further obligation to leave 25% residual on company lands.

Every effort should be made to induce the company to increase the percentage of leave on its lands. The ideal would be to secure the same percentage of leave on company lands as is currently being left on national forest lands, since under either a sustained yield or exchange program the combined lands should be managed during the second cutting cycle as one unit applying similar silvicultural practices.

Negotiations have been started for the acquisition of the Scritsmier Lumber Company holdings of 804 acres of cut-over timber land located within and adjacent to the Heppner Ranger District and 1120 acres of virgin timber land located in the Dixie and Isham Creek drainages adjacent to the Whitman National Forest. The proposed exchange contemplates the granting of selection timber on the Heppner District for the timber involved. Land values would be handled on a tripartite basis using timber sale receipts from a Whitman sale. The Whitman Forest would realize most of the benefit from this proposed exchange; although, since the Scritsmier Lumber Company "cutovers" represent some of the best timber producing sites within the Heppner Working Circle and are intermingled with national forest land, the exchange would be desirable from a Umatilla standpoint. This exchange will be undertaken only after the proponent has secured the written consent of the Morrow County Court.

Salvage operations are planned for approximately two million feet of ponderosa pine in the Dixon area where a high beetle hazard exists. Regular logging operations cannot be programmed for this area until cutting has been completed on the Wallowa Timber Co. selection area or for approximately 15 years. Without a salvage operation at this time the loss from beetle-killed timber and natural mortality of overmature timber would be unusually heavy.

Whenever timber that would ordinarily be lost from damage by fire, insects, or wind can be economically salvaged, the policy will be to conduct salvage operations regardless of whether or not the allowable annual cut for the working circle is being exceeded through the cutting of timber on existing sales and exchanges.

III. Analysis of National Forest Resources

A Forest Survey type map of one-inch-to-the-mile scale has been colored and is a part of this plan (note that no map was included with this copy of the report). On this map are shown the working circle boundary, block boundaries, forest types on national forest lands within the working circle, and the ownership by principal owners of the alienated lands within the national forest boundary.

The overlay prepared for the above type map shows the inoperable areas and the national forest areas selectively cut (note that no map was included with this copy of the report). None of the national forest land in this working circle has been clear cut.

The summary sheet for type areas in the working circle shows a total of 38,535 acres as inoperable. Of this acreage 37,263 is in types 1 and 2, which include the open grassland types. A total of 1272 acres of timber land supporting 11,038 M.B.M. was deducted for inoperability. Most of this area is located in the lower Potamus Block where topography makes logging prohibitive. A small area of isolated timber in the Spray Block was also deducted because of its position.

No deduction was made for "non-typed" inoperable areas in the Rock Creek, Service Creek, and Fossil Blocks because of the nature of the stand and topography.

Deductions for "non-typed" inoperable areas amounted to 1.3 percent of the total operable area, and deductions for "non-typed" inoperable volume equal 1.1 percent of the total operable volume in the working circle.

Type 5-1/2 was considered 50 percent operable in this plan since a part of this fringe type has been logged and is customarily accessible and merchantable. Deductions made for volume in type 5-1/2 were based on the Regional average of 1.2 M.B.F. per acre.

In determining the volume in type 21 the Regional average of 2.2 M.B.F. per acre was used. None of the volume in this type is considered as available for cutting during the first cutting cycle.

A deduction of 1145 acres supporting 15.6 million feet of operable timber was made for recreation reservations. This deduction includes reservations made for roadside zones in accordance with Regional standards on the following roads: Western Route, Kinzua Pine Mills Trunk, Heppner-Spray Highway, Coalmine Hill, Shaw Creek, and the Heppner-Monument. Deductions were also made for buffer zones around camp grounds, picnic areas, and summer home developments, both existing and proposed. No waterfront zones are considered necessary in this working circle since streams are fished for only a relatively short season during the spring, and there are no other waters.

Allowances made for recreation reservations should be reviewed and adjusted to conform to recreation unit plans which are to be prepared in the near future.

All of the type areas used in the accompanying sheets are taken from the 1937 Resource Survey data, corrected for drain and acquisition to January 1, 1948.

The volume data used in this analysis are derived from two sources. The Heppner District Aerial Photo Cruise is used for all computed sections. For the remainder of the working circle the 1937 Resource Survey data are used. All volumes are corrected for drain since the respective cruises were completed. The total drain since 1937 has been summarized previously under the discussion of cutting operations on page ???.

Tables follow which show:

1. Summary of drain,
2. Summary of volumes by species in the working circle,
3. Summary of acreage by forest types in the working circle,
4. Volumes by species in each block,
5. Acreages by forest type in each block.

SUMMARY OF DRAIN – M.B.M.

BLOCKS	*	SPECIES											
		Ponderosa Pine		Douglas Fir		Western Larch		White Fir		Engelmann Spruce		Other	
		Volume	Drain	Volume	Drain	Volume	Drain	Volume	Drain	Volume	Drain	Volume	Drain
Ditch Creek	1	112,216		30,100	36	14,528	133	8,036		1,383			171
Fossil	2	949	396	255		32		32					
Lonerock	1	44,181	3	9,944		2,528		2,242		434			22
Potamus	3	69,793		15,245	3	6,748	3	2,987		1,045			22
Rock Creek	3	13,840		1,161		975		292					
Service Creek	2	445											
Spray	1	100,205	526	12,758	55	1,155		1,411		285			
Wall Creek	1	315,470	11,629	47,082	2,452	10,184	1,446	4,327	9	699			
Willow Creek	2	32,255	12,678	22,984	456	11,366	333	8,603	3	470	104		542
Winlock	1	17,537		2,662		492		345					
TOTALS		706,891	25,232	142,691	3,002	48,008	1,915	28,275	12	4,316	104		757
Inventory as of 1/1/48		681,660		139,689		46,093		28,263		4,212			757

- * 1 Basic data from Forest Survey data and Heppner District aerial photo. cruising project. Corrected for drain since the aerial cruise was completed.
 2 Basic data entirely from Forestry Survey. Drain since 1937.
 3 Basic data entirely from aerial photograph cruise project. Drain data since aerial cruise.

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
SUMMARY HEPPNER WORKING CIRCLE
Current as of
M.B.M.

Species	__ Block (if significant -- otherwise for entire W.C.)									
	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
P.P. (a)	645,003			10,025	634,978	10,856	5,198	50% of Type 52 4,769	20,833	614,155
P.P. (b)	30,776				30,776					30,776
P.P. (c)	5,880				5,880					5,880
D.F. (a)	135,238			1,013	134,225	3,274	2,989		6,263	127,962
D.F. (b)	4,451				4,451					4,451
W.L. (a)	44,125				44,125	1,019	951		1,970	42,155
W.L. (b)	1,968				1,968					1,968
W.F.	28,263				28,263	404	613		1,017	27,246
E.S.	4,108				4,108	39	96		135	3,973
Others (a)	757				757		15		15	742
Others (b)	125				125					125
Totals	900,694			11,038	889,656	15,592	9,862	4,769	30,223	859,433
Percent	100				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any Aerial cruise corrected to 1/1/48

Compiled: 3/11/48
 By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
SUMMARY HEPPNER WORKING CIRCLE
Current as of 1/1/48

Acres

All Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8	2,720				2,720		47		47	2,673
20	103,102			1,062	102,040	764	1,297		2,061	99,979
R-20	8,642				8,642		33		33	8,609
21	2,835				2,835	4	35		39	2,796
22	1,350				1,350		25		25	1,325
25	7,692				7,692		154		154	7,538
27	20,821			35	20,786	377	413		790	19,996
R-27	1,938				1,938		14		14	1,924
28	1,772				1,772		35		35	1,737
37	1,645				1,645					1,645
5-1/2	7,825			175	7,650			(50% type 5-1/2 3,824)	3,824	3,826
R-5-1/2	115				115					115
1-2-38	37,263			37,263						
Totals	197,720			38,535	159,185	1,145	2,053	3,824	7,022	152,163
Percent	100%			19.5	80.5					

Basic data: Forest Survey, current as of 1937
Corrected for depletion to 1/1/48
Corrected for acquisition to 1/1/48
Other Corrections, if any

Compiled: March 11, 1948
By: K.H. Keeling

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Ditch Creek</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	111,687				111,687	861	788	50% of Type 52 497	2,146	109,541
P.P. (b)	144				144					144
P.P. (c)	385				385					385
D.F. (a)	29,850				29,850	220	602		822	29,028
D.F. (b)	214				214					214
W.L. (a)	14,181				14,181	267	290		557	13,624
W.L. (b)	214				214					214
W.F.	8,036				8,036	75	161		236	7,800
E.S.	1,383				1,383		28		34	168
Others (a)	171				171		3		3	168
Totals	166,265				116,265	1,429	1,872	497	3,798	162,467
Percent	100				100					

Basic data:

Forest Survey, current as of 1937
Corrected for depletion to 1-1-48
Corrected for acquisition to 1-1-48
Other Corrections, if any

Compiled: 2/20/48

By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

Species	Fossil Block (if significant -- otherwise for entire W.C.)										
	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable	
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)			
P.P. (a)	289					289					289
P.P. (b)	264					264					264
P.P. (c)											
D.F. (a)	255					255					255
D.F. (b)											
W.L. (a)	32					32					32
W.F. (a)	32					32					32
Totals	872					872					872
Percent	100					100					

Basic data:	Forest Survey, current as of	1937	Compiled: March 1, 1948
	Corrected for depletion to	1-1-48	
	Corrected for acquisition to	1-1-48	By: K.H. Keeling
	Other Corrections, if any	None	

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Lonerock</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	37,160				37,160	2,002	632	50% of Type 52 150	2,784	34,376
P.P. (b)	6,985				6,985					6,985
P.P. (c)	33				33					33
D.F. (a)	9,200				9,200	274	199		473	8,727
D.F. (b)	744				744					744
W.L. (a)	2,528				2,528	110			110	2,418
W.F. (a)	2,242				2,242	21	44		65	2,177
E.S. (a)	434				434		9		9	425
Others (a)	22				22					22
Totals	59,348				59,348	2,407	884	150	3,441	55,907
Percent	100				100					

Basic data: Forest Survey, current as of 1937 Compiled: March 1, 1948
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48 By: K.H. Keeling
 Other Corrections, if any Aerial photo cruise corrected to 1/1/48

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Potamus</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	68,397			9,330	59,067	2	1,064	50% of Type 52 399	1,465	57,602
P.P. (b)	43				43					43
P.P. (c)	1,353				1,353					1,353
D.F. (a)	15,213			671	14,542	1,341	305		1,646	12,896
D.F. (b)	29				29					29
W.L. (a)	6,716				6,716	240	135		375	6,341
W.L. (b)	29				29					29
W.F. (a)	2,987				2,987	63	60		132	2,864
E.S. (a)	1,045				1,045	2	21		23	1,022
Others (a)	22				22					22
Totals	95,834			10,001	85,833	1,648	1,585	399	3,632	82,201
Percent	100			10.4	89.6					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any Aerial photo cruise corrected to 1/1/48

Compiled: 2/26/48
By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
<u>Rock Creek</u> Block (if significant -- otherwise for entire W.C.)										
P.P. (a)	13,052				13,052					13,052
P.P. (b)	788				788					788
D.F. (a)	1,427				1,427					1,427
D.F. (b)	234				234					234
W.L. (a)	956				956					956
W.L. (b)	19				19					19
W.F. (a)	292				292					292
Totals	16,768				16,768					16,768
Percent	100				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any None

Compiled: 2/27/48
By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Service Creek</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	445				445					445
P.P. (b)										
P.P. (c)										
D.F. (a)										
D.F. (b)										
W.L. (a)										
W.L. (b)										
W.F.										
E.S.										
Others (a)										
Others (b)										
Totals	445				445					445
Percent	100				100					

Basic data:

Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

Compiled: March 1, 1948

By: K.H. Keeling

(a) = Uncut Mature

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	95,970			695	95,275	1,123	590	50% of Type 52 606	2,319	92,956
P.P. (b)	359				359					359
P.P. (c)	3,350				3,350					3,350
D.F. (a)	12,703			250	12,453	376	255		631	11,822
D.F. (b)										
W.L. (a)	1,155				1,155	61	28		89	1,066
W.L. (b)										
W.F. (a)	1,411				1,411	59	23		82	1,329
E.S. (a)	285				285	11	6		17	268
Totals	115,233			945	114,288	1,630	902	606	3,138	111,150
Percent	100			1	99					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any Aerial Photo cruise corrected for drain to 1/1/48

Compiled: 3/1/48
By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Wall Creek</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	293,297				293,297	6,312	1,832	50% of Type 52 3,060	11,204	282,093
P.P. (b)	9,895				9,895					9,895
P.P. (c)	649				649					649
D.F. (a)	41,921				41,921	515	843		1,358	40,563
D.F. (b)	2,709				2,709					2,709
W.L. (a)	7,375				7,375	170	175		345	7,030
W.L. (b)	1,363				1,363					1,363
W.F. (a)	4,318				4,318	78	86		164	4,154
E.S. (a)	699				699		14		14	685
Other (d) Resid.	18				18					18
Totals	362,244				362,244	7,075	2,950	3,060	13,085	349,159
Percent	100				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any Aerial Photo cruise corrected for depletions to 1/1/48

Compiled: 3/10/48
By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21
- (d) Residual on WF, ES & LP

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

<u>Willow Creek</u> Block (if significant -- otherwise for entire W.C.)										
Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
P.P. (a)	11,015				11,015	556	164	50% of Type 52 12	732	10,283
P.P. (b)	8,452				8,452					8,452
P.P. (c)	110				110					110
D.F. (a)	22,072				22,072	218	460		678	21,394
D.F. (b)	456				456					456
W.L. (a)	10,700				10,700	64	227		291	10,409
W.L. (b)	333				333					333
W.F. (a)	8,600				8,600	57	176		233	8,367
E.S. (a)	262				262	16	9		25	237
Other (a)	542				542		11		11	531
Residual (d) Other	107				107					107
Totals	62,649				62,649	911	1,047	12	1,970	60,679
Percent	100				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any

Compiled: 2/13/48
 By: K.H. Keeling & Glen Jorgensen

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21
- (d) Residual on WF, ES & LP

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
M.B.M.

Species	Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
								50% of Type 52		
P.P. (a)	13,691				13,691		128	45	173	13,518
P.P. (b)	3,846				3,846					3,846
P.P. (c)										
D.F. (a)	2,597				2,597	33	53		86	2,511
D.F. (b)	65				65					65
W.L. (a)	482				482	15	10		25	457
W.L. (b)	10				10					10
W.F. (a)	345				345	15	7		22	323
Totals	21,036				21,036	63	198	45	306	20,730
Percent	100				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1-1-48
 Corrected for acquisition to 1-1-48
 Other Corrections, if any Aerial Photo cruise current 1/1/48
 Compiled: 2/25/48
 By: K.H. Keeling

- (a) = Uncut Mature
- (b) = Residual on selective cut
- (c) = Residual on type 21

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Ditch Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8	855				855		(2%) 17		17	838
20	19,445				19,445	103	(1%) 194		297	19,148
R-20	240				240		(1%) 2		2	238
21	175				175	4	(1%) 2		6	169
22	55				55		(2%) 1		1	54
25	3,063				3,063		(2%) 61		61	3,002
27	8,230				8,230	21	(1%) 165		186	8,044
R-27										
28	347				347		(2%) 7		7	340
5-1/2	820				820			(50%) 410	410	410
1-2-38	8,255			8,255						
Totals	41,485			8,255	33,230	128	449	410	987	32,243
Percent	100%			2.0	98.0					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/48
 Corrected for acquisition to 1/1/48
 Other Corrections, if any Aerial Photos 1/1/48

Compiled: 2/20/48
 By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Fossil Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
20										
R-20	115				115					115
22	30				30					30
27										
R-27	40				40					40
1-2-38	15			15						
Totals	200			15	185					185
Percent	100%			19.5	80.5					

Basic data: Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

Compiled: 3/1/48

By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Lone Rock Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8										
20	5,820				5,820	121	158		279	5,541
R-20	2,060				2,060					2,060
21	15				15					15
22	160				160		2		2	158
25										
27	1,715				1,715	100	25		125	1,590
R-27	825				825					825
5-1/2	135				135			(50% Type 5-1/2)	67	68
R-5-1/2	115				115			67		115
1-2-38	1,150			1,150						
Totals	11,995			1,150	10,845	221	185	67	473	10,372
Percent	100%			9.6	90.4					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/48
 Corrected for acquisition to 1/1/48
 Other Corrections, if any

Compiled: 3/1/48
By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Potamus Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
20	13,375			922	12,453		266	(50% Type 5-1/2)	266	12,187
R-20										
21	615				615		12		12	603
22	85				85		2		2	83
25	3,655				3,655		73		73	3,582
27	3,540			35	3,505	150	71		221	3,284
R-27										
28	150				150		3		3	147
5-1/2	665			175	490			(50%) 245	245	245
1-2-38	4,285			4,285						
Totals	26,370			5,417	20,953	150	427	245	822	20,131
Percent	100%			20.5	79.5					

Basic data: Forest Survey, current as of 1937 Compiled: 2/26/48
 Corrected for depletion to 1/1/48
 Corrected for acquisition to 1/1/48 By: K.H. Keeling
 Other Corrections, if any Aerial photo cruise cor. to 1/1/48

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Rock Creek Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8	355				355					355
20	1,100				1,100					1,100
R-20	160				160					160
27	555				555					555
R-27										
28	25				25					25
5-1/2										
1-2-38	230			230						
Totals	2,425			230	2,195					2,195
Percent	100%			9.5	90.5					

Basic data:

Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

1937
1/1/48
1/1/48

Compiled: 2/27/48
By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Service Creek Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
20	120				120					120
Totals	120				120					120
Percent	100%				100					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/48
 Corrected for acquisition to 1/1/48
 Other Corrections, if any

Compiled: 3/1/48
By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48

Acres

Spray Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8										
20	14,690			140	14,550	116	148		264	14,286
R-20	80				80					80
21	1,525				1,525		15		15	1,510
22	175				175		3		3	172
25										
27	315				315	22	6		28	287
R-27										
37	370				370					370
5-1/2	1,010				1,010			(50%) 505	505	505
1-2-38	11,110			11,110						
Totals	29,275			11,250	18,025	138	172	505	815	17,210
Percent	100%			38.4	61.6					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/48
 Corrected for acquisition to 1/1/48
 Other Corrections, if any

Compiled: 3/1/48
 By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Wall Creek Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8										
20	42,895				42,895	352	458		810	42,085
R-20	2,930				2,930					2,930
21	455				455		6		6	449
22	455				455		9		9	446
25										
27	1,560				1,560	33	38		71	1,489
R-27	350				350					350
28	55				55		1		1	54
37	1,275				1,275					1,275
5-1/2	5,100				5,100			2,550	2,550	2,550
1-2-38	11,680			11,680						
Totals	66,755			11,680	55,075	385	512	2,550	3,447	51,628
Percent	100%			17.5	82.5					

Basic data:

Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

Compiled: 3/4/48

By: K.H. Keeling

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Willow Creek Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
8	1,510				1,510		(2%) 30		30	1,480
20	2,482				2,482	72	(1%) 41		113	2,369
R-20	1,597				1,597		(1%) 16		16	1,581
21	50				50					50
25	974				974		(2%) 20		20	954
27	4,521				4,521	40	(2%) 100		140	4,381
R-27	523				523		(2%) 10		10	
28	1,195				1,195		(2%) 24		24	
5-1/2	20				20			(50%) 10	10	10
1-2-38	243			243						
Totals	13,115			243	12,872	112	241	10	363	12,509
Percent	100%			1.8	98.2					

Basic data:

Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

1937
1/1/48
1/1/48

Compiled: 2/13/48

By: K.H. Keeling & Glen Jorgensen

UMATILLA NATIONAL FOREST SUMMARY OF TYPES
HEPPNER WORKING CIRCLE
Current as of 1/1/48
Acres

Winlock Block (if significant - otherwise for entire W.C.)										
Type	W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicated	Limited	Non-Operable	Operable	Rec. Res.	Non-typed Inoper.	Other (Specify)		
20	3,175				3,175		(1%) 32		32	3,143
R-20	1,460				1,460		(1%) 15		15	1,445
22	390				390		(2%) 8		8	382
27	385				385	11	(2%) 8		19	366
R-27	200				200		(2%) 4		4	196
5-1/2	75				75			(50%) 37	37	38
1-2-38	295			295						
Totals	5,980			295	5,685	11	67	37	115	5,570
Percent	100%			4.9	95.1					

Basic data:

Forest Survey, current as of
Corrected for depletion to
Corrected for acquisition to
Other Corrections, if any

1937
1/1/48
1/1/48

Compiled: 2/25/48
By: K.H. Keeling

IV. Calculation of Allowable Annual Cut

Ponderosa Pine

Operable volume	614,155 M.B.F.
Per cent of stand removed	60
Available during first cutting cycle	368,493 M.B.F.

Cutting cycle started in 1939.
Sixty per cent cut equals a 45-year cutting cycle.

Drain since 1937 equals 46.5 million divided by 9.3 (allowable cut) equals 5 years passed.

Years remaining in cutting cycle: $45 - 5 = 40$

Allowable annual cut: $368,493 \text{ M.B.F.} / 40 \text{ years}$

Allowable annual cut for ponderosa pine = 9.2 million

Associated Species

Operable volume	208,622
Cut at rate of 1-1/3 per cent per annum	
Allowable annual cut = 2.8 million	

Summary of Allowable Annual Cut

Ponderosa pine	9.2 million
Associated species	<u>2.8</u> million
TOTAL	12.0 million

V. Sales Program

In accordance with the approved 1948 Logging Plan, Kinzua Pine Mills Company plans to log 13.6 million feet of ponderosa pine this year. Approximately one-fifth of the total annual cut will be associated species or about 3.4 million feet, making a total yearly cut of all species on national forest land of 17 million feet. Since the company is slightly behind the cutting schedule provided for in the exchange agreement it is expected that it will maintain a cut of 17 million feet of all species for the next five-year period.

Sales of associated species will be made as needed for cutting concurrently with the selection ponderosa pine.

The area outlined in red on the enclosed one-half inch scale map and designated #1 is the approximate location of the exchange cutting for the next five-year period (note that no map was included with this copy of the report). It is not contemplated that this entire area will be cut over in that time. The cutting in different areas depends on the season of the year and the conditions that exist at that time. The predetermined beetle hazard areas as designated by the Forest Insect Laboratory in conjunction with topographic and seasonal conditions determine the order of logging. By the spring of 1949 all the **very high** beetle hazard areas will have been logged. The next priority of logging will be the areas classified as **high** hazard areas.

A salvage sale of 3 million feet of ponderosa pine is planned for 1948. The sale boundary is designated #2 on the accompanying sale program map (note that no map was included with this copy of the report). This sale is being made for the dual purpose of salvaging the trees that would otherwise be lost for cutting, and improving the thrift of the stand to minimize further beetle losses. The area in its present condition affords a very favorable breeding ground for the pine beetle to carry on its depredation against the ponderosa pine resources of this and other sites. This proposed sale area presents a rather peculiar situation. It is classified as a very high beetle hazard area. Trees have an abnormal appearance being characterized by normal foliage on the east exposure with only 25 to 50 per cent of normal foliage on the west exposure. This phenomenon is possibly the result of repeated violent hail storms of a localized nature. Hail damage to trees already weakened by beetle attack has resulted in retarded growth and in many cases mortality. Reproduction in the area also shows this two-sided appearance of light and normal foliage.

This proposed sale will be on a tree estimate basis allowing for a 25 per cent cut on approximately 1200 acres. The sale contract will require construction of two miles of medium standard road which will be in the same general location as the existing forest road. It is believed that several operators will be interested in bidding on this salvage sale.

Providing the Scritsmier Lumber Company exchange materializes, approximately six million feet of selection timber will be cut in the Rhea Creek drainage. The proposed selection area is designated #3 on the attached sale program map (note that no map was included with this copy of the report). Cutting operations could commence in 1949 and be completed in 1950. No additional road system will be needed to log the selection timber.

By reference to the cutting budget for the period 1948 to 1952 the proposed cutting program contemplates a total cut of 76 million feet of ponderosa pine and 18 million feet of associated species. These volumes exceed the allowable annual cut by 30 million feet of pine and 4 million feet of associated species. This overcut is caused mainly by the fact that the Kinzua Pine Mills Company is behind on the cutting schedule provided for in the exchange agreement. During the first four years of the agreement they cut an average of only 3.4 million feet a year. After the five-year period 1946-1952 there will remain to be cut on the selection area approximately 88.5 million, with a minimum of 10

years' time to remove this timber, or an average of 8.5 million per year. Should the company choose the 15 -year option, the maximum time allowed by the contract, the average cut would be 5.9 million feet of pine a year. The overall average cut of ponderosa pine contemplated under the terms of the exchange agreement was nine million feet a year or slightly under the computed allowable annual cut for the Heppner Working Circle.

Actually only the eight million feet of pine to be cut in the proposed Dixon salvage sale and the proposed Scritsmier land exchange will be in excess of the allowable budget. The benefits to be derived from these two programs are considered sufficient to justify the overcut of eight million feet during the five-year period.

The overcut in associated species is justified on the basis that these species should be cut concurrently with the ponderosa pine. Actually the computed allowable annual cut for associated is very conservative. Comparison of the cut with the cruises indicates that the cruises are at least 10 percent low on these species under present utilization standards. Until this has been established as fact, we do not feel justified in increasing the volume of associated species in this plan; however, after further comparison has confirmed those already made, an increase in the allowable annual cut of associated species will be in order for this working circle.

CUTTING BUDGET FOR **HEPPNER** BLOCK

1948 to 1952 incl.

Allowable Annual Cut for Block 12.0 MM

Block	Name or Description of Sale Areas or Units	Map Number	Estimated Volumes to be Cut											
			1948		1949		1950		1951		1952		Totals	
			PP	Other	PP	Other	PP	Other	PP	Other	PP	Other	Pine	Other
Ditch Cr. & Wall Cr.	Wallowa Tbr. Co. Exch.	1	13.6	3.4	13.6	3.4	13.6	3.4	13.6	3.4	13.6	3.4	68.0	17.0
Spray	selection cut Dixon Salvage Sale	2			1.5		1.5						3.0	
Willow Creek	Scritsmier Lbr. Co. Exch.	3			2.5	.5	2.5	.5					5.0	1.0
TOTALS			13.6	3.4	17.6	3.9	17.6	3.9	13.6	3.4	13.6	3.4	76.0	18.0
												Total Allowable Cut for Period	46.0	14.0
												Total Planned Cut for Period	76.0	18.0