R 404
RECONNAISSANCE
OF
ZEBALLOS RIVER
1915
FOREST SURVEYS & WORKING PLANS
RECONNAISSANCE

of

ZEBALLOS RIVER

by

A.G. Mumford

1915

Maps accompanying report:-

1 map showing cover and topog.
40 chns. to 1 in.
1 Key map with report, scale
2 miles to 1 inch.

Forest Surveys No. 404.
CONTENTS

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General Report
of
Timber Lands within the Zeballos River.
Nootka District.
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1915.

The sketch map accompanying this report shows the position of Crown Lands containing statutory timber, also the approximate area and location of agricultural soil.

No attempt has been made to show actual contours but, the chief topographical features with elevations at salient points have been given. It will be noticed that only spot-estimates of timber are shown upon the area of Timber Limits at the points indicated.

For convenience in reporting, the portions of Vacant Crown Timber Lands have been numbered 1 to 5 and, attached herewith are separate forms for each of these five areas.

Certain surveyed areas have already been cruised and reported as applications to purchase, and the timbered lands therein have
been recommended for reserve. The lot numbers of these sections are as follows:
L.48, 49, 50, T.Ls. 110 to 115 also expired
T., L. 23973.

The following table gives the estimated distribution of timber within the Zeballos Valley.

<table>
<thead>
<tr>
<th>Vacant Area</th>
<th>Area No.</th>
<th>M.B.M.</th>
<th>Soil</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>190</td>
<td>3,420</td>
<td>Main valley</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>112</td>
<td>1,792</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>760</td>
<td>11,877</td>
<td>&quot; North Fork.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>100</td>
<td>2,300</td>
<td>20 S.E. Fork.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>394</td>
<td>5,560</td>
<td>70 S.E. Fork.</td>
</tr>
<tr>
<td></td>
<td>1,556</td>
<td>29,749</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.P. Area</td>
<td>1390</td>
<td>29,877</td>
<td>245</td>
<td>North Fork.</td>
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<tr>
<td>recom. for</td>
<td>735</td>
<td>15,365</td>
<td>171</td>
<td>S.E. Fork.</td>
</tr>
<tr>
<td>reserve</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. Ls.</td>
<td>4000</td>
<td>60,000</td>
<td>560</td>
<td>Main &amp; S.E. Fork.</td>
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<tr>
<td>Totals.</td>
<td>7,682 Acs.</td>
<td>130,191</td>
<td>1066</td>
<td></td>
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</table>

Distribution of Forest Growth.

The original growth was evidently Douglas Fir (pseudotsuga taxifolia) and Cedar (thuya plicata) which has given place, by natural reproduction to a type of Hemlock (tsuga heterophylla) and Balsam (abies amabilis) with scattered Spruce (sitka).

Generally the growth is clean and sound, having little defect other than due to over-maturity
in the Fir and Hemlock species.

Along the river course in the main valley there is a heavy stand of Douglas Fir, Cedar, Hemlock and Spruce which extends up to almost an entire Hemlock, Cedar and Balsam type, beyond this limit there are found exposed ridges of Yellow Cedar up to an elevation of 3000 ft.

The two tributary Valleys have a type of Hemlock, Balsam and Cedar up to an elevation of 1800 feet but wherever the valley is narrow and secluded from the sun, there is an almost pure stand of Balsam and Hemlock. Above the Hemlock type is found the scrub Yellow Cedar & Jack Pine country which is generally inaccessible owing to rough topography.

The reproduction throughout the valley is in good condition and Balsam saplings and seedlings compose 60% of the young growth.

Logging Possibility.

The timbered area upon the Vacant Crown Lands and A.P. sections is at a distance from the salt water and means of transport will be needed as the river is not suited for entire system to
transport the logs. The most profitable method will be in the use of an over-head system as the cost in construction of railroad would be excessive as the main line would need to be 19 miles in length and costing approximately $660,000. Also it will require considerable engineering to overcome the sharp grade upon the North Fork, in doing this the line would be far removed from the centre of the valley and operations at the main forks.

It is evident that the vacant areas cannot be operated either separately or apart from the operations in the main valley therefore the whole valley should be logged by a responsible firm and thereby eliminate the need to secure right-of-way through the main valley.

The shipment of logs to any part of the lower coast will be attended by heavy expense and loss owing to the exposed nature of the Pacific shore. There should be installed within the Nootka Sound District, a plant to manufacture the natural product contained within this valley and other timbered country in the vicinity.

Soil.

There are approximately 1060 acres of agricultural soil which is heavily timbered land
which will be good land for settlement after the removal of present timber. Of the 1060 acres there are only 90 acres of Vacant area and 430 acres upon the A.P. area. The soil is composed of deep sandy loam upon a subsoil of gravel, except near the slides the soil is fairly free from boulders.

This report covers the timbered land strictly within the Zeballos Valley owing to the limited time for examination, but it will be noticed the No. 4 portion of Vacant land situated west of L. 112, extends indefinitely toward Tahsis Arm in a westerly direction and is evidently timber lands.

There is also a small draw running back from the N.E. corners of T.Ls. 3740, 3789, this area is bounded by two high snow-peaks and the divide is at a considerable altitude possibly above timber line but which eventually descends easterly in the direction of Woss Lake.

Recommendations.

The 1500 acres of Vacant Timber Land (total together with the 2100 acres Timber Land upon A.P. area (total stand of 45,000 M.B.M.) to be reserved for future sale purposes as a pulp operation and should be offered at such period as a profitable operation can be made. Also the area of agricultural soil can be recorded for settle-
ment after the complete removal of timber.

The following is a list of photographs taken during the period of examination of Lots 110 to 115 and 48 to 50, these views are already on branch file and their respective file numbers are given below for reference.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>954-017</td>
<td>S.W. &quot; T.L. 3786p.</td>
</tr>
<tr>
<td>950-018</td>
<td>&quot; &quot; T.L. 3788p.</td>
</tr>
<tr>
<td>949-019</td>
<td>&quot; &quot; T.L. 3789p.</td>
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<tr>
<td>948-020</td>
<td>T.L. 3789p.</td>
</tr>
<tr>
<td>947-021</td>
<td>T.L. 23973 exp.</td>
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<tr>
<td>946-022</td>
<td>L.111. North Fork</td>
</tr>
<tr>
<td>942-023</td>
<td>L.111. &quot; &quot;</td>
</tr>
<tr>
<td>940-024</td>
<td>L.113 &quot; &quot;</td>
</tr>
<tr>
<td>937-025</td>
<td>L.115 &quot; &quot;</td>
</tr>
<tr>
<td>935/10246 &amp; 7 - L.48 S.E. Fork</td>
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</tr>
<tr>
<td>1036/10289 &amp; 9</td>
<td>Head of S.E. Fork</td>
</tr>
<tr>
<td>030</td>
<td>Zeballos S.E. Divide.</td>
</tr>
<tr>
<td>929-031</td>
<td>L. 49 S.E. Fork</td>
</tr>
</tbody>
</table>

Funnel shape Canyon a point for power installation.
Alder paths along river bottom.
Fir type Main River.
View from forks N.E. to Snow Range.
Topography of north end of area.
View West to timbered pass to Tahsis Arm.
Heavy Timber upon A.P. H.&B. type.
Windfall and Bald Mt. on A.P. End of windfall and showing snow peaks on A.P.
L.110, 111, & 114.
Granite Slide, Heavy Hemlock and Balsam type and General Topography.
Topography of No. 5 Crown Lands.
Party enroute at 3200 ft. elevation.
Heavy timber upon A.P. area Balsam & Hemlock type.

"A.G. Mumford."

Examiner.
S.W. cor. T13786p. Alder patches along river bottom.

S.W. cor. T13786p. Showing alder patches along river bottom.
T.L. 3789p. View from forks N.E. to Snow Range.

L.48. S.E. Fork. Granite slide, heavy hemlock and balsam type, and general topography.

L.48. S.E. Fork. Heavy hemlock and balsam type, and general topography.
L.III. N. Fork. View west to timbered pass to Tahsis Arm.
L.113. N. Fork. Windfall and Bald Mt. on A.P.
T.L.25973 exp. Topography of north end of area.
REPORT ON AREA 1

Description of Area.

Commencing at (W.P. 13.64 N. to N.E.)
T.L. 3786p, thence South-Easterly 80 chains more or less, thence Westerly 50 chains more or less to line of T.L. 3786p, thence North 70 chains to point of commencement, Zeballos River, West Coast.

Estimate of Timber (Approximate)

Total ------ 3,420 M. Bd. Feet.
Area ------ 190 Acres
Average ---- 18 M.Bd. Feet per acre.

Species.

Hemlock 50%, Cedar 40%, Douglas Fir 10%.

Topography

Area occupies narrow rocky gulch upon East side of Valley which is backed by snow slides and Mountain Peak. Elevations range between 500' - 1700'. Westerly exposure.
Remarks.

Owing to the broken surface the area will be difficult to operate, but all merchantable timber should be removed at the same time of operation as T.L. 3786.

Recommendations.

Area to be held in Reserve for Timber value and future sale purposes.

.....A.G. Mumford.....
Examining Officer.
REPORT ON AREA 2.

Description of Area.

Situated in Zeballos River Valley and commencing at S.W. corner T.L. 3788p, thence West 40 chains to angle T.L. 3787p, thence South 16 chains, thence Easterly 64 chains, thence N.W. 32 chains to line of T.L. 3787p, thence 10 chains West to commencement.

Estimate of Timber (Approximate).

Total ------ 1,792 M.Bd. Feet
Area ------ 112 Acres
Average ---- 16 M.Bd. Feet per acre.

Species.

Douglas Fir 30%, Hemlock 40%, Cedar 30%.

Topography.

Area occupies small gulch between Rocky spurs and has broken surface with very steep grades. Elevation ranges between 140' - 1200'.
Remarks.

Cannot be considered a logging unit but should be operated in conjunction with T.L. 3787p.

Recommendations.

Area to be held in reserve for timber value and future sale purposes.

....A.G. Mumford....
Examining Officer.
REPORT ON AREA 3

Description of Area.

Situated within N. Valley of Zeballos River, commencing 10 chains West of N.E. corner T.L. 3788p, thence meandering in a Northerly direction 250 chains more or less to W.P. 32 chains North of S.W. L.110, thence following boundary of L.110 South and East to W.P. 8.8 chains North of Angle No.5 L.110, thence meandering South to point 60 chains North of (N.W. T.L. 3789p W.P. 54) thence South 100 chains, thence West 30 chains to point of commencement.

Estimate of Timber (Approximate)

<table>
<thead>
<tr>
<th>Total</th>
<th>11,877 M.Bd. Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>760 Acres</td>
</tr>
<tr>
<td>Average</td>
<td>15.6 M.Bd. Feet per acre</td>
</tr>
</tbody>
</table>

Species.

Hemlock 50%, Cedar 30%, Balsam 20%, with scattered Douglas Fir.
Topography.

Area occupies narrow rocky portion of North Valley approximately 2½ miles long. Contours are very broken and surface is generally exposed rock. River bed elevations are 300' - 1000' and general elevations range between 350' - 2000'.

Remarks.

This area of timber land forms a connecting link between timbered areas within upper North Valley and the Main River to the South.

Recommendations.

This area to be retained as Forest Reserve for timber value and future sale purposes in connection with timber lands situated immediately North.

...A.G. Mumford....
Examing Officer
REPORT ON AREA 4

Description of Area.

Situated within the upper North Valley
Zeballos River commencing at S.W. corner L. 113, thence
East 40 chains, thence S. W. S. along boundary of L. 112
to (W.P. 33.3 ohs. S. S.W. L.112) thence West 20 chains,
thence North to point of commencement.

Estimate of Timber (Approximate).

Total ------ 2,300 M.Bd. Feet
Area ------- 100 Acres
Average ---- 23 M.Bd. Feet per acre.

Species.

Cedar 40%, Hemlock 50%, Balsam 10%.

Topography.

Situated within a divide between Zeballos
North Fork and Valley running out to Tahsis Arm in a
Westerly direction. Elevation 1300'. Valley bottom
contains small swamps.
Remarks.

This area is only part of a tract which extends West of L. 112 apparently for several miles.

A view was obtained from the centre of L.111, through this pass toward salt water in Tahsis Arm.

Recommendations.

This area be reserved for timber value together with adjoining timber lands East and West of this area.

.....A.G. Mumford.....
Examining Officer
REPORT ON AREA 5.

Description of Area.

Situated at the head of S.E. Fork Zeballos River. Commencing at W.P. on South boundary of L. 49, thence meandering South-Easterly 130 chains to head of Valley, thence meandering Easterly and Northerly to South boundary of L. 50, thence West 40 chains to point of commencement.

Estimate of Timber.

Total ---- 5560 M.Bd. Feet
Area ------ 394 Acres
Average ---- 14 M.Bd. Feet per acre.

Species.

Balsam 50%, Hemlock 40%, Cedar 10%.

Topography.

Area occupies narrow basin enclosed by high bluffs. Surface is very rough, there being two distinct rock slides coming down West side of Valley. Elevation along river bottom ranges between 1100' - 1750'.
Remarks.

This area contains approximately 70 acres agricultural soil.

Recommendations.

The full area be reserved for timber value and future sale purposes together with adjoining timber lands.

...A.G. Munford......
Examining Officer