

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

S
PLANS - Umatilla
Timber Management
Pendleton-Pilot Rock W.C.

Pendleton, Oregon

April 19, 1948

TIMBER DISPOSAL PLAN
PENDLETON - PILOT ROCK WORKING CIRCLE

Approved:

Carl Ewing
Forest Supervisor

Approved 6/2/1948
s/O.F. Ericson
Ass't. Reg. For.

Prepared by:

Glen Jorgensen
Forester

SUMMARY FOR PENDLETON-PILOT ROCK WORKING CIRCLE National Forest Lands Only

Total Gross Acreage		= 556,603 Acres
Total Net Available Operable Acreage		= 357,398 Acres
Total Gross Volume All Species		= 2,416,351 MBM
Total Net Available Operable Volume		
Ponderosa pine	=	1,127,515 MBM
Douglas fir	=	380,109 MBM
Western larch	=	323,445 MBM
White fir	=	241,360 MBM
Engelmann spruce	=	30,253 MBM
Lodgepole pine	=	1,238 MBM
Others	=	<u>12,648</u> MBM
Total		= 2,116,568 MBM

First Cutting Cycle – 46-3/4 years ending in 1992

Allowable Annual Cut – First Cutting Cycle:

Ponderosa pine	=	15.4 million
Associated species	=	<u>13.1</u> million
Total		28.5 million

TIMBER DISPOSAL PROGRAM FOR THE NATIONAL FOREST RESOURCES OF THE PENDLETON-PILOT ROCK WORKING CIRCLE

I. INTRODUCTION

The Pendleton-Pilot Rock Working Circle includes all of the land in the Dale and Ukiah Ranger Districts and that part of the Pendleton Ranger District drained by the Umatilla River. In 1937 a sale of 221,308 M feet of ponderosa pine was made to the Milton Box Company which operates a sawmill and remanufacturing plant in Pendleton known as the Harris Pine Mills Company. To date 53.4 million feet of ponderosa pine and 7.2 million feet of associated species have been cut under this contract. Due to the leave volume being increased from 20% to 35% it is now estimated that the company has 127.6 million feet of pine to remove to complete this sale, and it is anticipated that the sale will be cut out by 1962. The Milton Box Company sale is located in the Camas and Pilot Rock blocks within the Ukiah Ranger District. Other recent cutting within the working circle includes:

3,000 MBF	– McKay Creek Block	by Mt. Emily Lumber Co.
1,000 MBF	– Gurdane Block	by Heppner Lumber Co.
4,300 MBF	– Camas Block	by Mt. Emily Lumber Co.
285 MBF	– Ukiah Block	by Brown & Hoxie Lumber Co.
725 MBF	– Ukiah Block	by Pilot Rock Lumber Co.
5,400 MBF	– Desolation Block	by Pilot Rock Lumber Co.
214 MBF	– North Fork Block	by Pilot Rock Lumber Co.
125 MBF	– North Fork Block	by Brown & Hoxie Lumber Co.

There has been no cutting in recent decades on the Gibbon Block. The total volume cut including S-22 sales since 1937 is 71.4 million feet of ponderosa pine and 7.6 million feet of associated species. Prior to 1937 there has been little or no cutting on National Forest lands within this working circle.

At the time of the establishment of the Harris Pine Mills plant at Pendleton, the Forest Service gave public assurance that sufficient National Forest stumpage would be available within the Working Circle to supply a long-term operation with 10 million feet of pine per annum, an amount equivalent to the maximum authorized in the Milton Box contract. The following more important mills are now located within the working circle:

	Annual Capacity	Location	Date Established
Pilot Rock Lumber Co.	20 million	Pilot Rock, Oreg.	1940
Pendleton Lumber Co.	9 million	Reith, Oregon	1941
Harris Pine Mills Co.	18 million	Pendleton, Oreg.	1939
Pine Grove Mill	3 million	Pendleton, Oreg.	1941
Brown & Hoxie Lumber Co.	6 million	Ukiah, Oregon	1941

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:

Pilot Rock Lumber Co.	–	12 years
Pendleton Lumber Co.	–	3 years
Harris Pine Mills Co.	–	5 years
Pine Grove Mill	–	4 years
Brown & Hoxie Lumber Co.	–	6 years

There is not sufficient public timber to support all of the dependent mills, and it is expected that only Harris Pine Mills Company and Pilot Rock Lumber Company will survive as sawmills after the privately owned timber is cut.

In addition to the Milton Box Company sale contract a commitment was verbally made to make available for sale small isolated tracts to Pilot Rock Lumber Company, whenever the tracts are isolated and surrounded by company land. The majority of these tracts are located within the Desolation block. It is expected that approximately one million feet will be cut each year in this manner.

No other commitments have been made for the sale of National Forest timber in the working circle.

II. Management Objectives

In addition to the previously mentioned commitments there will be available an additional 4.4 million feet of ponderosa pine per year for acquisition purposes. During 1947 several conferences were held with Pilot Rock Lumber Company in an attempt to negotiate an exchange with the company. The proposed exchange contemplated the acquisition of 35,448 acres of land classified as 24,448 acres of virgin timber on which the company would leave a 25% residual stand and 11,000 acres of cut-over land with a residual stand of 10 million feet of pine. In 1947 negotiations were sufficiently close to an acceptable agreement to warrant the initiation of field work consisting of cruising and appraising the offered and selected tracts. It later developed that the company was not in a position to deed to the United States title to their lands, which were purchased under two different contracts with the First National Bank, which institution is unwilling to commute them to permit transfer of title to any of the land before both contracts have run their course. For this reason the exchange cannot now be consummated.

It is planned that exchange negotiations will be resumed whenever the company is in a position to furnish satisfactory title. In the meantime the company has indicated its desire to embark on a selective cutting program on company land. A marking rule was prepared by the Forest Service based on a 1-1/4% stand structure cruise of 2800 acres and furnished the company for its guidance. On the basis of the marking rule a 25% leave will be obtained on company lands.

In accordance with preliminary negotiations with the company some 83 million feet of ponderosa pine and 15.7 million feet of associated species will eventually be required to consummate this exchange. If this exchange is effected, the Pilot Rock Lumber Company may expect a life of operation approximately equal to that of the Harris Pine Mills Company.

The acquisition of the Brown and Hoxie and Heppner Lumber Company lands is of equally high priority. It is estimated that 5.7 million feet of ponderosa pine and 1.2 million feet of associated species will be required to acquire the Brown and Hoxie holdings, 2240 acres of land on which they will leave a 30% residual stand, and 15600 acres of cutover without residual stand.

Heppner Lumber Company owns 11,000 acres of virgin timber in the working circle. It is believed they will commence operating this tract in the next two or three years. Every effort will be made to negotiate a pre-cutting agreement with the company by that time. It is desirable that their lands be selectively cut leaving a 30% residual stand. Present calculations indicate that 22.6 million feet of ponderosa pine and 3.9 million feet of associated species will be required to accomplish this objective.

Other tracts of privately owned land located within the working circle and within our present exchange authority will be acquired as opportunity affords under tripartite exchange using receipts from current sales.

The following is a summary of the proposed land exchange program in the working circle:

Land Ownership – Acres			Present Holdgs. Volume – MBM		Residual Stand Volume – MBM		N.F. Selection Lumber to be Granted	
Lumber Co.	Cut Over	To be Select. Cut	P.P.	Other	P.P.	Other	P.P.	Other
Pilot Rock	11,000	24,448	210,000	33,000	60,000	15,750	83,000	15,750
Heppner	—	11,000	60,000	15,600	15,000	3,900	22,600	3,900
Brown & Hoxie	1,560	2,240	17,920	4,480	4,480	1,120	5,700	1,120
TOTAL	12,560	37,688	287,920	53,080	79,480	20,770	111,300	20,770

A study should be continuously made to determine the feasibility now or later of establishing a federal unit within the working circle. It is proposed that the communities of Pilot Rock and Pendleton be given consideration under the primary dependency requirement of Public Law 273 by reason of the high degree of refinement of products being achieved there. The evidence available to us now does not indicate that we are yet ready to make any recommendation in this report.

III. Analysis of National Forest Resources

A Forest Survey type map of a scale 1" to-the-mile 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 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. None of the National Forest land in this working circle has been clear cut. A small acreage was cut on the Milton Box Company sale area under the old 80% cutting contract, but most of the cutting has left 35% or more.

The grand summary sheet for type areas in the working circle shows a total of 179,960 acres classed as inoperable. Of this acreage 74,682 is in types 1, 2, and 38 which include the open and subalpine types. The inoperable area supports a total timber volume of 228,547 M.B.M. which has been deducted from the available resources of the working circle in calculating the allowable annual cut. The average stand per acre on the inoperable area is 1,270 board feet, most of which is associated species. Only 2-1/2% of the volume of available ponderosa pine was considered inoperable. Inoperable areas represent 32.3% of the total area, and the inoperable volume represents 9.5% of the total volume in the working circle. The percentage distribution of inoperability by block follows:

Block	Per Cent of Total Inoperable Area	Per Cent of Total Inoperable Volume
Gibbon	23.6	16.7
McKay	.1	—
Pilot Rock	.7	—
Gurdane	.5	—
Ukiah	6.1	15.3
Camas	10.4	8.6
Desolation	9.1	2.3
North Fork	49.5	57.1
Total	100.0	100.0

In determining the inoperable areas the judgment of the rangers coupled with all available information such as aerial photographs, forest type maps, resource survey volume data, and 1" scale aerial planimetric maps was used. The data for each block was studied section by section to determine operability. In general, the inoperable areas consisted of those lands characterized by light stands of 1,500 board feet or less per acre, usually non-commercial or associated species, extremely rough topography, inaccessible by roads, and uneconomical to operate when considering the unusually high road development cost in comparison with the small volume to be moved. Only the first cutting cycle was considered in determining inoperability, it being recognized that changes in the demand for product utilization, and progress in developing logging and

road building equipment will continue to alter the picture. Many areas were considered operable in this plan that could not be operated under present standards but it is believed that before the end of the cutting cycle these will be economically accessible.

The following major areas were considered inoperable:

1. A part of the North Fork Umatilla River drainage characterized by extremely rough topography, light stands, and very expensive development costs.
2. That part of the Meacham River drainage in the vicinity of Duncan including the Camp Creek drainage and the area between Duncan and Black Mountain. The two main types found in this area are Douglas fir poles, and upper slope mixture small, both supporting very little merchantable volume. Topography is very steep and broken, the timber is isolated from other operable stands, and there is little possibility of roads being developed to serve the area.
3. The largest inoperable area is located on the east end of the Dale Ranger District and is bounded by the Powder Peaks on the east, Chicken Hill and Tower Mountain on the north. It includes the headwaters of Crane Creek and the North Fork John Day River, Meadow Creek, Big Creek, and Winom Creek. This area is characterized by steep topography that would require high road development costs. Timber types found on the area are lodgepole, upper slope mixture small, upper slope mixture large, and sub-alpine. The volume per acre is very light and could not possibly justify the necessary development costs. A part of this area will no doubt be considered operable during the second cutting cycle.
4. A small area between Olive Lake and the Greenhorn Mountains is considered inoperable because of the light stand per acre, rough steep ground, and noncommercial species.
5. A small area in the vicinity of Rabbit Butte is considered inoperable because of the extremely rough topography and light stand per acre.
6. A small area along the lower Five Mile Canyon is considered inoperable because of the steep topography, rimrocks, and light stand of associated species.
7. A part of the Potamus and Stony Creek Canyons is considered inoperable because of the steep, rimrocky nature of the ground and lack of roads below.

A deduction of 4,123 acres supporting 19,250 M.B.F. of operable timber was made for recreation reservations. This deduction includes reservations made for road side scenic strips on predetermined recreation road in accordance with Regional standards. as well as deductions for all major camp ground developments existing and proposed.

A deduction was made for "non-typed inoperable" in varying amounts for each block, the amount deducted being tempered to the topography and type stands. A deduction was made for pine volumes and type acreages varying from 1 to 5% of the acreage, which was estimated as supporting a stand of 2,000 board feet per acre.

All volumes included in types 5-1/2 are considered inoperable in this plan. This is a conservative approach since probably a part of this type will be operated during the first cutting cycle.

Tables follow which show:

1. Summary of drain from 1937 to 1/1/47
2. Grand summary of volumes by species in the working circle
3. Grand summary of acreage of forest types in the working circle
4. Summary of volumes by species in each block
5. Summary of acreage by forest types in each block

SUMMARY OF DRAIN
 UMATILLA NATIONAL FOREST SUMMARY OF VOLUMES
 PENDLETON-PILOT ROCK WORKING CIRCLE
 M.B.M.

Current as of 1/1/47

__ 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
P.pine	1,242,610							Drain 62,209		1,180,401
D.fir	451,934							4,303		447,631
W.larch	409,295							1,108		408,187
W.fir	298,988							15		298,973
E.spruce	56,496							49		56,447
L. pine	2,390							149		2,241
Other sp.	22,569							98		22,471
Totals	2,484,282							67,931		2,416,351
Percent										

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

Compiled: March 1947

By: Glen Jorgensen

*Inventory as of 1937

**Inventory as of 1/1/47

GRAND SUMMARY
 UMATILLA NATIONAL FOREST SUMMARY OF VOLUMES
 PENDLETON-PILOT ROCK WORKING CIRCLE
 M.B.M.

Current as of 1/1/47

__ 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
(a) P.P.	1,122,300			27,744	1,094,556	9,122	11,009	Type 5-1/2 5,011	25,142	1,069,414
(b) P.P.	33,495				33,495					33,495
(c) P.P.	24,606				24,606					24,606
(a) D.F.	445,318			50,351	394,967	4,866	12,305		17,171	377,796
(b) D.F.	2,313				2,313					2,313
(a) W.L.	407,592			70,209	337,383	2,909	11,624		14,533	322,850
(b) W.L.	595				595					595
W.F.	298,973			45,332	253,332	1,921	10,360		12,281	241,360
E.S.	56,421			24,678	31,743	333	1,157		1,490	30,253
L.P.	2,162			852	1,310	7	65		72	1,238
(a) Others	22,455			9,381	13,074	92	455		547	12,527
(b) Others	121				121					121
Totals	2,416,351			228,547	2,187,804	19,250	46,250	5,011	71,236	2,116,568
Percent	100			9.46	90.54					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/47
 Corrected for acquisition to 1/1/47
 Other Corrections, if any

Compiled: March 1947
 By: Glen Jorgensen

*Inventory as of 1/1/47

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

GRAND SUMMARY
UMATILLA NATIONAL FOREST SUMMARY OF TYPES
PENDLETON-PILOT ROCK WORKING CIRCLE
 Acres

Current as of 1/1/47

All Block (if significant - otherwise for entire W.C.)										
Type	*Block or W.C. Total	Non-Available		Available		Deductions Applicable to Avail. Oper.			Total Ded.	Net Available Operable
		Dedicat ed	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
1, 2, 38	74,682			74,682	0					0
5-1/2	4,176				4,176			In Type 5-1/2 4,176	4,176	0
8	2,635			715	1,920	9	38		47	1,873
9	3,625			2,220	1,405		61		61	1,344
20	141,730			3,925	137,805	1,141	3,378		4,519	133,286
R20	11,573				11,573					11,573
21	11,225			41	11,184	154	234		388	10,796
22	3,440				3,440	70	51		121	3,319
25	106,870			53,680	53,190	1,219	1,568		2,787	50,403
27	175,067			37,215	137,852	1,382	5,011		6,393	131,459
28	21,580			7,482	14,098	148	605		753	13,345
Totals	556,603			179,960	376,643	4,123	10,946	4,176	19,245	357,398
Percent	100%			32.33	67.67					

Basic data:

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

1937
 1/1/47
 1/1/47

Compiled: March 1947

By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

Gibbon 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
Ponderosa Pine	38,144			1,929	36,215	857	376	529 — Types 21&5-1/2	1762	34,453
Douglas Fir	76,706			9,430	67,276	991	3,314	49 — Drain 26 — Leave Stand	4,380	62,896
Western Larch	45,168			5,471	39,697	306	1,970	49 — Drain 26 — Leave Stand	2,351	37,346
White Fir	137,082			14,425	122,657	873	6,089	—	6,962	115,695
Engelman n Spruce	12,063			2,921	9,142	44	455	49 — Drain 26 — Leave Stand	574	8,568
Lodgepole Pine	1,992			852	1,140	7	57	49 — Drain 26 — Leave Stand	139	1,001
Alpine Fir	6,888			3,113	3,775	9	188	—	197	3,578
Totals	318,043			38,141	279,902	3,087	12,449	829	16,365	263,537
Percent	100			12	88					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/47
 Corrected for acquisition to 1/1/47
 Other Corrections, if any

Compiled: February, 1947
 By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

McKay 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
Ponderosa Pine	9,418				9,418		15	913 — Types 21&5-1/2 3,000 — Drain 1,615 — Leave Stand	5543	3,875
Douglas Fir	7,368				7,368		147	113 — Drain 211 — Leave Stand	471	6,897
Western Larch	4,594				4,594		92	105 — Drain 56 — Leave Stand	253	4,341
White Fir	1,024				1,024		20	—	20	1,004
Engelman n Spruce	113				113		2	—	2	111
Lodgepole Pine	186				186		4	20 — Drain 10 — Leave Stand	34	152
Totals	22,703				22,703		280	6,043	6,323	16,380
Percent	100				100					

Basic data: Forest Survey, current as of 1937
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 Other Corrections, if any

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UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

Pilot Rock 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
		Dedicat ed	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
Ponderosa Pine	50,642				50,642	986	127	4,774 — Types 21&5-1/2 4,477 — Drain 2,410 — Leave Stand	12,774	37,868
Douglas Fir	23,618				23,618	577	472	690 — Drain 371 — Leave Stand	2,110	21,508
Western Larch	11,977				11,977	299	239	344 — Drain 186 — Leave Stand	1,068	10,909
White Fir	6,222				6,222	104	124	—	228	5,994
Engelman n Spruce	244				244	1	5	—	6	238
Lodgepole Pine	204				204		4	80 — Drain 43 — Leave Stand	127	77
Totals	92,907				92,907	1,967	971	13,375	16,313	76,594
Percent	100				100					

Basic data:

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

1937
1/1/47
1/1/47

Compiled: February, 1947

By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

Camas 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)		
Ponderosa Pine	343,105			475	342,630	3,656	1,510	13,333 — Types 21&5-1/2 47,662 — Drain 25,664 — Leave Stand	91,825	250,805
Douglas Fir	141,576			10,640	130,836	1,901	2,575	3,170 — Drain 1,706 — Leave Stand	9,352	121,484
Western Larch	82,463			5,635	76,828	1,260	1,508	453 — Drain 247 — Leave Stand	3,468	73,360
White Fir	26,943			2,095	24,848	301	486	15 — Drain	802	24,046
Engelman Spruce	3,976			203	3,773	36	75	—	111	3,662
Other	5,890			475	5,415	56	107	50 — Drain	213	5,202
Totals	603,953			19,623	584,330	7,210	6,261	92,300	105,771	478,559
Percent	100			3.2	96.8					

Basic data: Forest Survey, current as of 1937
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 Other Corrections, if any

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UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

Gurdane 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
Ponderosa Pine	62,905				62,905		1,698	54 — Types 21&5-1/2 1,144 — Drain 616 — Leave Stand	3,516	59,393
Douglas Fir	11,434				11,434		214	—	214	11,220
Western Larch	6,189				6,189		116	—	116	6,073
White Fir	5,093				5,093		97	—	97	4,996
Engelman n Spruce	155				155		2	—	2	153
Lodgepole Pine	8				8			—		8
Totals	85,784				85,784		2,127	1,814	3,941	81,843
Percent	100				100					

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M.B.M.

Current as of 1/1/47

Ukiah 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
		Dedi- cated	Limited	Non- Operable	Operable	Rec. Res.	Non- typed Inoper.	Other (Specify)		
Ponderosa Pine	245,233			20,719	224,514	2,064	934	3,575 — Types 21&5-1/2 285 — Drain 153 — Leave Stand	7,011	217,503
Douglas Fir	40,482			5,554	34,928	878	658	28 — Drain 15 — Leave Stand	1,579	33,349
Western Larch	29,246			7,115	22,131	339	583	58 — Drain 31 — Leave Stand	1,011	21,120
White Fir	10,750			1,458	9,292	247	211	—	458	8,834
Engelman n Spruce	1,185				1,185	38	23	—	61	1,124
Other	886			84	802	16	18	30 — Drain 16 — Leave Stand	80	722
Totals	327,782			34,930	292,852	3,582	2,427	4,191	10,200	282,652
Percent	100			10.7	89.3					

Basic data: Forest Survey, current as of 1937
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SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

Desolation 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)		
Ponderosa Pine	185,069				185,069	1,559	2,579	3,314 — Types 21&5-1/2 5,427 — Drain 2,922 — Leave Stand	15,801	169,268
Douglas Fir	45,554			10	45,544	390	903	155 — Drain 82 — Leave Stand	1,530	44,014
Western Larch	58,786			561	58,225	482	1,155	92 — Drain 49 — Leave Stand	1,788	56,447
White Fir	30,518			1,164	29,354	277	581	—	858	28,496
Engelman n Spruce	12,073			3,474	8,599	135	169	—	304	8,295
Other	587				587		12	8 — Drain	20	567
Totals	332,587			5,209	327,378	2,843	5,399	12,049	20,291	307,087
Percent	100			1.57	98.43					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/47
 Corrected for acquisition to 1/1/47
 Other Corrections, if any

Compiled: February, 1947
 By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF VOLUMES
PENDLETON-PILOT ROCK WORKING CIRCLE
M.B.M.

Current as of 1/1/47

North Fork 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)		
Ponderosa Pine	308,094			4,621	303,473		3,770	3,125 — Types 21&5-1/2 214 — Drain 115 — Leave Stand	7,224	296,249
Douglas Fir	105,196			24,617	80,579	129	4,022	—	4,151	76,428
Western Larch	170,872			51,427	119,445	223	5,961	7 — Drain	6,191	113,254
White Fir	81,356			26,190	55,166	119	2,752	—	2,871	52,295
Engelman Spruce	26,687			18,080	8,607	79	426	—	505	8,102
Other	8,318			5,709	2,609	11	130	10 — Drain	151	2,458
Totals	700,523			130,644	569,879	561	17,061	3,471	21,093	548,786
Percent	100			1.57	98.43					

Basic data:

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

1937
1/1/47
1/1/47

Compiled: February, 1947

By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Gibbon Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	395			395	0					0
9	1,770			720	1,050		52	Immature 998	1,050	0
10	130			58	72	42	4	Immature 26	72	0
20	3,760			20	3,740	61	177		238	3,502
21	25				25		1	Immature 24	25	0
25	740			25	715	8	36		44	671
27	37,120			5,457	31,663	364	1,583		1,947	29,716
28	12,930			5,062	7,868	68	393	Unmercha ntable 7,407	7,868	0
37	25			25	0					0
1-2-38	31,700			31,700	0					0
Totals	88,595			43,462	45,133	543	2,246	8,455	11,244	33,889
Percent	100			49	51					

Basic data:

Forest Survey, current as of
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Other Corrections, if any

1937
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Compiled: March 1947

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

McKay Block (if significant - otherwise for entire W.C.)										
Type	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)		
20	880				880		9		9	871
21	415				415		8	Immature 407	415	0
22	5				5			Unmercha ntable 5	5	0
25	845				845		17		17	828
27	1,945				1,945		39		39	1,906
28	410				410		8	Unmercha ntable 402	410	0
36	20			20	0					0
1-2-38	235			235	0					0
Selective Cut — 20	255				255			255 — S.C.	255	0
Totals	5,010			255	4,755		81	1,069	1,150	3,605
Percent	100			5	95					

Basic data:

Forest Survey, current as of
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Other Corrections, if any

1937
1/1/47
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Compiled: March 1947

By: Glen Jorgensen

UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Pilot Rock Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	55			55	0					0
9	170				170		3	Immature 167	170	0
20	6,057				6,057	137	61		198	5,859
Selective Cut —20	448				448			448 —S.C.	448	0
21	2,140				2,140	10	21	Immature 2,109	2,140	0
22	25				25			Unmercha ntable 25	25	0
25	3,465				3,465	77	69		146	3,319
27	5,495				5,495	121	110		231	5,264
28	970				970	10	19	Unmercha ntable 941	970	0
1-2-38	1,570			1,570	0					0
Totals	20,395			1,625	18,770	355	283	3,690	4,328	14,442
Percent	100			8	92					

Basic data:

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1937
1/1/47
1/1/47

Compiled: March 1947

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Camas Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	65			65	0					0
8	1,645			220	1,425	9	28		37	1,388
9	990			855	135		3	Immature	137	0
20	28,460			35	28,425	443	568	132	1,011	27,414
Selective Cut—20	9,845				9,845			9,845 — S.C.	9,845	0
21	6,025				6,025	126	120	Immature	6,025	0
22	1,500				1,500	40	30	5,779 Unmercha ntable	1,500	0
25	15,410			9,625	5,785	282	115	1,430	397	5,388
27	25,100			1,998	23,102	361	462		823	22,279
28	1,885			645	1,240		25	Unmercha ntable	1,240	0
1-2-38	5,666			5,666	0			1,215		0
Totals	96,591			19,109	77,482	1,261	1,351	18,401	21,013	56,469
Percent	100			20	80					

Basic data:

Forest Survey, current as of
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Other Corrections, if any

1937
1/1/47
1/1/47

Compiled: March 1947

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Gurdane Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	45			45	0					0
8	95				95		2		2	93
20	5,815				5,815		58		58	5,757
Selective Cut—20	200				200			200—S.C.	200	0
25	335				335		7		7	328
27	1,180				1,180		23		23	1,157
28	220				220		4	Unmercha ntable 216	220	0
22	50				50			50	50	0
1-2-38	1,085			1,085	0					0
Totals	9,025			1,130	7,895		94	466	560	7,335
Percent	100			13	87					

Basic data:

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Compiled: March 1947

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Ukiah Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	605			605	0					0
8	400				400		8		8	392
20	34,955			2,920	32,035	291	320		611	31,424
Selective Cut—20	90				90			90—S.C.	90	0
21	1,305			41	1,264	17	25	Immature	1,264	0
22	1,265				1,265	30		Unmercha ntable	1,265	0
25	6,495			85	6,410	199	128	1,235	327	6,083
27	7,455			1,855	5,600	197	11		208	5,392
1-2-38	5,785			5,785	0					0
Totals	58,355			11,291	47,064	734	492	2,547	3,773	43,291
Percent	100			19	81					

Basic data: Forest Survey, current as of 1937
 Corrected for depletion to 1/1/47
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 Other Corrections, if any

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

Desolation Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	2,506			2,506	0					0
6	490			150	340	7	7		14	326
20	23,193				23,193	209	232		441	22,752
Selective Cut —20	695				695			695 —S.C.	695	0
21	170				170		2	Immature 168	170	0
22	210				210		2	Unmercha ntable 208	210	0
25	20,455			915	19,540	527	391		918	18,622
27	23,417			1,575	21,842	223	437		660	21,182
28	445				445		9	Unmercha ntable 436	445	0
1-2-38	11,596			11,596	0					0
Totals	83,177			16,742	66,435	966	1,080	1,507	3,553	62,882
Percent	100			20	80					

Basic data:

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

1937
1/1/47
1/1/47

Compiled: March 1947

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UMATILLA NATIONAL FOREST
SUMMARY OF TYPE AREAS
PENDLETON-PILOT ROCK WORKING CIRCLE
ACRES

Current as of 1/1/47

North Fork Block (if significant - otherwise for entire W.C.)										
Type	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)		
5-1/2	505			505	0					0
6	1,140			415	725	10	36		469	679
8	495			495	0					0
9	695			645	50		3	Immature 47	50	0
20	38,610			950	37,660		1,953		1,953	35,707
Selective Cut —20	40				40					40
21	1,145				1,145		57	Immature 1,088	1,145	0
22	385				385		19	Unmercha ntable 366	385	0
25	59,125			43,030	16,095	126	805		931	15,164
27	73,355			26,330	47,025	116	2,351		2,467	44,558
28	4,720			1,775	2,945	70	147	Unmercha ntable 2,728	2,945	0
1-2-38	17,045			17,045	0					0
Totals	197,260			91,190	106,070	322	5,371	4,229	9,922	96,148
Percent	100			46	54					

Basic data:

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

1937
1/1/47
1/1/47

Compiled: March 1947

By: Glen Jorgensen

IV. Calculation of Allowable Annual Cut

Ponderosa Pine

Operable Volume = 1,069,413 M.B.F.
Per cent of stand removed = $\frac{65}{100}$
Available during first cutting cycle = 695,118.45 M.B.F.

Cutting cycle started in 1941
65% cut equals a 48-3/4 year cutting cycle

Drain since 1941 equals 49.9 million/13.3 (allowable cut) = 3-3/4 years passed

Years remaining in cutting cycle = 48-3/4 - 3-3/4 = 45

Allowable annual cut = 695,118.45 M.B.F./45 years

Allowable annual cut for ponderosa pine = 15.4 million

Associated Species

Operable volume = 986,077 M.B.F.
Cut at the rate of 1-1/3% per annum
Allowable annual cut = 13.1 million

Summary of Allowable Annual Cut

Ponderosa pine	15.4 million
Associated species	<u>13.1 million</u>
Total	28.5 million

V. Sale Program

The Milton Box Company sale of 11/8/37 will be operating for approximately 16 more years. The sale boundary and road program for the next five years is shown on the attached map (note that no map was included with this copy of the report). In the next five years the company will extend its main utilization road from the top of the ridge north of Dugout Spring to join with the present Camas Creek Road. Spur roads will be built up the Bowman Creek, Bear Wallow Creek, and Lane Creek drainages. A second network of roads will extend eastward from the main utilization road to tap the Waucup, Peet, Salisbury, and Rancheria Creek drainages. It is expected that the company will cut approximately 8.5 million feet of pine and approximately 1.5 million feet of associated species a year from the sale area during the next 5-year period.

It is not expected that negotiations for exchange with the Pilot Rock Lumber Company will be completed in time to permit the cutting of any selection timber during the next five year period. A commitment was made to sell the company timber from the small isolated tracts of National Forest land that are surrounded by the company's private land. Approximately 1 million feet of pine and .2 million feet of associated species will be cut each year under this program. The accompanying sale program map shows the proposed selection area and the proposed 10-year road program for the Pilot Rock Lumber Company exchange.

It is estimated that it will be two years before a land exchange is negotiated with Brown and Hoxie Lumber Co. Cutting of the estimated 6.8 million feet of selection timber will be spread over a period of two to three years. The company's main road up Wilkins Creek will be used in operating the selection area. Additional short spurs will be constructed. The attached one-half inch scale map shows the proposed selection area and road system.

Heppner Lumber Company will start operating its Buckaroo Flat holdings within four or five years. Cutting of selection timber will probably be confined to the isolated tracts of National Forest land in T. 6 S., R. 30 E., W.M. during the next five year period. It is estimated that the company will cut but 2 million feet of selection timber during the ensuing five year period. The North Jones Prairie access road was constructed to this tract in 1944 and 1945. The logging operation in this area will require considerable construction of secondary and spur roads. The proposed selection area is shown on the attached maps.

It is planned to advertise for sale the allowable cut of the Gibbon block which is approximately 3.5 million feet a year, 87% being associated species. The South Fork Umatilla River affords the best opportunity for the initial sale in this block. This area is predominately associated species, there being very little pine in the drainage. It is not likely that operators will be interested in a sale of this kind, and for this reason it will be necessary to make the sale large enough to encourage bidders. The amount of timber advertised should be in the neighborhood of 20 to 30 million feet and the sale contract cover a period of 5 to 10 years.

The construction of a road up the South Fork Umatilla River will be required starting at the mouth of the Thomas Fork and eventually intersecting present roads on the ridge tops in the vicinity of Black Mountain. This road will be very important in National Forest administration and extremely valuable during elk season to facilitate the harvesting of that game resource.

No preliminary work has been done in this area but it is anticipated road development costs will be quite high. It is planned to complete pre-sales examination work in the area this year. Cutting operations could possibly commence in 1949, providing an acceptable bid is received. The proposed sale area and road system is shown on the attached sale program map.

In addition to the above sale program it can be expected that 1 million feet, one-half to be pine, will be cut annually through small salvage or sanitation sales and the cutting of an occasional isolated forty that may be cut concurrently with other private operations. Early this year a sale of 300 M.B.F. was made to B.A. Tharrington who has a portable mill near Dale for some fringe timber that was not considered operable by the larger outfits.

By reference to the cutting budget for the period 1948-1952 the proposed sale program contemplates a total cut of 59.4 million feet of pine and 24.4 million feet of associated species. These volumes are 17.6 million of pine and 41.1 million of associated species less than the allowable cut for the same period. We on the Umatilla wish to retain a part of the allowable cut of pine for acquisition purposes. When the proposed Pilot Rock Lumber Company and Heppner Lumber Company exchanges are negotiated, the cutting even so of selection pine added to sale commitments will create a small overcut of pine timber. Pine stumpage in excess of present sale commitments will be used to insure good cutting practices on private land and to consummate land exchanges. Were we to sell the full allowable cut of pine at this time, it would serve only to shorten the life of existing mills and communities. For this reason no present attempt will be made to bring our pine cut up to the allowable maximum.

The associated species present a different picture. Demand for these species is small and then only in conjunction with pine operations. If we were cutting our full cut of pine and concurrently cutting the associated species in the stand on or adjoining sale areas, we would achieve a cut of but approximately 22 million feet of associated species in the 5-year period. On the average the associated species represent not more than 20% of the total stand in the pine areas. Our allowable cut of associated species is 65.5 million for the five-year period.

This would indicate that the only method of reaching the allowable cut in associated species without overcutting the pine is to make sales in areas of nearly pure mixed stands. The proposed sale in the Gibbon block is recommended with this idea in mind.

The bulk of the volume of associated species lies in the North Fork and Desolation blocks and as yet locked up behind stands of pine. To tap these areas would require extensive road construction, and the first timber to be made operable by such roads would be pine. Without government assistance in constructing a road up the North Fork John Day River there is little possibility of attaining our full allowable cut in associated species for at least another 15 years.

CUTTING BUDGET FOR PENDLETON-PILOT ROCK WORKING CIRCLE
 1948 to 1952 incl.
 Allowable Annual Cut for Circle
 PP=15.4 MM
 Other=13.1 MM

Block	Name or Description of Sale Areas or Units	Map Number	Estimated Volumes to be Cut										Totals	
			1948		1949		1950		1951		1952		Pine	Other
			PP	Other	PP	Other	PP	Other	PP	Other	PP	Other		
Camas	Milton Box Co. Sale 11/8/37	1	8.5	1.5	8.5	1.5	8.5	1.5	8.5	1.5	8.5	1.5	42.5	7.5
Desolation	Pilot Rock Lbr.Co. Sales	2	1.0	0.2	1.0	0.2	1.0	0.2	1.0	0.2	1.0	0.2	5.0	1.0
Ukiah	Brown & Hoxie Exchange	4					2.0	0.3	2.0	0.3	1.7	0.5	5.7	1.1
Ukiah	Heppner Lbr.Co Exchange	5									2.0		2.0	
—	Small Sales	—	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.5	2.5
Gibbon	S. Fk. Umatilla River	6			0.5	3.0	0.5	3.0	0.4	3.1	0.3	3.2	1.7	12.3
TOTALS			10.0	2.2	10.5	5.2	12.5	5.5	12.4	5.6	14.0	5.9	59.4	24.4

Total Allowable Cut for Period 77.0 65.5
 Total Planned Cut for Period 59.4 24.4