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ANALYSIS OF DAYTON WORKING CIRCLE UMATILLA NATIONAL FOREST

SUMMARY
Dayton Working Circle

Location

Upper drainage of Tucannon and Touchet Rivers.

Area

	National Forest (Acres)	Others (Acres)
Timbered	64,480	54,880
Non-timbered	18,725	39,960
Total	83,205	94,840

Stand

Ponderosa Pine	96,680 M ft. b.m.
Douglas Fir	61,727 M ft. b.m.
Western Larch	42,609 M ft. b.m.
Engelmann Spruce	22,209 M ft. b.m.
White Fir	100,654 M ft. b.m.
Others	5,136 M ft. b.m.
Total	329,015 M ft. b.m.

DAYTON WORKING CIRCLE
Umatilla National Forest

Introduction

Purpose of Analysis

This analysis presents summarized stand data, inventories of industrial and local timber needs, and the major problems involved in sustained yield management of the unit. It also attempts to point the way toward the solution of these problems.

Source of Data

The stand and acreage data are taken from the Forest Resource Survey recently completed for this unit. Local and commercial needs were determined from forest cutting records and by contact with the various operators.

Previous Cutting

The following data concerning the amount of cutovers in the various classifications represent fairly well the present status but should be considered in the light of an estimate.

Walla Walla Block. 8300 acres of ponderosa pine have been cut over outside the Forest boundary together with 6000 acres of the fir-larch type.

Dayton Block. To date 800 acres of ponderosa pine have been cut over inside the National Forest boundary and 700 acres of this type outside the Forest boundary. 900 acres of the fir-larch type have been cut over within the Forest boundary, and 3200 acres of this type outside the Forest boundary.

Total cutover for the circle:	Ponderosa Pine -	9,800 acres
	Fir-Larch	10,100 acres

Physiographic Features

Location

This circle lies in the extreme northeastern portion of the Forest and takes in the upper drainage of the Tucannon and Touchet Rivers.

Acreage

	Commercial	Non-Commercial With Timber	Non-Commercial Without Timber
National Forest	60,340 A.	4,140 A.	18,725 A.
Other Federal	750	80	90
State	2,380	45	775
County	650		30
Private	48,490	2,485	39,065
Total	112,610 A.	6,750 A.	58,685 A.

Total Area within circle - 178,045 acres.

Topography

The upper portions of both the Touchet and Tucannon Rivers are very steep and rugged. The canyon bottoms are narrow with steep-walled sides giving way to narrow, rocky ridges. From this rugged condition in its eastern portion the circle gradually smoothes out into rolling grassy hills furrowed by shallow steep-walled canyons. Fair transportation routes are available up the lower portions of these ridge tops.

Forest Description

Types

Walla Walla Block:

Ponderosa Pine Type. The total area is 19,395 acres which represents 19.4% of the block area. The stand is in a rather thrifty condition with all age classes being fairly well represented. The major portion of the pine is rather inaccessible, needing only spur roads to open it up.

Fir-Larch Type. 45,310 acres are covered by this type, which is 45.4% of the block area. Approximately 2/5 of this acreage is mature. The major portion of the stand is reasonably accessible.

Douglas Fir Type. Only 85 acres are shown in this classification representing .1% of the block area.

Other Timber Land Types. There are 515 acres represented in this classification which is .5% of the block area.

Non-Forest or Non-Commercial Type. There are 34,615 acres in this classification representing 34.6% of the block area.

Dayton Block:

Ponderosa Pine Type. The total area of this type is 18,445 acres representing 23.6% of the block area.

Fir-Larch Type. The total area of this type is 35,446 acres representing 45.4% of the block area.

Deforested Burns. 775 acres have been burned over which have not been restocked. This represents 1% of the block area.

Other Timber Land Types. This classification covers 350 acres which represents .4% of the block area.

Non-Forest or Non-Commercial Type. There are 23,295 acres in this classification representing 29.6% of the block area.

Probable Use of Various Species

Without question the ponderosa pine timber will be used as much as possible for saw timber purposes. Douglas fir and western larch will be used to a certain extent for dimension and rough construction lumber which will be used locally. It is believed that when ponderosa pine becomes scarce, white fir will be used for the manufacture of boxes. Efforts will be made from time to time as opportunity affords to encourage operators to experiment with the use of white fir for box ends. It is understood that white fir knots are very hard on slasher knives but if properly treated, a very satisfactory box end can be manufactured from this species.

Due largely to its inaccessibility only relatively small amounts of timber have been used for fuel purposes. As the private timber becomes scarcer, however, and as roads are opened up into the interior country, demand for this type of product will materially increase on National Forest land.

Summarized Tables of Volume, Area, & Status

Walla Walla Block:

Ownership	Area (acres)	Volume, M ft. B.M.
National Forest	29,280	93,369
Other Federal	920	1,692
State	2,560	3,046
County	680	2,146
Private	66,480	55,103
Block Total	99,920	155,356

Dayton Block:

Ownership	Area (acres)	Volume, M ft. B.M.
National Forest	53,925	135,722
State	640	613
Private	23,560	37,324
Block Total	78,125	173,659
Circle Total	178,045	329,015

The distribution of private ownership in the circle is as follows:

Walla Walla Block

E. Broughton; Van & C.J., Jr. – 2440 acres

Ponderosa Pine	1,041 M ft. b.m.
Western Larch	812 M ft. b.m.
Douglas Fir	2,195 M ft. b.m.
White Fir	3,169 M ft. b.m.
Total	7,217 M ft. b.m.

George W. Crider – 1,520 acres

Ponderosa Pine	722 M ft. b.m.

Harry Rainwater – 1,760 acres

Ponderosa Pine	934 M ft. b.m.
Western Larch	603 M ft. b.m.
Douglas Fir	511 M ft. b.m.
White Fir	1,317 M ft. b.m.
Total	3,365 M ft. b.m.

Miscellaneous Small Ownerships – 49,383 acres

Ponderosa Pine	14,031 M ft. b.m.
Western Larch	2,955 M ft. b.m.
Douglas Fir	11,143 M ft. b.m.
White Fir	13,882 M ft. b.m.
Engelmann Spruce	1,487 M ft. b.m.
Others	301 M ft. b.m.
Total	43,799 M ft. b.m.

Dayton Block

Miscellaneous Small Ownerships – 23,560 acres

Ponderosa Pine	12,306 M ft. b.m.
Western Larch	2,856 M ft. b.m.

	Douglas Fir	9,615 M ft. b.m.
	White Fir	8,264 M ft. b.m.
	Engelmann Spruce	4,035 M ft. b.m.
	Others	248 M ft. b.m.
	Total	37,324 M ft. b.m.
Circle Totals		
	Ponderosa Pine	29,034 M ft. b.m.
	Other Species	63,393 M ft. b.m.

Economic Situation

Towns & Communities

The City of Walla Walla and the towns of Dayton and Waitsburg, together with the intervening fertile farming communities, all look toward this working circle for their timber needs. Fuel, fence posts, poles, fruit props, and rough construction lumber are the major items required. None of the above mentioned cities or towns are primarily dependent upon the manufacture of forest products for a livelihood. The towns of Dayton and Waitsburg are largely agricultural centers and are supported mainly by wheat, fruit, peas, and livestock.

Wood Using Industries

The following mills are located adjacent to and operate on this working circle.

1. J.A. Hanger, Dayton, Washington

   Daily capacity – 25 M ft. b.m.
   1937 production – 10,000 M. ft. b.m.
   Annual production, 1925-1934 – 3500 M ft. b.m.

   The products of this mill are sold largely in Dayton and Walla Walla. About a four-year supply of timber remains for this operation in T. 8 N., R. 39 E. which is owned by Broughton, Newby, and McHargue.

2. City Lumber & Coal Yard, Dayton, Washington

   Daily capacity – 25 M ft. b.m.
   1937 production – 377 M. ft. b.m.

   The products of this operator are sold in Dayton, Waitsburg, and Walla Walla. The company owns no timber but buys from small "gippos" who purchase timber from time to time from private land owners along the various creeks which are now accessible.

3. Z.E. Scott, Dayton, Washington

    Daily capacity – 35 M ft. b.m.
    1937 production – 265 M. ft. b.m.

    Rough and finished building material and boxes are manufactured, the lumber being sold in Dayton and Walla Walla and the boxes in Yakima.

4. Oliver Bros., Pomeroy, Washington

    Daily capacity – 6 M ft. b.m.
    1937 production – 360 M. ft. b.m.

    Only rough lumber is produced by this mill which is sold in Pomeroy and adjacent farming communities.

In addition to these mill operators our records show the following needs for timber products:

Private, Outside	–	1600 M ft. b.m.
Commercial & S-22 Sales	–	200 M ft. b.m.
Free Use	–	500 M ft. b.m.

The free use material represents forest clean-up only and should not be used in connection with sustained yield estimates as there is an unestimated amount of dead material which will become increasingly available as transportation routes are developed.

Transportation

The major portion of the circle outside the Forest boundary is fairly well covered with satisfactory routes. Before the National Forest timber is operated, it will be necessary to construct certain additional roads. Sufficient data are not at hand on which to base cost estimates or to establish accurate locations for these needed roads.

Labor Situation

There will probably never be much of a problem in connection with labor in this territory. The operators run intermittently on a seasonal basis and use local labor to a large extent. Until the milling situation has been settled down and has been placed on a more assured basis, the communities will probably never realize much benefit from this class of employment.

Ownership Problems

As there are several operators competing for the various accessible private timber, little hope is held for sustained yield operations for any of them. Most of the private timber is held in small ownerships and the land is used chiefly in connection with grazing. Any revenue derived from timber stumpage is incidental and just that much profit. However, a study should be made of this problem and an attempt made to influence sustained cutting in every way possible.

Private Cutting Practices

The cutting is being done by small "gippos" operating under no restrictions other than those placed by state law. Economic selection is in most cases being roughly applied with little thought given to future growth. Brush disposal practices are being carried on in accordance with state requirements, and reproduction is establishing itself on most of the areas.

Plan of Action

Ultimate Forest Boundary

A 1/4" scale map is included in the appendix showing the proposed ultimate Forest boundary for this circle (note that no map was included with this copy of the report). It is our belief that all forest producing lands should be included within the National Forest boundary. This contention is based upon the following facts:

1. Timber growth is so slow that private forestry is economically impossible.
2. There is little or no opportunity to block out either County or State units.

Ultimate Circle Boundary Based on Planned Transportation Facilities

No changes in the present circle boundary are recommended at this time. It is quite probable that minor changes will eventually be effected between the Dayton block of this circle and the Pomeroy block of the Clearwater circle.

Sales Policy

The established mill capacities far exceed the sustained yield capacities for this circle. Also much of the land is in private ownership and is not subject to sustained management planning. For this reason it is believed that sales within this circle should be confined exclusively to community needs other than saw timber except where desirable private lands may be acquired in exchange for the timber. Certain alienations occur along the Tucannon River which are highly desirable from both the administrative and recreational standpoints. Every effort should be made to further their acquisition, and it is believed that timber for this purpose should be provided in the amount required from National Forest lands.

Administrative Correlation

Acquisition Program. As mentioned above, certain private cutover lands lie along the Tucannon River which are owned by Mr. Z.E. Scott, local timber operator. It is planned to contact Mr. Scott this season in an effort to work out a satisfactory plan which will provide for the early acquisition of these tracts. It is believed that as he is anxious to acquire adjacent government stumpage, his cutover land may be obtained at an attractive price.

Recreation. Both the Tucannon and Touchet Rivers are important from a recreation standpoint. Great care must be exercised in operating the timber along and adjacent to these streams to insure preservation of essential recreational values.

Grazing. The entire working circle is suitable for grazing purposes and certain correlation will be needed between timber and grazing needs at the time timber sale contracts are being prepared.

Watershed Protection. The soil on the upper slopes of the working circle is rather light and of volcanic origin. Careful logging practices will of necessity have to be followed to guard against excessive erosion. No undue problem in connection with this point, however, is expected and close supervision of going sales should be adequate to prevent this danger if suitable skidding practices are provided for in the sale contracts.

Need for Policy Statement. Possibly a local study to supplement the above sales policy will be satisfactory for the next few years, but it should be followed up as soon as possible by a carefully worked out policy statement. Such a statement would entail at least two weeks of field work and three weeks of office compilation and arrangement.

VOLUME BY SPECIES IN THOUSAND BOARD FEET

WALLA WALLA BLOCK

Ownership	Ponderosa Pine	Douglas Fir	Western Larch	Engelmann Spruce	White Fir	Others	Total
Private	16,728	13,849	4,370	1,487	18,368	301	55,103
State	641	1,021	255		1,090	39	3,045
County	316	532	98	390	810		2,146
Other Federal	581	512	174	48	377		1,692
National Forest	15,896	15,000	16,837	5,548	39,230	858	93,369
TOTAL	24,162	30,914	21,734	7,473	59,875	1,198	155,356

DAYTON BLOCK

Private	12,306	9,615	2,856	4,035	8,264	248	37,324
State	315	193			105		613
National Forest	49,897	21,005	18,019	10,701	32,410	3,690	135,722
TOTAL	62,518	30,813	20,875	14,736	40,779	3,938	173,659

WORKING CIRCLE TOTALS

Private	29,034	23,464	7,226	5,522	26,632	549	92,427
State	956	1,214	255		1,195	39	3,659
County	316	532	98	390	810		2,146
Other Federal	581	512	174	48	377		1,692
National Forest	65,793	36,005	34,856	16,249	71,640	4,548	229,091
TOTAL	96,680	61,727	42,609	22,209	100,654	5,136	329,015

TYPES IN ACRES

WALLA WALLA BLOCK

	Ponderosa Pine				Douglas Fir		Fir-Larch					
Ownership	Mature	Imma-ture	Reprod.	Wood-land	Imma-ture	Reprod.	Large	Small	Defor-ested Burns	Other Timber-land Types	Non-For. or Non-Comm.	Total
Private	1,660	2,040	6,035	2,085	30	55	7,215	19,870		30	27,460	66,480
State		235	190	45			435	885			770	2,560
County	65		145				205	235			30	680
Other Fed.	30	10	80	80			305	325			90	920
Nat. Forest	5,405	45	40	1,205			10,800	5,035		485	6,265	29,280
TOTAL	7,160	2,330	6,490	3,415	30	55	18,960	26,350		515	34,615	99,920

DAYTON BLOCK

Private	2,855	1,080	1,370	370			3,635	2,645	530		11,075	23,560
State	105		225				35	270			5	640
County												
Other Fed.												
Nat. Forest	9,980	115	45	2,100			10,985	17,890	245	350	12,215	53,925
TOTAL	12,940	1,195	1,640	2,470			14,655	20,805	775	350	23,295	78,125

WORKING CIRCLE TOTALS

Private	4,515	3,120	7,405	2,455	30	55	10,850	22,515	530	30	38,535	90,040
State	105	235	415	45			470	1,155			775	3,200
County	65		145				205	235			30	680
Other Fed.	30	10	80	80			305	325			90	920
Nat. Forest	15,385	160	85	3,305			21,785	22,925	245	835	18,480	83,205
TOTAL	20,100	3,525	8,130	5,885	30	55	33,615	47,155	775	865	57,910	178,045

CUTTING BUDGET FOR **ELGIN** BLOCK

1948 to 1952 include.

Allowable Annual Cut for Block 6.4 MM

Block	Name or Description of Sale Areas or Units	Map Number	Estimated Volumes to be Cut										Totals	
			1948		1949		1950		1951		1952			
			PP	Other	PP	Other	PP	Other	PP	Other	PP	Other	Pine	Other
Elgin	Marshall Exchange	1			.1	1.2							.1	1.2
Elgin	Eales Exchange	2			1.1	2.4							1.1	2.4
Elgin	Blue Mountain Prune Exchange Growers	3						2.0						2.0
Elgin	Small Exchanges							1.0		1.0		1.0		3.0
TOTALS					1.2	3.6		3.0		1.0		1.0	1.2	8.6
												Total Allowable Cut for Period	4.5	27.4
												Total Planned Cut for Period	1.2	8.6