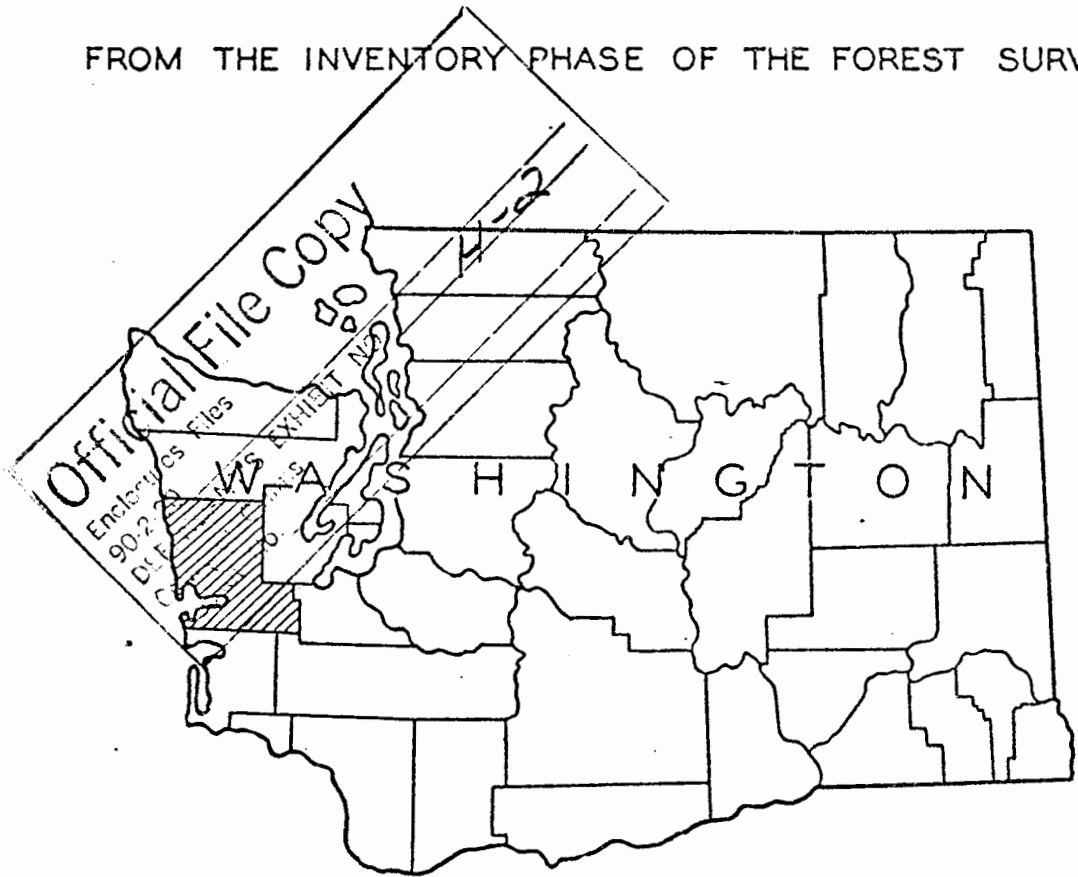


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# FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON

FROM THE INVENTORY PHASE OF THE FOREST SURVEY



U. S. DEPARTMENT OF AGRICULTURE                      FOREST SERVICE  
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IN GRAYS HARBOR COUNTY

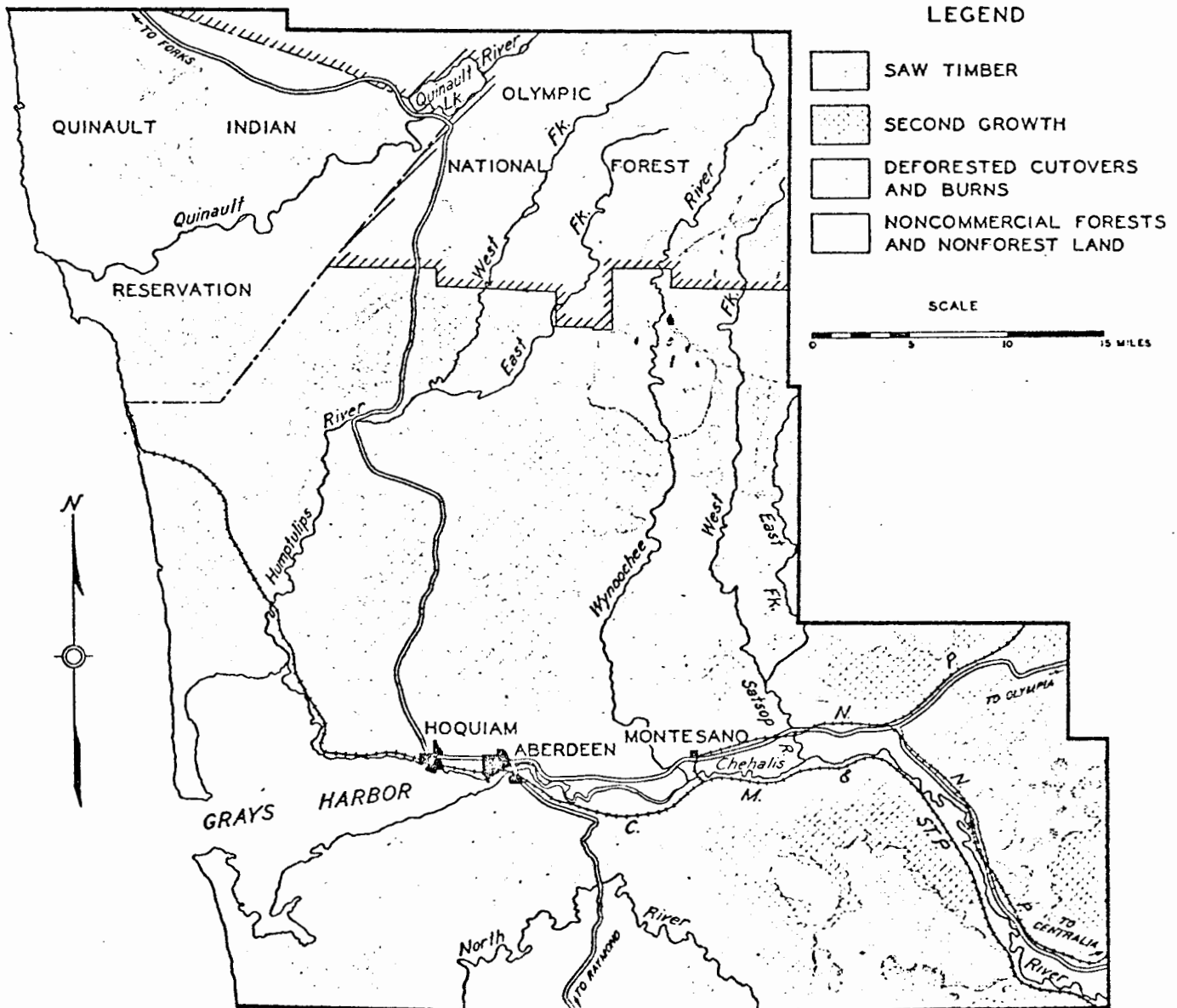
PORTLAND, OREGON

JULY 25, 1938

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FIGURE I  
OUTLINE MAP  
OF  
GRAYS HARBOR COUNTY  
WASHINGTON

1938



## FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON

By Wm. E. Sankela<sup>1/</sup>

An inventory of the forests of Grays Harbor County, Washington, was first made by the Forest Service in 1932 as a part of a national survey of forest resources. Results of this inventory were summarized in a statistical report issued in 1934. In the fall of 1937 the inventory was brought up-to-date through field examination and office recompilation. Adjustments were made for all changes in forest types and merchantable timber volume due to depletion by cutting and fire, the restocking of deforested cutover and burned land, and transfer of ownership of forest land since the original inventory. Also adjustments due to more intensive field work, changed economic standards, and other factors were made. Statistics resulting from the 1937 revised inventory are presented in this report which supersedes the one issued in 1934. Methods used in the survey and detailed definitions of types are described in an explanatory text entitled "The Forest Survey of the Douglas Fir Region",<sup>2/</sup> which should be read in connection with this report.

### Location and Description of County

Located in the west-central part of Washington, the county borders on the Pacific Ocean for approximately 50 miles north and south and extends inland from 30 to 50 miles. It is roughly L-shaped and has a total land area of 1,223,510 acres. In the southwest part lies Grays Harbor after which the county was named (figure 1).

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- <sup>1/</sup> The field and office work of the forest survey of Grays Harbor County was done by Wm. E. Sankela, P.A. Briegleb, M.J. Lauridsen, Claude Kerr, B.C. Baker, A.W. Hodgman, E.D. Buell, Paul Logan, E.J. Hanzlik, B.H. Payne, D.J. Kirkpatrick, and P.N. Pratt.
- <sup>2/</sup> Oregon and Washington were divided for purposes of the survey into two regions, (1) the Douglas fir region, consisting of that part of both States west of the summit of the Cascade Range, and (2) eastern Oregon and eastern Washington, that part of both States east of the summit of the Cascade Range. Regional reports will be issued which will present and discuss findings for each region as a whole. The regional reports will include an interpretation of the forest survey data as related to other economic data and a comprehensive analysis of the regional forest situation from both a physical and an economic standpoint.

OVERS

FORESTS  
LAND

15 MILES

The bulk of the county is drained by rivers that are tributary to Grays Harbor. The Chehalis, the largest river, enters the county in the extreme southeast corner and flows northwesterly to Grays Harbor to drain most of the southern part of the county. It is navigable to river boats for a distance of about 23 miles above its mouth. The principal tributaries, the Satsop, Wyncochee, and Wishkah Rivers, all rising in the Olympic Mountains, flow south to drain the northeastern part of the county. Drainage of the western part is to the Hoquiam and Humptulips Rivers which empty directly into Grays Harbor, and the Quinault River which flows into the ocean. North River in the extreme southern part of the county is tributary to Willapa Harbor in Pacific County.

The topography varies from rolling to mountainous terrain. North of Grays Harbor and west of the Humptulips River is an undulating bench extending to the northern boundary of the county and cut by numerous streams. The interior of the county is more rugged. The flat rounded divides between the main tributaries of the Chehalis gradually increase in elevation and roughness to merge rather suddenly with the Olympic Mountains in the northern part of the county. The topography of the southern part of the county is more pronounced.

Grays Harbor County has a very heavy precipitation. At Aberdeen and along the coast the average annual rainfall is usually above 80 inches, and in some years has exceeded 100 inches. In the northern part of the county rainfall is greater. At Lake Quinault in the foothills of the Olympic Mountains the annual average is approximately 130 inches and in the higher mountains it is even greater. Progressing inland the rainfall decreases at the lower levels. At Oakville in the extreme southeastern part of the county the average precipitation is about 50 inches per year.

### The Forests<sup>3/</sup>

Originally the county was almost entirely covered with dense forests of large trees. Western hemlock, Sitka spruce, and western red cedar were the predominant species in the areas of high precipitation along the coast, in the Olympic Mountains, and in the southwestern portion of the county. In the drier central and eastern portions Douglas fir was the key species. Now after many years of forest exploitation large areas of virgin forests are limited to the northern one-third of the county, principally in the Olympic National Forest and Quinault Indian Reservation, and to the region southeast of Grays Harbor (figure 1).

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<sup>3/</sup> Location and extent of forest types are shown by Forest Survey type maps. Information regarding 1-inch-to-the-mile county type maps and  $\frac{1}{4}$ -inch-to-the-mile lithographed State type maps and how they may be obtained will be furnished upon request. Address Director, Pacific Northwest Forest and Range Experiment Station, 423 U. S. Court House, Portland, Oreg.

In the 1937 inventory a total of 1,149,485 acres was classified as forest land. This is approximately 94 percent of the county's total land area.

### Saw-Timber Types

Coniferous forest types of saw-timber size (20 inches or more d.b.h.) occupy a total of 438,180 acres or about 38 percent of the total forest land area.

Western hemlock stands (type 14) occupy 233,160 acres or over one-half of the total area of merchantable types. This type covers nearly all of the virgin forest area that lies southeast of Grays Harbor, predominates on the lower slopes of the Olympic Mountains in the northern portion of the county, and occurs as small scattered stands along the coast immediately north of Grays Harbor. These latter stands and some of those in the southern portion have been selectively logged; in approximately 24 percent of the total area of the type the high-quality trees have been removed.

Western red cedar (type 17) ranks second in area of saw-timber types. It covers a total area of 91,795 acres and is the predominating type throughout nearly all of the Quinault Indian Reservation where it occurs on poorly drained soil of low site quality. Smaller areas of this type occur on moist sites in the Olympic Mountains and along the coast.

Old-growth Douglas fir, over 40 inches in d.b.h. (type 6), once the predominant type over a large portion of the county's area, now occupies a total area of only 49,900 acres. The most extensive area of this type is in the upper Wynoochee and Wishkah River drainages. Other small areas of the type remain in the southern part of the county.

Fir-mountain hemlock stands (type 23) are limited to the northeastern part of the county where they occupy an area of 39,615 acres of the upper slopes of the Olympic Mountains. Silver fir is the principal species in the type and comprises the majority of the merchantable volume. Associated species include mountain hemlock, western hemlock, Alaska cedar, western white pine, and alpine fir.

Stands of old-growth Sitka spruce (type 11), small old-growth Douglas fir (type 7), and second-growth Douglas fir (type 8) occupy a relatively small acreage in the county.

### Immature Types

Forest types of less than saw-timber size cover 376,690 acres, or approximately 33 percent of the forest land area of the county. These immature stands occur chiefly on logged-off land; the area of old burns that is occupied by them is only about 17,000 acres.

Types in which the majority of the trees are from 6 to 20 or 24 inches in d.b.h. cover an area of 155,500 acres, 65 percent of which is

occupied by second-growth western hemlock, 29 percent by small second-growth Douglas fir, 5 percent by second-growth western red cedar, and the remaining 1 percent by second-growth Sitka spruce.

The area occupied by the small reproduction types, in which the majority of the trees are less than 6 inches in d.b.h. totals 221,190 acres. Douglas fir is the predominating species on 61 percent of this area, western hemlock on 34 percent, western red cedar on 4 percent, and Sitka spruce on the remaining 1 percent.

The stocking of the immature stands is fair; on approximately one-half of the area occupied by them the stocking is of medium classification, and on one-fourth each it is of good and poor classification. Table 4 shows the distribution of the stocking and age classes of the immature types.

#### Hardwoods

Although red alder occurs throughout practically all parts of the county as an understory tree in coniferous stands, it forms a type only along the moist stream courses. Bigleaf maple and black cottonwood occur in the county but their range is much more limited than that of red alder.

Hardwood stands of saw-timber size (12 inches or more in d.b.h.) occupy an area of 9,085 acres and immature stands 37,010 acres. In practically all of these stands red alder is the predominant species.

#### Noncommercial Types

Only a small part of the forest land of the county is too rocky, steep, or sterile to grow merchantable timber, 5 percent of the total forest land area being classified as noncommercial type by the survey. Most of the land so classified lies in the Quinault Indian Reservation and is too poorly drained to support good tree growth.

#### Deforested and Nonforest Lands

Included in the broad category of "deforested lands" is the nonrestocked cutovers (cut prior to 1930), recent cutovers (cut since 1930), and deforested burns. Of these three types the first, nonrestocked cutovers, occupies by far the largest area, 156,170 acres. In the 1937 inventory this type was divided into two subtypes, 35a, areas cut prior to 1920, and 35b, areas cut between 1920 and 1929, inclusive. The latter subtype includes about 72 percent of the area of nonrestocked cutovers.

Areas typed as recent cutovers may or may not be restocked. Because of the short elapse of time since a large portion of the lands have been logged, it was not thought feasible to examine and map the degree of stocking of the reproduction.

Deforested burns occupy an area of only 770 acres, an unusual circumstance in the counties in the Douglas fir region. This by no means indicates that the county is free from fire damage. Thousands of acres of cutover land are burned over practically every year and this is the chief contributing factor to the nonrestocked condition of cutover lands.

Clearing of forest land for agriculture and town sites has greatly increased the original area of nonforest land in the county. A total of 47,420 acres is now devoted to agriculture and there is an area of 26,605 acres in barrens, tideland, natural grassland, or within the boundaries of cities and towns.

#### Productive Capacity of Forest Land

The forest lands of Grays Harbor County are well above the average of the Douglas fir region in their capacity for growing timber. In the survey the productiveness of forest lands was measured by their capacity to grow Douglas fir and five site classes were recognized (table 5). Seventy-six percent of the commercial coniferous forest land is in the upper two classes, sites I and II. In comparison only about one-third of the commercial forest lands of western Washington are so classified. Site III, the median site, makes up 13 percent of the total, while the two poorest, sites IV and V, aggregate 11 percent of the commercial coniferous forest lands. The bulk of the poorer sites are concentrated in the Olympic National Forest and the Quinault Indian Reservation.

#### Saw-Timber Volume

The volume of merchantable saw timber in the county, by species and ownership class, is shown in table 1 and figure 2. Of the total stand of 17 billion board feet, log scale, all but about 105 million feet is coniferous. Eleven coniferous and three hardwood species are included in the estimate. Western hemlock greatly predominates, composing approximately 48 percent of the total volume. Of the other important commercial species, Douglas fir ranks next composing about 18 percent, followed closely by western red cedar 16 percent, silver fir 10 percent, and Sitka spruce 6 percent. Approximately 68 percent of the hardwood volume is of red alder.

#### Forest Ownership

A large portion of the forest land in the county is in private ownership. Approximately 64 percent of the total area of 1,149,485 acres is privately owned, 15 percent is in Indian ownership, and 14 percent is in national forest ownership. The remaining 7 percent is in the other public ownership classes of State, county, municipal, and Federal other than national forest.

Of the saw-timber volume about 44 percent is privately owned, 36 percent is in national forest ownership, and 17 percent is in Indian ownership. Over one-half of the old-growth Douglas fir and Sitka spruce



volume and about one-third of the western red cedar volume is on private lands.

### Economic Development

Settlement in Grays Harbor County has been chiefly limited to the area adjoining Grays Harbor and to the broad Chehalis River Valley. Industrial development has centered on the harbor because of ocean shipping facilities, and over one-half of the county's population is in the two industrial cities of Aberdeen and Hoquiam located at the eastern end of the harbor. According to the Bureau of the Census the population of Aberdeen in 1930 was 21,723 and that of Hoquiam 12,766. Most of the agricultural lands lie in the Chehalis River Valley and the bulk of the remainder of the county's population is found here on the farms and in the towns of Montesano, the county seat, Elma, and Oakville.

The settled part of the county is well served by transportation facilities. Three standard State highways radiate from Aberdeen to connect that city directly with Olympia, Centralia, Raymond, and the Olympic Loop Highway around the Olympic Peninsula. Numerous secondary roads traverse the agricultural areas. Three transcontinental railroads serve the county, terminating at Aberdeen. Branch lines from Aberdeen give rail service to the settled areas north and south of Grays Harbor. Another branch ascends North River. Grays Harbor is a port for ocean-going vessels.

### Forest Industries

The manufacture of lumber is the foremost industry of Grays Harbor County. In the latter part of the decade from 1920 to 1929, inclusive, over a billion feet of lumber per year was produced. Since 1930 the production has declined, the output varying from about 200 to 500 million feet, lumber tally, per year. At present the mills of the county have a capacity of 3.2 million feet of lumber in an 8-hour day.

Second in value to lumber is the output of the plywood and veneer industry which has an annual installed capacity of about 202 million square feet of 3-ply, three-eighths inch plywood. This industry is chiefly dependent on a supply of large old-growth Douglas fir and Sitka spruce logs. The wood pulp and paper industry ranks next in value of product. There is one pulp mill on Grays Harbor with an annual production of about 90,000 tons of pulp and 19,000 tons of paper. Other wood-using plants in the county include shingle mills, door and furniture factories, and wood-specialty plants.

Logging operations that supply the mills are scattered throughout several parts of the county. In the northeast two or three large companies are operating in Douglas fir stands on private and national forest lands. In the northwest several operations are concentrated in or near the Quinault Indian Reservation; cutting Douglas fir, hemlock, and cedar on both private lands and Indian allotments. Some of these



companies also operate a shingle mill in connection with the logging. There is one large operation in the southeast part of the county cutting Douglas fir. However, this operation is nearly cut out. In the hemlock zone south of Grays Harbor there are two fairly large operations. Most of the large logging companies in the county operate their own railroad although a few use the common carriers. In addition to the rail operations there are a number of truck operations logging chiefly in hemlock stands near Grays Harbor.

Minor forest products of the county include cascara bark, sword fern, and Christmas trees. Of these cascara bark is of greatest importance. It is estimated that the annual production is from 500 to 600 tons of dry bark. Although mature cascara trees are now found only in the more inaccessible parts of the county, young trees have come in on some of the cutover lands and help maintain the production of bark. In the 1937 survey it was found that about one-sixth of the total area of the nonrestocked cutover lands cut prior to 1920 and those clear cut between 1920 and 1930 were restocked with cascara. Where the species occurred over an area of sufficient size to map the average stand was about 20 trees to the acre.

Commercial picking of sword ferns is also an industry of considerable importance in parts of the county. About 300 to 400 carloads of the fronds are shipped annually from Aberdeen and Chehalis in adjoining Lewis County. The ferns are found on moist, shady sites under virgin timber stands.

According to the Bureau of the Census figures for 1930 there was a total of 27,071 persons gainfully employed in the county, of which approximately 42 percent was employed in forestry, which includes logging, pulpwood cutting, fire patrol, and other kinds of woods work, saw and planing mills, pulp and paper mills, and other woodworking and furniture plants. In addition to this portion of the population that is directly dependent on the forest industries, practically all of the remainder of the population is indirectly dependent.

### Agriculture

Agriculture is an industry of secondary importance in the county. Only 47,420 acres, or approximately 4 percent of the county's total land area, is now in agricultural use. A recent land use reconnaissance<sup>4/</sup> classified 111,350 acres, or 9 percent, as suitable for agriculture; the remainder was classified as forest land.

Dairying and the production of hay, small grains and vegetables are the principal farm activities.

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<sup>4/</sup> A Reconnaissance Land Use Classification of Grays Harbor County, Washington, December 1936. Resettlement Administration Region 11.

Bureau of the Census figures for 1930 show a total of 1,290 persons gainfully employed in agriculture in the county.

### Trends in the Forest Situation

A comparison of the data obtained in the original inventory in 1932 and those obtained in the inventory of 1937 offers a good opportunity to trace the trend of certain phases of the forest situation in the county.

#### Depletion

The total depletion of merchantable saw-timber volume due to cutting from 1933 to 1937, inclusive, was approximately 2.7 billion board feet, log scale, an average cut of 540 million board feet per year. During this period the volume of Douglas fir was reduced approximately 1.5 billion board feet, this species furnishing over one-half of the total cut. Eighty-seven percent of the Douglas fir cut came from lands in private ownership and the total volume of the species in this ownership class was reduced more than one-half in the 5-year period. The total volume of Douglas fir in all ownership classes decreased approximately 33 percent in the same period. Practically all of the cut of this species was of old-growth timber more than 40 inches in d.b.h.

The volume of western hemlock was reduced by approximately 740 million board feet and that of Sitka spruce by 325 million board feet. The bulk of the remainder of the cutting depletion was of western red cedar and silver fir. Depletion of merchantable volume in saw-timber stands due to agencies other than cutting was negligible during the 5-year period.

#### Timber Supply

Analysis of the cutting depletion of the past 5 years forecasts an impending decline in lumber production from old-growth Douglas fir in the county. On the basis of the average annual cut for this period, the supply of old-growth Douglas fir on lands in private ownership would be exhausted in about 4 years and on lands in all ownerships in about 8 years. However, several factors considerably alter this estimate. Of the large logging companies that have furnished a major part of the Douglas fir cut during the past 5 years, two have entirely liquidated their holdings in the county and ceased logging and a third has cut most of its timber in the county and is at present operating largely in adjoining counties. Most of the remaining Douglas fir saw-timber volume in private ownership is concentrated in the holdings of two large companies. One of these transports its logs to the Puget Sound area, thus reducing the volume of lumber produced in Grays Harbor County. Although truck loggers operating in scattered remnant stands of old-growth Douglas fir will help maintain the present cut, the supply of the species is limited and present rate of cutting will be curtailed in the relatively near future.

The growing scarcity of higher-grade Douglas fir logs is of vital importance to the plywood plants of the county which have about 27 percent of the installed capacity of the plywood industry in Washington and Oregon. In order to supply these plants it has been necessary to import a considerable volume of "peeler" logs from the Columbia River district. Selective logging of the remaining stands of old-growth Douglas fir in the county will help to maintain the supply of logs suitable for plywood manufacture.

### Reforestation

In general cutover lands logged prior to 1920 have become better restocked than those logged since 1920. In the 1932 inventory it was found that nonrestocked lands cut prior to 1920 amounted to approximately 50,000 acres which was 16 percent of the area logged up to that date. In the 1937 inventory the area of cutover land logged during the decade 1920-1929 that was found to be nonrestocked totaled 113,100 acres or about 43 percent of the area logged during the decade.

Although a considerable acreage of the more recent cutover land has been swept by recurring fires that killed the reproduction, a change in logging methods was no doubt largely responsible for the increase in the area of nonrestocked cutover land. Earlier logging in the county was by the ground-lead system, whereas since about 1916 the high-lead system has been in general use. This latter system, which results in clear-cutting, destroys the advance reproduction and immature trees that might provide a source of seed. Because of the large scale of several of the logging operations in the county during the last two decades clear-cut areas of 20,000 acres or more in extent with practically no seed trees have resulted. This is particularly true in the Douglas fir zone of the central and eastern portions of the county where 63 percent of the total area of 139,000 acres logged during the decade 1920-1929 is nonrestocked, 24 percent is poorly stocked, and only on 13 percent are the coniferous reproduction stands satisfactorily restocked. In the fog belt along the coast where western hemlock is predominant, 43 percent of the 60,000 acres logged during the decade 1920-1929 is nonrestocked, 30 percent is poorly stocked, and 27 percent is satisfactorily reforested. Small islands of immature hemlock stands located throughout many of these non-restocked areas are a source of seed supply and chances of reseeding are fairly favorable.

### Growth

The present rate of growth of the forests of the county is much less than that possible under intensive forest management. On the basis of data obtained in the 1932 inventory the current annual growth, which may be defined as the annual increment of the forests in their present condition, was found to be 96 million board feet or about one-sixth of the average annual cutting depletion. The potential annual growth, which is the average annual increment that could be obtained on the whole of the county's commercial forest land through intensive forest management,

was computed from data obtained in the 1937 inventory and found to be 476 million board feet.

#### Changes in Forest Ownership

There has been little change in ownership of forest land in the county in the past 5 years. Principal transfers were from State to private ownership or from private to State ownership. The State has sold the merchantable timber on several thousand acres to private logging companies but has retained title to the land. During the same period approximately 18,000 acres of privately owned cutover land has been acquired by the State through gift or the issuance of utility bonds.

Although the area of privately owned cutover land that is tax delinquent is increasing yearly no tax foreclosure by the county has been made during the last 5 years. In 1936 a total of approximately 180,000 acres was subject to tax foreclosure.

#### Conclusion

Grays Harbor County, long one of the leading lumber producing areas of the Pacific Northwest, is now faced with the serious problem of rapidly diminishing old-growth forests and a consequent drying up of the source of raw materials for its principal industries, as well as non-restocking and tax delinquency of vast areas of cutover lands resulting from a long period of forest exploitation. Under the present rate of cutting the supply of old-growth Douglas fir saw-timber in the county will soon be exhausted and already high-grade Douglas fir logs are being imported to keep some of the mills in the county operating. Although the forest lands of the county are of high site quality and capable of producing a high rate of forest growth, a large acreage is at present deforested and standing idle. Public ownership of these idle lands through tax foreclosure is probable. Solution of the serious problem lies in improved logging practices, adequate fire protection, rehabilitation of idle cutover land, stable ownership of forest land, and a permanent plan of forest management.

FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON  
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 1. VOLUME OF TIMBER BY SPECIES AND OWNERSHIP CLASS  
DATA CORRECTED TO DECEMBER 1, 1937

TREES 16" AND MORE IN D.B.H. ✓  
THOUSANDS OF BOARD FEET, LOG SCALE, SCRIBNER RULE

SYM-	SPECIES <sup>2/</sup>	STATE				FEDERAL				TOTAL			
		PRIVATE	AVAILABLE	RESERVED	COUNTY	MUNICIPAL	INDIAN AND TRUST	PUBLIC DOMAIN	RAILROAD		NATIONAL FOREST		
COL		FOR	FROM	FROM		TRUST	AVAILABLE	FROM	SELECTION	FOR	FROM		
		CUTTING	CUTTING			ALLOTMENTS FOR CUTTING	CUTTING ✓		PENDING	CUTTING	CUTTING		
DA	LARGE OLD-GROWTH DOUGLAS FIR	1,258,362	27,525		138	302	114,174	2,227		32,246	1,033,567	47,404	2,515,945
CB	SMALL OLD-GROWTH DOUGLAS FIR	74,728	1,635		8	18	7,155	132		1,915	136,216	3,420	225,297
DC	LARGE SECOND-GROWTH DOUGLAS FIR	236,747	12,138	1,797	270		13			1,120	11,625	10,958	274,668
DD	SMALL SECOND-GROWTH DOUGLAS FIR	28,710	3,202			4,474	10,679	3		34	2,096	7,475	56,673
SA	LARGE SITKA SPRUCE	562,467	41,702	1,148	1,189	1,023	238,664		1,005	450	110,979	86,978	1,045,605
SB	SMALL SITKA SPRUCE	138,384	7,403	202	268	181	42,404		192	79		2	182,115
HA	LARGE WESTERN HEMLOCK	3,156,175	237,199	1,096	9,711	27,838	630,799	476	1,528	23,705	2,146,139	201,281	6,435,947
HB	SMALL WESTERN HEMLOCK	1,133,847	67,273	470	5,430	5,962	69,562	41	133	4,183	378,865	35,520	1,701,294
MH	MOUNTAIN HEMLOCK										2,639	7,360	9,999
C	WESTERN RED CEDAR, LIVE	675,537	46,664	132	8,630	227	1,057,557	265	1,004	4,070	463,167	61,866	2,319,127
KC	WESTERN RED CEDAR, DEAD	13,024	1,412		257		366,606		235	20	15,694	411	397,722
YC	ALASKA CEDAR, LIVE										3,375	3,462	6,837
W	WESTERN WHITE PINE	13,145	1,067				33,592				6,243	3,813	57,860
LP	LOGSPOLE PINE	434			39		4				756		1,233
WF	LOWLAND WHITE FIR	68					342				1,007		1,417
NF	NODDF FIR	4,340											4,348
A	SILVER FIR	81,074	7,457				224,127			650	1,226,979	164,351	1,704,638
RA	RED ALDER	50,008	2,131	4	129	10	12,905	5	14		5,126	589	70,921
BC	BLACK COTTONWOOD	8,200	30								968	730	10,008
OW	BIGLEAF MAPLE	12,211	814	4	57	12	8,553	6	16		2,573	5	24,251
	TOTAL	7,447,549	457,652	4,853	26,134	40,047	2,817,216	3,155	4,207	68,480	5,548,016	635,693	17,653,002

1/ TREES OF HARDWOOD SPECIES TAKEN FROM 12" AND MORE D.B.H.

2/ IN ADDITION TO THE SPECIES LISTED, OREGON ASH AND ALPINE FIR ARE KNOWN TO OCCUR IN THE COUNTY, BUT IN NEGLIGIBLE QUANTITIES ONLY.

3/ LIGHTHOUSE RESERVATIONS.

FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON  
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 2. AREA, IN ACRES, OF ALL FOREST COVER TYPES, BY OWNERSHIP CLASS  
DATA CORRECTED TO DECEMBER 1, 1937

SUR- VEY TYPE NO.	TYPE DEFINITION	FEDERAL										TOTAL		
		PRIVATE	STATE		COUNTY	MUNICIPAL	INDIAN, TRIBAL AND TRUST ALLOTMENTS	PUBLIC DOMAIN, RESERVED FROM	RAILROAD COLLECTION PENDING	NATIONAL FOREST				
			AVAILABLE FOR CUTTING	RECOVERED FROM CUTTING						AVAILABLE FOR CUTTING	RESERVED FROM CUTTING			
4	WOODLAND OAK FOREST CONTAINING 60% OR MORE OF OAK	310											310	
6	DOUGLAS FIR FOREST CONTAINING 60% OR MORE OF DOUGLAS FIR													
6	DOUGLAS FIR, LARGE OLD GROWTH, MORE THAN 40" D.B.H.	28,140	2,270	20		2,715	70	720	15,505	460			40,900	
7	DOUGLAS FIR, SMALL OLD GROWTH, 22 TO 40" D.B.H.								1,435				1,435	
8	DOUGLAS FIR, LARGE SECOND GROWTH, 22 TO 40" D.B.H.	6,075	50						505	205			7,715	
9	DOUGLAS FIR, SMALL SECOND GROWTH, 6 TO 20" D.B.H.	39,755	2,605		265	915	205	60		60		375	44,330	
10	DOUGLAS FIR SEEDLINGS AND BAPPLINGS, LESS THAN 6" D.B.H.	112,775	17,505		2,000	2,710	5			965			136,000	
	SITKA SPRUCE FOREST CONTAINING 50% OR MORE OF SITKA SPRUCE													
11	SITKA SPRUCE, LARGE, MORE THAN 24" D.B.H.	5,100			35	40	6,500				5	1,630	1,170	14,560
12	SITKA SPRUCE, SMALL, 6 TO 24" D.B.H.	2,765	60		50		30						2,905	
13	SITKA SPRUCE SEEDLINGS AND BAPPLINGS, LESS THAN 6" D.B.H.	450	75			00	405						1,020	
	WESTERN HEMLOCK FOREST CONTAINING 50% OR MORE OF WESTERN HEMLOCK													
14	WESTERN HEMLOCK, LARGE, MORE THAN 20" D.B.H.	127,345	10,935	35	655	1,505	23,400		75	590	63,305	5,245	233,160	
15	WESTERN HEMLOCK, SMALL, 6 TO 20" D.B.H.	87,765	2,585		1,030	3,000	3,425				335	435	100,295	
16	WESTERN HEMLOCK SEEDLINGS AND BAPPLINGS, LESS THAN 6" D.B.H.	62,775	4,085		710	645	3,795				2,140	10	74,960	
	WESTERN RED CEDAR FOREST CONTAINING 40% OR MORE OF WESTERN RED CEDAR													
17	WESTERN RED CEDAR, LARGE, 20" OR MORE D.B.H.	15,315	430		415		69,035			120		4,900	800	91,775
19	WESTERN RED CEDAR, SMALL, LESS THAN 20" D.B.H.	11,230	150		50		5,500				20		40	17,070
	FIR-MOUNTAIN HEMLOCK FOREST CONTAINING 50% OR MORE OF NOBLE FIR, SILVER FIR, OR MOUNTAIN HEMLOCK, OR OF ANY COMBINATION OF THESE SPECIES													
23	FIR-MOUNTAIN HEMLOCK, LARGE, 16" OR MORE D.B.H.	1,350	65				4,450					27,405	6,345	39,615
	LODGEPOLE PINE FOREST CONTAINING 50% OR MORE OF LODGEPOLE PINE													
25	LODGEPOLE PINE, LARGE, 12" OR MORE D.B.H.	85											85	
26	LODGEPOLE PINE, SMALL, LESS THAN 12" D.B.H.	2,050	5		75		850						2,980	
	HARDWOODS FOREST CONTAINING 50% OR MORE OF HARDWOODS													
31.5	HARDWOODS, LARGE, 12" OR MORE D.B.H.	6,735	120				980				505	100	8,610	
31	HARDWOODS, SMALL, LESS THAN 12" D.B.H.	34,500	805		290	265	475				1,025	45	37,405	
33	SIBIRIAN PINE FOREST AT UPPER LIMITS OF TREE GROWTH, USUALLY UNMERCHANTABLE										6,060	7,170	14,030	
	NONRESTOCKED CUTOVER, CLEAR CUT AREA NOT SATISFACTORILY RESTOCKED													
35	CLEAR CUT PRIOR TO 1920	38,615	2,405		1,195	645							43,060	
35A	CLEAR CUT FROM 1920 TO 1929, INCLUSIVE	89,225	11,025		180	865	11,195				590		113,110	
36	RECENT CUTOVER, CLEAR CUT SINCE BEGINNING OF 1930	53,975	7,195	25	65	10	10,470				75		71,815	
	DEFORESTED AREA, NONRESTOCKED AREA DEFORESTED OTHERWISE THAN BY CUTTING													
37	DEFORESTED BURN	205					405						770	
38	NONCOMMERCIAL ROCKY AREA	10,245	445		630		23,410		55		6,665	910	42,360	
	TOTAL FOREST TYPES	737,405	63,035	00	8,505	11,760	160,450	130	250	1,315	134,045	23,470	1,149,405	
	NONFOREST LAND, CULTIVATED, GRASS, BRUSH, URBAN AREAS, AND UNCANDICED													
	WATER SURFACES													
2	GRASS, BRUSH, URBAN AREAS, AND UNCANDICED WATER SURFACES	24,345	140		315	70	1,390				160	105	26,605	
3	CULTIVATED AREAS	47,150	145		40	10	35				35	5	47,430	
	TOTAL	802,120	64,120	00	8,060	11,040	169,875	130	250	1,315	134,240	23,610	1,223,510	

1/ LIGHTHOUSE RESERVATIONS.

FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON  
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 3. AREA, IN ACRES, OF GENERALIZED FOREST TYPES, BY OWNERSHIP CLASS  
DATA CORRECTED TO DECEMBER 1, 1937

TYPE DEFINITION	STATE				FEDERAL				TOTAL			
	PRIVATE	AVAILABLE	RESERVED	COUNTY	MUNICIPAL	INDIAN,	PUBLIC	RAILROAD		NATIONAL FOREST		
		FOR	FROM			TRUST	DOMAIN,			RESERVED	AVAILABLE	RESERVED
		CUTTING	CUTTING			ALLOTMENTS	FOR CUTTING	CUTTING	PENDING	CUTTING	CUTTING	
HARDWOODS: ALDER, MAPLE, ASH, AND COTTONWOOD SURVEY TYPES 31 AND 31.5	41,235	1,005		290	265	1,455				1,620	225	46,095
CONIFERS MORE THAN ABOUT 20" D.B.H. SURVEY TYPES 6, 7, 8, 11, 14, 17, AND 23	104,125	13,770	55	1,105	1,545	106,200	70	195	1,315	114,715	14,305	439,180
CONIFERS 6 TO 20" OR 6 TO 24" D.B.H. SURVEY TYPES 9, 12, AND 15	ON CUTOVER AREAS 123,665	4,740		2,005	4,795	3,430				65		138,700
	ON OLD BURNS 6,620	570		60	310	60				330	760	8,710
	TOTAL 130,285	5,310		2,145	4,795	3,740	60			395	760	147,490
CONIFERS LESS THAN 6" D.B.H. SURVEY TYPES 10, 13, AND 16	ON CUTOVER AREAS 174,435	22,525		2,770	3,435	4,240				1,910		209,315
	ON OLD BURNS 1,565					45				1,195	10	2,815
	TOTAL 176,000	22,525		2,770	3,435	4,285				3,105	10	212,130
CONIFERS LESS THAN 26" D.B.H. SURVEY TYPE 19	ON CUTOVER AREAS 9,755	150		50		1,060				20		11,235
	ON OLD BURNS 1,275					4,520					40	5,835
	TOTAL 11,230	150		50		5,580				20	40	17,070
NONCOMMERCIAL AREAS SURVEY TYPES 4, 25, 26, 33, AND 39	12,600	450		705		24,260		55		13,525	8,000	59,765
RECENT CUTOVER AREAS: CLEAR CUT SINCE BEGINNING OF 1930 SURVEY TYPE 36	53,975	7,195	25	65	10	10,470				75		71,815
NONRESTOCKED CUTOVER AREAS AND DEFORESTED BURNS SURVEY TYPES 35, 35A, AND 37	120,155	13,430		1,375	1,710	11,600				500		156,940
TOTAL FOREST TYPES	737,695	63,835	80	8,505	11,760	166,450	130	250	1,315	134,045	23,420	1,149,405
NONFOREST LAND SURVEY TYPES 2 AND 3	71,495	285		355	80	1,425				195	190	74,025
TOTAL	809,190	64,120	80	8,860	11,840	167,875	130	250	1,315	134,240	23,610	1,223,510

1/ LIGHTHOUSE RESERVATIONS.



FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON  
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 4. AREA, IN ACRES, OF CERTAIN IMMATURE CONIFEROUS FOREST TYPES,  
BY AGE CLASS AND DEGREE OF STOCKING  
DATA CORRECTED TO DECEMBER 1, 1937

AGE CLASS (YEARS)	DEGREE OF STOCKING	TYPE NUMBER AND NAME								TOTAL
		10	13	16	9	12	15	19		
		DOUGLAS FIR SEEDLINGS AND SAPLINGS	SITKA SPRUCE SEEDLINGS AND SAPLINGS	WESTERN HEMLOCK SEEDLINGS AND SAPLINGS	DOUGLAS FIR SECOND GROWTH	SITKA SPRUCE SECOND GROWTH	WESTERN HEMLOCK SECOND GROWTH	CEDAR, SMALL		
10	GOOD	16,745	650	17,230				1,075	35,700	
	MEDIUM	49,980		32,015				840	82,835	
	POOR	65,125	440	23,970				4,870	94,305	
	TOTAL	131,850	1,090	73,115				6,785	212,840	
20	GOOD	595		1,845	2,730		7,200	1,075	13,445	
	MEDIUM	3,515			11,790		4,560	675	20,540	
	POOR	120			415		160	90	785	
	TOTAL	4,230		1,845	14,935		11,920	1,840	34,770	
30	GOOD				10,155	45	18,035	75	28,310	
	MEDIUM				8,590	80	21,895	130	30,695	
	POOR				405	130	1,040	30	1,605	
	TOTAL				19,150	255	40,970	235	60,610	
40	GOOD				4,790	125	3,610		8,525	
	MEDIUM				3,690	325	20,760	295	25,070	
	POOR				225	310	1,275	185	1,995	
	TOTAL				8,705	760	25,645	480	35,590	
50	GOOD				205		405		610	
	MEDIUM				125	105	710	240	1,180	
	POOR				315		425	15	755	
	TOTAL				645	105	1,540	255	2,545	
60	GOOD					180	7,580	105	7,865	
	MEDIUM					390	6,110	175	6,675	
	POOR				25	205	1,540		1,770	
	TOTAL				25	775	15,230	280	16,310	
70	GOOD						960	40	1,000	
	MEDIUM						1,675	540	2,215	
	POOR				55		20		75	
	TOTAL				55		2,655	580	3,290	
80	GOOD				555	250	465	130	1,400	
	MEDIUM				220	280	1,370	210	2,080	
	POOR				40		225		265	
	TOTAL				815	530	2,060	340	3,745	
90	GOOD									
	MEDIUM						235	110	345	
	POOR					20			20	
	TOTAL					20	235	110	365	
100	GOOD							535	535	
	MEDIUM					460		585	1,045	
	POOR							125	125	
	TOTAL					460		1,245	1,705	
140	GOOD							5	5	
	MEDIUM							345	345	
	POOR									
	TOTAL							350	350	
150	GOOD							85	85	
	MEDIUM									
	POOR									
	TOTAL							85	85	
TOTAL	GOOD	17,340	650	19,075	18,435	600	38,255	3,125	97,480	
ALL	MEDIUM	53,495		32,015	24,415	1,640	57,315	4,145	173,025	
AGES	POOR	65,245	440	23,970	1,480	665	4,685	5,315	101,700	
	TOTAL	136,080	1,090	74,960	44,330	2,905	100,255	*12,565	*372,205	

\* EXCLUSIVE OF 4,485 ACRES TYPE 19 WHICH WAS NOT SUBDIVIDED INTO AGE AND STOCKING CLASSES.

FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON  
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 5. AREA OF FOREST LAND, BY SITE QUALITY  
DATA CORRECTED TO DECEMBER 1, 1937

SITE CLASSIFICATION		AREA IN PERCENTAGE OF—			
TYPE	SITE QUALITY CLASS <sup>1/</sup>	ACRES	COMMERCIAL CONIFEROUS FOREST LAND	TOTAL FOREST LAND	TOTAL AREA
	I	147,480	14.1	12.8	12.1
	II	647,415	62.0	56.3	52.9
COMMERCIAL CONIFEROUS	DOUGLAS FIR	139,645	13.4	12.2	11.4
	IV	80,840	7.8	7.0	6.6
	V	28,245	2.7	2.5	2.3
TOTAL COMMERCIAL CONIFEROUS		1,043,625	100.0	90.8	85.3
LODGEPOLE PINE		3,055		0.3	0.2
NONCOMMERCIAL ROCKY		42,360		3.7	3.5
SUBALPINE		14,030		1.2	1.1
OAK		310			
HARDWOOD		46,095		4.0	3.8
TOTAL OTHER THAN COMMERCIAL CONIFEROUS:		105,860		9.2	8.6
ALL FOREST TYPES		1,149,485		100.0	93.9
NONFOREST TYPES		74,025			6.1
GRAND TOTAL		1,223,510			100.0

<sup>1/</sup> THE "SITE QUALITY" OF A FOREST AREA IS ITS RELATIVE PRODUCTIVE CAPACITY, DETERMINED BY CLIMATIC, SOIL, TOPOGRAPHIC, AND OTHER FACTORS. THE INDEX OF SITE QUALITY IS THE AVERAGE HEIGHT OF THE DOMINANT STAND AT THE AGE OF 100 YEARS. FIVE SITE QUALITY CLASSES ARE RECOGNIZED FOR DOUGLAS FIR, CLASS I BEING THE HIGHEST. IN THE SURVEY DOUGLAS FIR CLASSIFICATIONS WERE USED NOT ONLY FOR TYPES OF WHICH THIS SPECIES IS A CHARACTERISTIC COMPONENT BUT FOR OTHER TYPES FOR WHICH NO SITE QUALITY CLASSIFICATIONS HAVE BEEN DEVELOPED.

# FOREST STATISTICS FOR GRAYS HARBOR COUNTY, WASHINGTON

FROM INVENTORY PHASE OF FOREST SURVEY

FIGURE 2. DISTRIBUTION OF SAW-TIMBER VOLUME BY SPECIES AND OWNERSHIP CLASS (FROM TABLE 1)

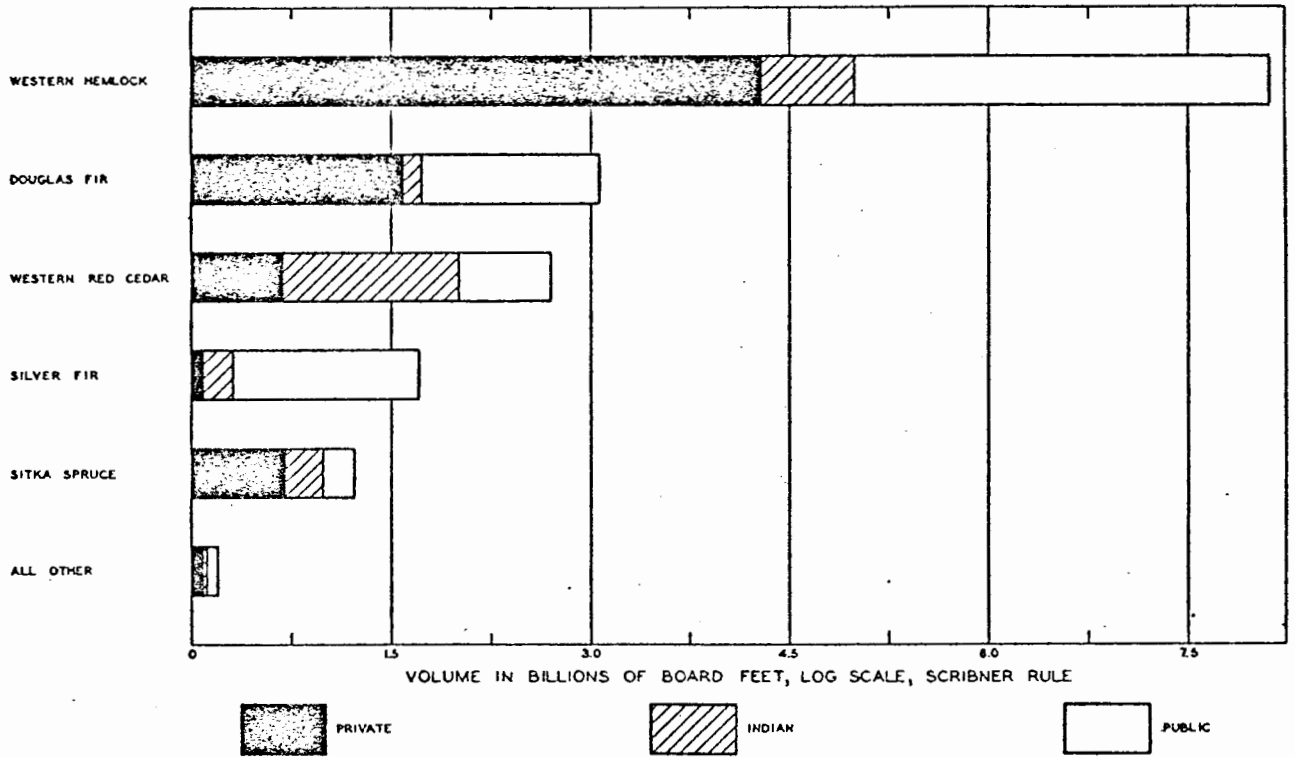
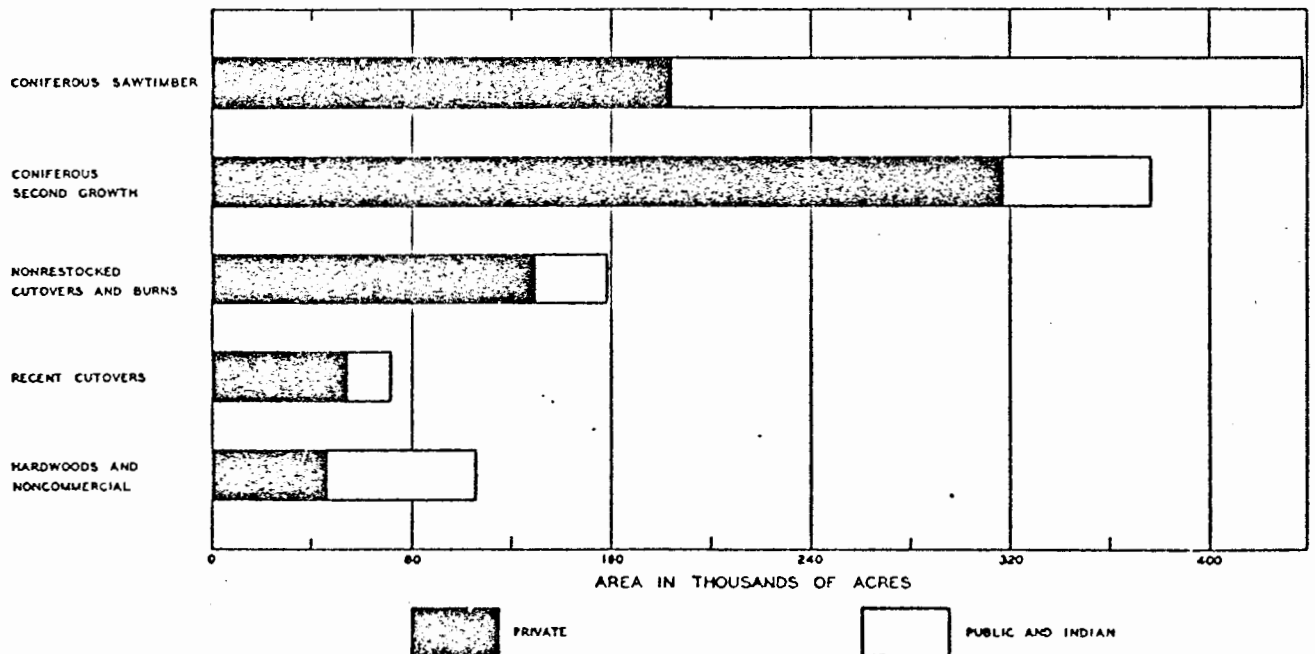


FIGURE 3. GENERALIZED FOREST TYPES BY OWNERSHIP CLASS (FROM TABLE 3)



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Additional Information TR-144 P. 315

ANNUAL FOREST REPORT

FOREST-RV D.F. U READING FILE

fiscal year 1925

1925-32

QUINALET INDIAN RESERVATION, WA.

INTRODUCTION:

General Description. (Narrative)

1. Area and location.

The Quinalelt Indian Reservation is located in the extreme western central part of the State of Washington, and embraces 223,540 acres (including 13,242.54 acres of fee patented allotments).

2. Surface features, topography, etc.

The general topography is level with the exception of a strip about five miles in width along the Pacific Ocean and a small area of foothills of the Olympics in the extreme North Eastern part. Four rivers (Queets, Raft, Quinalelt, and Koolips) flowing West constitute the main drainage system, but on the whole the reservation is very poorly drained, resulting in large areas of Cedar swamp and several large prairies which are under water in the winter.

3. The Forest; species, types, development, etc.

The principal timber trees are Cedar, Spruce, Douglas Fir, Hemlock, White and Amabilis Fir, and White Pine, and the forest types are those typical of the West slope of the Cascades. Because of poor soil drainage, the stand of timber is very uneven, heavy and light stands of timber, and Cedar swamp and open prairie being mixed heterogenously.

Until recent years the Reservation was very inaccessible, there being no wagon roads nor railroads, but only a few foot trails. Five large sales of timber have been made since 1921, and four different logging railroads are being built in a general northerly direction, and the timber on the reservation which has not been sold will be marketable within a few years. The Olympic Highway is being built West from Quinalelt Lake, and will be completed within the coming year, making the Quets and the entire northern end of the reservation readily accessible by auto.

Enclosures Files

90-2-20

DEFENDANT'S EXHIBIT NO. H-3

Court of Claims

Docket No.

4. Statistics.

(A). Estimated forest resources June 30, 1925.

	<u>Acres</u>	<u>M. D. Ft.</u>	<u>Value per M</u>	<u>Total Value</u>
Allotted land	41,829.09	975,000	\$3.00	\$2,925,000.00
Unallotted land	<u>167,568.73</u>	<u>3,950,000</u>	<u>\$5.00</u>	<u>\$19,950,000.00</u>
Total	209,397.82	3,925,000	3.00	11,775,000.00

(B) Estimated Value of timber lands, exclusive of timber, June 30, '25

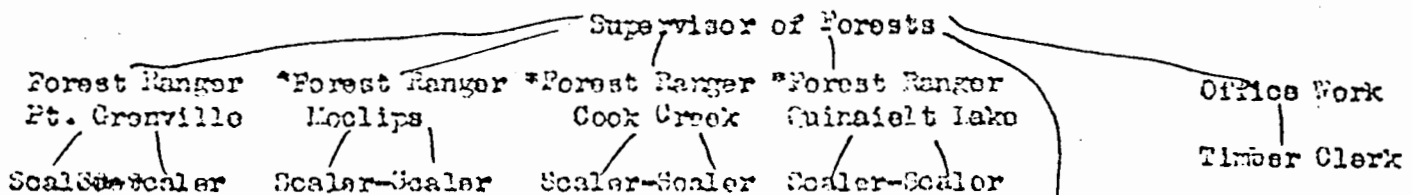
	<u>Acres</u>	<u>Value per acre</u>	<u>Total Value</u>
Allotted land	41,829.09	\$1.00	\$41,829.09
Unallotted Land	<u>167,568.73</u>	<u>.50</u>	<u>\$83,784.36</u>
Total	209,397.82		125,613.45

(C) Estimated percentages of predominating species

<u>Species</u>	<u>Estimated percentage</u>
Cedar	43
Hemlock	26
Spruce	10
Douglas Fir	8
White Fir	7
White Pine	1

Organization and Personnel.

1. Graphical representation of organization.



\* Scalers are now in charge of the Hoopliips, Cook Creek, and Guinaiekt Lake Units. One man has qualified for appointment as Forest Ranger and the others will do so in the near future

Temporary Forest Guards  
Trail and fire work

2. Analysis of personnel in table form.

	<u>Title</u>	<u>Name</u>	<u>Time</u> <u>employed</u>	<u>Salary</u>	<u>Authority</u>	<u>Fund</u>	<u>Amount</u> <u>earned</u>	<u>Travel</u> <u>Expense</u>
8b	Timber Clerk	Lucile J. Keller	12 mos.	1320	50000-24	Ex.Ac.Tbr.	1320.00	---
9a	Forest Asst.	I.W.O.Gama	7-1;7-31	1050	"	"	155.00	---
10	Forest Ranger	L. S. McKeever	12 mos.	1680	"	"	1680.00	---
10a	Forest Guard	---	---	1440	"	"	---	---
10b	Scaler	*H.L.Gallant	8-10;10-25	1500	"	"	302.00	---
10b	Scaler	*Clarence Shaw	1-5;6-30	1440	"	"	704.00	---
10c	Scaler	F. P. Branson	12 mos.	1500	"	"	1500.00	---
10d	Scaler	*Ralph Sheibley	8-15;8-18	1440	"	"	12.00	---
10d	Scaler	*Merlie Shorill	1-16;2-24	1440	"	"	156.00	---
10e	Scaler	Frank N. Briggs	12 mos	1500	"	"	1500.00	---23.35
10f	Forest Guard	---	---	1320	"	"	---	---
10g	Scaler	*P.J.Moriarty	6-19;6-30	1440	"	"	48.00	---
10h	Scaler	P.J.Stover	12 mos	1500	"	"	1500.00	---
10i	Scaler	---	---	1500	"	"	---	---
10j	Forest Guard	A. W. McCalvy	12 mos	1440	"	"	1440.00	6--
11	Forest Ranger	Ray C. Mast	8-22;8-9	1680	"	"	764.00	---
12	Forest Guard	*Jack Mason	7-14;8-31	95mo	"	Ind.WFO.Tbr	146.83	---
12	Forest Guard	*Webster Hudson	9-1;9-17	95mo	"	"	53.83	---
13	Forest Guard	*Howard Caltee	7-14;8-31	95mo	"	"	146.83	---
13	Forest Guard	*J.J.Bastian	9-1;9-17	95mo	"	"	53.83	---
14	Forest Guard	*Colonel Martin	7-14;8-31	95mo	"	"	146.83	---
12	Forest Guard	*Webster Hudson	6-1;6-30	95mo	"	"	95.00	---
13	Forest Guard	*Edward Hudson	6-1;6-30	95mo	"	"	95.00	---
14	Forest Guard	*Colonel Martin	6-1;6-15	95mo	"	"	47.50	---
14	Forest Guard	*Cap Bastian	6-16;6-30	95mo	"	"	47.50	---
	Forest Guard	*William Mason	6-1;6-19	95mo	"	"	65.00	---

\* Temporary employee

3. General discussion of personnel and organization from the point of view of efficiency.

Practically the only forestry activity on the Quinalt is timber sale administration. Under normal market conditions timber operations are in progress for 12 months each year, with the exception of a few days suspension at Xmas and 4th of July. Because of the isolated location of the logging camps, the heavy timber, (90% of which is or will be allotted) the inclement weather, and the necessity of scaling the logs as they are loaded on cars, the Quinalt presents peculiar difficulties in timber sale administration. It is believed that the present organization is functioning in a very efficient manner, as has been reported to the Indian Office by inspecting officials. The office records are kept on prescribed forms, and are posted promptly. The field work is kept constantly up to date especially in the case of pick-up scale, which is never more than two weeks behind actual logging operations. The Ranger or Scaler in charge of each unit keeps a map of that unit up to date showing the location of each camp, railroad spur, landing (by numbers) and the cut over area on which pick-up has been made in crayon, using a different color for each year. This map record is kept in the Hoquiam office on unit maps and also on a large cloth backed map of the entire reservation.

Operations for the fiscal year 1925 were only 50% of normal (the actual cut was a little better than 70 million feet) due to adverse market conditions. Each operation normally calls for one man in charge and one scaler for each side, of which there are usually two.

4. Total number of forestry employees.

Positions are authorized for 16 regular employees. During 1925 there were 6 regular employees employed during the total year, and 17 temporary employees, only 7 of which were employed on timber sale work. All temporary employees were employed for short periods of time, as they were needed.

5. Number of acres to each forestry employee --32,000.



I. General Expense, Forestry.

1. Analysis of items included under this cost feature.

- a. Salary of timber clerk
- b. Office equipment.
- c. Rent of Supervisor's quarters, fuel, etc.

2. Cost of General Expense.

General Expense, Forestry	Total Cost	Unit Cost
Classification of Operating Expenses	Amount	
01. Salary and Wages Regular Employees	\$1,520.00	
.02 Salary and Wages Irregular Employees	---	
.03 Material and Supplies	107.41	
.04 Repairs and Preservation of Property	---	
.05 Traveling Expenses	---	
.06 Expenses not otherwise classified	543.95	
Gross Operating Cost	\$1,971.36	

II. Operation of Forestry Automobile.

- (A). Car #2 purchased June 27, 1932.
- (B). Ford Touring
- (C). Operator--H.B.Steer.
- (D). Total Miles travelled 10,000.
- (E). Cost per mile .043
- (F). Total Cost of operation \$431.06
- (G). General Condition-poor.

Operation Automobiles	Miles Traveled 10,000	Amount	Unit Cost per mile
Classification of Operating Expenses			
.01 Salary and Wages Regular Employees		-----	
.01 Salaries and Wages, Irregular Employees			
.03 Materials and Supplies	(21.54)	\$206.99	.021
.04 Repairs and preservation of Property	(144.02)	144.32	.014
.05 Traveling Expenses		-----	
.06 Expenses not classified (storage)	(60.00)	79.75	.008
Gross Operating Cost	(225.56)	431.56	.043

Explanation: The figures given in parentheses are the amounts paid by the Taholah Indian Agency for the auto expense of the car used by Mr. Steer. The difference between the figures in parentheses and the figures shown in the "Amount" column were paid by Mr. Steer from funds other than Taholah Agency. Only the amounts actually paid by the Taholah Agency are used in a later compilation, but the gross total of auto expense is shown here in order that accurate information as to the expense of upkeep of the car may be shown.

### III. Operation of Agency Sawmill.

There is no Service sawmill in this jurisdiction.

### IV. Fire Protection.

#### Outline of system of control.

In past years three temporary forest guards have been employed during the summer months, and stationed at Quinalt Lake, The Meets, and near Hoolips to warn campers and others against making camp fires and to patrol their respective regions for fires. For the past two years the temporary guards have been placed at work on roads and trails with the understanding that they would be immediately available in case of fire, with the result that considerable work has been done on the Taholah-Sweets Trail and the Taholah-Hoolips road. Until recent years no timber has been cut on the Quinalt Reservation, and conditions under which a fire will burn in green timber and very unusual if not entirely improbable. With the area of logged off land increasing year by year, and the construction of the Olympic Highway from the Lake to the Meets, throwing open the entire northern part of the reservation to campers and vacationists, the problem of fires on the Quinalt will become more acute year by year. The present plan is to place one reliable fire guard at Quinalt Lake and one at Taholah next summer and furnish them with a gasoline pump and about 500 feet of hose. The pumps and hose have been purchased. The guard at Quinalt should patrol the Olympic highway daily in an auto, while the guard at Taholah would be available for fires along the beach. It is felt that lumber companies operating on the reservation must bear primarily the responsibility of fires in their respective sale areas, although the Service men in charge of the various units have been appointed as Deputy State Fire Wardens and are under instructions to see that State regulations and Federal requirements (as contained in the timber contracts) are rigidly enforced.

#### 2. Discussion of character of fire season, etc.

The relative humidity on the Quinalt is very high, and almost nightly fogs in the summer, especially along the beach, materially reduce the fire danger. Due to the very dense timber and the large amount of material on the ground, when a fire "gets away" on logged off

land, in other words when it gets out of control, it is practically impossible to put it out by ordinary means. The only feasible means of control are to back fire from green timber or a railroad grade, and let the fire burn out. In case of a heavy wind it is impossible to do anything. The only thing to do in this country is to patrol thoroughly and get the fires while they are small, as ordinary methods of trenching, etc are absolutely useless here. The lumber companies patrol their railroads in summer, and smoking in the woods is absolutely prohibited.

### 3. Analysis of forest fires.

In August, 1924, a fire was started at the mouth of Wreck Creek by campers, which was extinguished at a cost of \$28.70 in regular and irregular labor. This fire did no damage worth mentioning, but burned in the drift logs and just behind the drift logs along the beach.

On June 27, 1925 two fires started on the Reservation, one about one half mile from the mouth of Wreck Creek, and the other from slash burning on the southern end of the Mt. Grenville Unit. Ebers from the latter fire blew over one mile of green timber and started a very bad fire in the Koolips Unit, which burned over all the logged off land in the eastern end of that unit, destroyed the Aloha camp, and burned out three large railroad trestles. It will be impossible to get complete and accurate data compiled as to these fires and submit this report as promptly as is desired in view of Office letter of July 2, 1925 to the Superintendent. The Indian Service lost approximately \$300.00 worth of equipment which was burned when the Aloha camp was lost, but it has been definitely been ascertained that the fire damage to green timber up to this time has been negligible, and at the present writing the damage to logs which were felled and bucked on the reservation has also been very small. The Aloha and Hobi Companies have been fighting this fire with their entire equipment, being materially aided by the Smith Company, and it is now believed that the fire is under control.

In the discretion of the Office a complete report can be made of these fires to file with this report, or in the absence of instructions from the Office, these fires will be included in the report for the next fiscal year.

With regard to the fire in the Aloha workings, it is interesting, at least, to note that perhaps the hottest fire occurred on an area that had previously been burned over three times. This I know from personal observation, and it is mentioned to show the amount of debris and rubbish which is left on the ground after logging.

It is estimated that the loss to the Aloha and Hobi Companies will be in excess of \$50,000.00 the larger part of which has been suffered by the Aloha Company.

Fire Protection	Area under protection	Total Cost	Unit Cost per acre
	209,397.82		
.01 Salaries and wages regular employees		32.70	
.02 Salaries and wages irregular employees		16.00	
.03 Materials and supplies		492.50	
.04 Repairs and preservation of property		-----	
.05 Traveling expenses		10.25	
.06 Other expenses		-----	
Gross total cost		551.45	.0026

5. Discussion of problems; improvement; needs; etc.

As mentioned above two fire pumps have been purchased (as per the attached cut, and it is planned during the coming season to place one of these pumps at the lake and the other at Taholah which are considered strategic points for fires not inside timber sale areas.

With regard to fires in timber sale areas the Service employee in charge of each Unit is a Deputy State Fire Warden under instructions to enforce not only State regulations, but also to see that the provisions of the approved form of timber sale contracts with regard to fire prevention and suppression are carried out.

V. Grazing Management.

There is absolutely no grazing on the Quinaltolt Reservation.

VI. Construction and Maintenance of Roads and Trails.

Roads and Trails	Miles	Total Cost	Unit Cost per Mile
	Road -3- Trails 40		
.01 Salaries and Wages, regular employees		816.07	
.02 Salaries and Wages, irregular employees		417.00	
.03 Materials and Supplies		9.10	
.04 Repairs and preservation of property		--	
.05 Traveling expenses		3.35	
.06 Other expenses		--	
Gross total cost		\$1245.52	\$415.17*

\* This cost per mile is based on the approximately three miles of wagon road between Modlips and Tahelch on while all the money shown above was expended by temporary forest guards and irregular labor. No trail work was done during the past year.

3. No new trails or roads were constructed during the past year.

4. -----

5. No construction is proposed.

VII. Telephone Operation and Construction.

1. Inventory

- (A). Name of line. Taholah
- (B). Terminals. Taholah—Clippis
- (C). Length. 9 $\frac{1}{2}$  miles.
- (D). The line is a mixed tree and pole line, about 3 miles pole, and 6 $\frac{1}{2}$  tree.

- 1. Insulators 700 #d-5—Western Electric.
- 2. Wire #10 B.B. Galvanized
- 3. Size of poles—About 25' with 7" top.
- 4. Value Unknown

(G) Present condition—Good.

Telephone Lines	Total number of miles 9 $\frac{1}{2}$	Total Cost	Cost per mile
.01 Salaries and Wages regular employees		---	
.02 Salaries and Wages, irregular employees		50.00	
.03 Materials and Supplies		---	
.04 Repairs and Preservation of property		---	
.05 Traveling Expenses		---	
.06 Other Expense		---	
Total gross cost		50.00	5.12

3. No new construction during the year

5. No proposed construction

VIII. Miscellaneous Improvements.

None

IX. Miscellaneous Non-Forest Work.

None



X. Timber Sale Administration.

1. Analysis by units.

<u>Unit</u>	<u>Purchaser</u>	<u>File No.</u>	<u>Contract approved</u>	<u>Contract expires</u>	<u>Area</u>	<u>Estimated volume</u> M Feet B.M.	<u>Bond</u>	<u>Minimum yearly cut</u>	<u>Adv. Depos- its</u>	<u>Stump price</u>
Mcclips	Aloha Lbr. Co.	59215-19	7-16-20	3-31-30	3,560	121,122	\$25,000	\$12,000	\$5,000	C-3.60 F- 3.10 S- 3.10 P- 3.00 H- 1.25
Pt. Grenville	M. R. Smith Co	31250-20	5-25-22	3-31-35	9,640	305,151	40,000	25,000	10,000	C- 2.60 F- 2.25 S- 2.25 P- 1.50 H- .60
Cook Creek	Hobi Tbr Co	7529-22	9-2-22	3-31-39	11,500	306,000	40,000	25,000	10,000	H- .80 P- 1.50 C-F-29-- 4.35
Wain. Lake	Czetto Ry Co	98546-22	1-18-23	3-31-42	14,420	588,000	50,000	25,000	15,000	H- 3.00 All others - 5.00
Mounts	Aloha Lbr Co	731-23	6-29-23	3-31-35	7,320	156,000	25,000	25,000	10,000	H- 1.00 P- 1.50 C-F 23 - 3.50
					46,240	1,275,273	150,000	112,000		

C--Cedar F--Douglas Fir S--Spruce P--White Pine H--Hemlock

2. Analysis of cut for year by units.

<u>Unit</u>	<u>Purch</u>	<u>Hemlock</u>	<u>Pine</u>	<u>Cedar</u>	<u>Spruce</u>	<u>Douglas</u>	<u>Cedar</u>	<u>R.R.</u>	<u>Total</u>	<u>Value</u>	<u>Value</u>
	<u>asst</u>					<u>Fir</u>	<u>Poles</u>	<u>Ties</u>	<u>Log</u>	<u>Allotments</u>	<u>Tribal</u>
									<u>Scale</u>		
McClips:Aloha	:10,020,510:	546,150:	10,043,830:	4,287,370:	6,337,010:	51,858:	1,281:	31,365,570:	\$11,732.44:	\$	72,712.58
Pt.Gren:Smith	: 5,672,970:	6,820:	12,222,780:	3,547,350:	----	:13,379:	—	:21,449,930:	43,377.98:	---	
Cook C.:Hobi	: 4,830,900:	312,860:	3,793,250:	1,529,890:	6,548,450:	5,405:	1,275:	17,015,360:	----	*55,085.37	
O.Lake :Ozette	: 130,390:	---	: 288,990:	10,630:	84,240:	---	---	: 514,250:	603.82:	* 1,706.65	
Total	:20,554,770:	965,830:	26,348,850:	9,375,250:	13,000,510:	70,642:	2,556:	70,345,210:	55,714.24:	130,504.60	

Total Value of 1925 cut \$186,218.34

\* The tribal timber from the Cook Creek and Quinalt Lake Units has been kept separately by parties because it has been or probably will be selected for allotments. On this account the cost and difficulty of administration have been greatly increased.

3. Total cost of Administration and Income, as follows:

Timber Sales	Volume Out	Total Cost	Unit Cost per M
.01 Salaries and Wages Regular Employees	70,345,210	\$9,756.38	
a. Scaling		\$7,167.12	
b. Marking		313.96	
c. Supervision		275.30	
.02 Salaries and Wages, Irregular Employees		-----	
.03 Materials and Supplies		180.00	
.04 Repairs and Preservation of Property		.75	
.05 Traveling Expenses		9.75	
.06 Other Expenses		747.20	
Gross operating total		*10,694.08	

\*Covers only field expense salary of Agency timber clerk, office equipment, or rent of Agency employees quarters.

Operating income	Volume Out	Value of Out	Exp. Acct. Tr.	Unit Income per M
	70,345,210	\$196,218.64	\$14,897.53	\$.08
Deduct operating Expense			*12,872.31	.068
Total net Gain			2,025.22	.012

\* See Form 5-185a attached to this report.

4. General discussion of timber sales by units.

(A). Attitude of purchaser as to fulfilling the terms of the contract with respect to stump height, utilization, etc.

1. Moclips Unit, Aloha Lumber Company, entirely satisfactory.
2. Pt. Grenville Unit, H. R. Smith Lumber and Shingle Company. This Company maintains a system of continual protest against scaling, proper utilization, and has even protested the prompt payment of Advance Deposits. The pick-up scale on the Pt. Grenville Unit has been and is entirely too high--the matter has been repeatedly called to the attention of officials of the Company, and inspection by Indian Service officials shows that Mr. McKeever, who is in charge of this unit, is making the pick-up scale in a manner which is both fair to the Company and at the same time just to the Indian owners of the timber. This report is not made to give the Office the impression that there is a continual battle between the Smith Company and the Taholah Agency, as the Agency has insisted and will continue to insist on a reasonable compliance with contract provisions, however the files of the Taholah Agency will show the continual protests that have been made by the Company in the face of what we know to be fair treatment.
3. Cook Creek Unit, Hobi Timber Company. Entirely satisfactory.
4. Qinalet Lake Unit, Ozette Railway Co. Entirely satisfactory.
5. Mounts Unit, Aloha Lumber Company, entirely satisfactory.

(B). Efficiency of Forest Officers in fulfilling their duties.

1. Moclips Unit. P. A. Stover Scaler in Charge. Mr. Stover, who is the only employee on this sale area at this time, has been with the Service since February 4, 1924 is performing his duties in all respects in an entirely satisfactory manner.
2. Pt. Grenville Unit. L. C. McKeever Forest Ranger in Charge. Mr. McKeever, who has been with the Service since September 27, 1922, is performing his duties in all respects in an entirely satisfactory manner. A. W. McCalvy, Forest Guard (Scaler) who entered the Service on June 4, 1923 is an old experienced scaler and as competent as can be obtained.

3. Cook Creek Unit. F. P. Branson, Scaler in Charge. Mr. Branson, who entered the Service on September 16, 1923, is performing his work in an entirely satisfactory manner in all respects. Mr. Clarence Shaw, temporary scaler, who has been with us since January 1, 1925, is an exceptionally competent scaler, and it is hoped that he will be given the opportunity to obtain Civil Service standing in the near future.
4. Quinalt Lake Unit. F. T. Briggs, Scaler in Charge. Mr. Briggs, who entered the Service on July 9, 1923, is performing his duties in an entirely satisfactory manner in all respects.

While it may seem from the above reports that a stereotyped form of report has been used in setting forth the efficiency of these men, the fact remains that the timber sale work in this jurisdiction is being performed in a highly efficient and creditable manner, as has been reported to the Office by Mr. Muck and others.

Two instances may be cited to show the Office that this efficiency is a fact. When Ray C. Quast, who was in charge of the Mcclips Unit, resigned without notice on March 9, 1925, the records of the sale unit and the field work were up to date and so complete that Mr. Stover took over the responsibility of this sale area with no loss of efficiency. It is our constant aim to keep our timber sale work up to date, complete, and accurate, and we know that this is being done. When the Aloha Camp burned on June 27, 1925, destroying all the records in the scalers cabin, it was possible to duplicate all these records, except of course the original scale books, from those in the Hogueian office. All the scale books had been recently checked for errors, and all logs cut and scaled had been reported, including pick-up scale, which was up to date.

Due to the curtailment of logging operations during 1925 we have had only a skeleton organization, employing temporary scalers as needed. As has been reported to the Office before, we can stand a high turnover in scalers provided we have competent men continuously in charge of the various units.

<u>Unit</u>	<u>Value Cut</u>	<u>Exp Acct Thr</u>	<u>Collected from C'tor</u>		<u>Deductions for Thr out</u>		<u>Balances</u>	
			<u>Adv Payt</u>	<u>Adv Dent</u>	<u>Adv Payt</u>	<u>Adv Dent</u>	<u>Adv Payt</u>	<u>Adv Dent</u>
Delips	\$371,587.15	\$29,726.95	\$ 24,997.48	\$357,951.98	\$19,190.15	\$352,397.00	\$ 5,807.33	\$ 5,554.98
Grenville	61,889.56	4,951.18	63,363.86	65,464.45	9,229.70	52,659.86	54,134.16	13,804.59
ok Creek	56,085.37	4,486.84	58,870.73	65,100.00	-----	66,085.37	58,870.73	9,014.63
insault Lake	2,400.44	192.02	51,630.50	20,000.00	603.82	1,796.62	51,026.68	18,203.38
unts	-----	-----	19,407.00	10,000.00	-----	-----	19,407.00	10,000.00
	<u>491,962.52</u>	<u>39,356.99</u>	<u>218,269.57</u>	<u>519,516.43</u>	<u>29,023.67</u>	<u>462,938.85</u>	<u>189,245.90</u>	<u>55,577.53</u>

<u>Deposit Individual Indians</u>	<u>Deposit Tresu U S</u>	<u>Exp Act Tbr</u>	<u>Wh. Pine</u>	<u>Hemlock</u>	<u>Spruce</u>	<u>Doug. Fir</u>	<u>Cedar</u>	<u>Tot. Log M3 Scale</u>
\$185,653.82	\$150,562.32	\$29,236.15	1,648,930	33,324,110	18,451,240	20,555,880	57,910,640	131,890,800
105,254.30	-----	9,152.50	6,820	7,669,670	4,199,650	-----	18,310,960	30,167,100
54,161.09	10,340.09	5,508.05	312,860	4,830,900	1,529,890	6,548,460	3,793,250	17,015,350
47,500.06	-----	4,130.44	-----	156,580	12,910	84,240	208,990	542,720
<u>17,854.44</u>	<u>-----</u>	<u>1,552.56</u>	<u>No operations.</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
410,423.71	160,903.21	49,680.60	1,968,610	45,981,260	24,193,690	27,168,560	60,503,640	179,635,990

	<u>R. H. Ties</u>	<u>Cedar Poles (L.F.)</u>
Moelips	2,408	108,763
Ft. Gren.	---	14,489
J. Creek	1,275	5,405
C. Lake	---	---
Mounts	---	---
	<u>3,683</u>	<u>208,657</u>



DEPARTMENT OF THE INTERIOR  
U. S. INDIAN SERVICE  
FORESTRY BRANCH

REPORT FOR FISCAL YEAR OF 1925.

Report No. ....

Period from June 30th ..... 1924

to June 30th ..... 1925, inc.

**TIMBER SALE STATEMENT**  
OF  
**OPERATING INCOME AND OPERATING EXPENSE**

I. O. File No. .... Quinalt ..... Indian Reservation.

**STATUS OF THE FUND EXPENSE ACCOUNT TIMBER**  
(OPERATING INCOME)

Opening balance .....	\$16,155.16
Credited during the period .....	\$12,990.49
Total .....	\$29,145.65
Deductions during the period .....	\$12,872.31
Closing balance .....	\$16,273.34

**ANALYSIS OF CLOSING BALANCE**

Allotted .....	\$2.25
Unavailable funds .....	\$16,271.09

Approved, ....., 192 .....

.....  
(Title)

.....  
(Title)

# COST ANALYSIS OF

NAME OF UNIT	VOLUME SCALED	AVERAGE PRICE	AMOUNT	EXPENSE ACCOUNT TIMBER	SALARIES AND WAGES			
					Scaling	Marking	Supervision	Total
Gen Exp (Salaries)	See Note Below							
General Expense	See Note Below							
Eclipse Unit	51,365,670	\$2.59	\$134,445.02	\$6755.62	\$2956.95	\$ 44.92	\$ 533.56	\$3535.43
Point Grenville	21,449,930	\$2.02	\$43,377.98	\$3470.25	\$2005.40	\$194.73	\$ 366.23	\$2636.36
Cook Creek	17,015,360	\$3.29	\$55,005.37	\$4486.84	\$ 907.61	\$ 40.61	\$ 67.67	\$1035.99
Quinciolt Lake	514,250	\$4.49	\$ 2,310.47	\$ 184.82	\$ 216.96	\$ 83.80	\$1297.64	\$1548.60
Kounts Unit	-----	-----	-----	-----	-----	-----	-----	-----
Miscellaneous	-----	-----	-----	-----	-----	-----	-----	-----
<b>Totals</b>	<b>70,545,210 *</b>	<b>\$2.64</b>	<b>\$186,218.84</b>	<b>\$14897.53</b>	<b>\$7167.12</b>	<b>\$313.96</b>	<b>\$2276.30</b>	<b>\$9756.38</b>
*Not including cedar poles.								
Note: Expenses under the first two headings have always been prorated in Expense Account Timber of the various Timber Units; but were not, prior to January 1st, 1925, formally prorated on the Timber Sale Statement. The General Expenses shown on the first two lines are, therefore, expenses incurred prior to January 1st, 1925, and actually prorated in Expense Account Timber of the various Timber Units. Since January 1st, 1925, all such expenses have been prorated on the Timber Sale Statement.								
Totals								



8. Summary of work to be completed during the coming year.

(A). Stumpage re-adjust becomes effective on the Ft. Grenville Unit April 1st, 1925.

(B). No bonds will expire during the coming year.

(C). List of allotments and amounts due follows.

X a. TIMBER SALE ADMINISTRATION (other reservations than principal).

Spokaneish

74047-22	Sale of unit #3 to John Whittaker still in progress	Value	\$5,683.25
	Additional sale to be advertised in near future		

Chehalis

57729-23	Sale to W.H.S. Clark still in progress	Value	1,950.00
87581-24	Sale to Blevin and Sullivan made on Nov. 28, 1924	Value	1,225.00
	Additional sale now being advertised		

Miscually

One sale advertised but not sold.

Georgetown

8381-25	Sale to Armstrong made Dec. 19, 1924	Value	<u>15,150.00</u>
Total Value under contract			\$24,008.25

Receipts into "Exp. Acct. Trb." from above sales and  
land sales during 1925---\$302.20

Note---These sales are made and administered without cost to  
the Taholah Agency, since appraisal, etc., is done by Steer  
and paid from other funds.

XI. Recapitulation of Operating Costs and Returns from Operation.

1. Statement of Costs and Returns.

Feature	Operating Costs	Operating returns	net operating income	net operating expense
1. General Expense	\$1,971.36	---	---	\$1,971.36
2. Operation Agency Autos	225.56	---	---	225.56
3. Operation Sawmill	---	---	---	---
4. Fire Protection	551.45	---	---	551.45
5. Grazing Management	---	---	---	---
6. Roads and Trails Construction	---	---	---	---
Maintenance	1,245.52	---	---	1,245.52
7. Telephone Lines Construction	---	---	---	---
Maintenance	50.00	---	---	50.00
8. Miscellaneous Improvements	---	---	---	---
9. Misc. Non-Forest Work	---	---	---	---
10. Timber Sale Administration	10,694.03	14,897.53	4,203.45	---
Totals	14,737.97	14,897.53	4,203.45	4,043.89

## 2. Analysis of Gross Operating Costs

Feature	Gross Opera. Cost	Salaries & Wages Reg. Emp.	Salaries & Wages Irreg. Emp.	Materials and Supplies	Repairs & Preser. of Property	Travel Exp.	Other Exp.
1. General Expense, Forestry	1,971.35	1320.00	-----	107.41	---	---	543.95
2. Operation Automobiles	225.56	----	-----	21.54	144.02	---	60.00
3. Operation Sawmill	----	-----	-----	---	---	---	---
4. Fire Protection	551.45	32.70	16.00	492.50	---	10.25	---
5. Grazing Management	---	---	-----	---	---	---	---
6. Roads and Trails Construction Maintenance	1,245.52	816.07	417.00	9.10	---	3.35	---
7. Telephone Lines Construction Maintenance	50.00	---	50.000	---	---	---	---
8. Miscellaneous Improvements	---	---	-----	---	---	---	---
9. Misc. Non-Forest Work	---	---	---	---	---	---	---
10. Timber Sale Administration	<u>10,694.08</u>	<u>9,756.38</u>	<u>---</u>	<u>180.00</u>	<u>.75</u>	<u>9.75</u>	<u>747.20</u>
Grand Totals	14,737.97	11,925.15	493.00	810.55	144.77	23.55	1,351.15

**THE STATUS OF INDIAN FORESTS**  
**IN RELATION TO**  
**A NATIONAL PROGRAM OF SUSTAINED YIELD**

**Official File Copy**

Enclosures Files

90-2-20

DEFENDANT'S EXHIBIT NO. H-185

Court of Claims

Docket No. \_\_\_\_\_

by

**LEE MUCK**  
Assistant Director of Forestry

**PERCY E. MELIS**  
Assistant Forester



CHAPTER II

SUSTAINED YIELD FOREST MANAGEMENT

1. Definition of the Term

Sustained yield forest management may be defined as that practical business procedure which aims to perpetuate forest resources through conservative economic use. The principal objective sought, namely, the continued flow of a balanced volume of wood from forest to factory, is accomplished by regulating the cut in such manner as to utilize a quantity of wood equal to the volume which is produced by the forest annually. Fundamentally, sustained yield forest management seeks to develop a forest property into a normal business enterprise, with the income proportional to the investment. It establishes method and order in the turnover of the investment in tree capital and sets up a balanced relationship between available volume and yield.

Effective practice under these principles results in a perpetual annual yield of approximately the same volume and value, secures a maximum growth under given conditions of site, species and rotation, and provides the greatest degree of safety from fire, insects, and other destructive agencies. Both over-cutting and under-cutting are avoided; there is a constant, regulated flow of wood from forest to market; and the forest capital is maintained in a state of equilibrium.

2. Sustained Yield and Lumber Industry

It is a matter of common knowledge that the erratic trends which have been so common to the lumber industry during recent years and the comparatively unstable position of the business as a consequence are due to the improper balancing of the fundamental factors of supply and demand, and the chronic tendency towards overproduction. The comparatively irregular flow of the volume of lumber trade, the optimistic peaks and pessimistic valleys of the business, and the extreme changes so common to its price levels, are the direct result of over-investment in plant and equipment and the maladjustment which exists between potential capacity and normal volume requirements.

Although the total volume of lumber produced in the United States has declined from an average of almost forty billion feet B. M. per annum for the five-year period 1907 to 1912 to less than thirty-four billion feet per annum during the five-year period ended December 31, 1930, and per capita consumption has declined from an average of slightly over 300 board feet during the former period to slightly more than 200 board feet during the latter, it is a strange fact that the potential capacity of the industry and the investment in lumber producing plant and equipment have increased substantially. Between 1900

and 1925, there was an increase of over 250% in the number of sawmills which annually produce more than 50,000,000 feet of lumber, and a corresponding increase in the investment. During the same period the number of mills producing from 10,000,000 feet to 15,000,000 feet declined 6% and those cutting from 5,000,000 feet to 10,000,000 feet declined 32%. Exact information is not available with respect to the portable mills cutting less than 5,000,000 feet B.M. per annum. However, it is generally conceded that they have increased materially, especially in the Southern States. Similar to industry in general during recent years, the lumber industry has reflected a trend towards mass production, large and expensive manufacturing plants, and top-heavy capital investments. The recent depression has forced down production, volume of business, and prices to subnormal levels and a spirit of conservation prevails with respect to expansion. However, the unbalanced capital investment, with its involved financial structure, still exists and there is every reason to believe that it will be forced into liquidation through the channels of mass production at the earliest opportunity offered in the lumber market.

It has been conclusively demonstrated during the past twenty-five years that the lumber industry can not maintain itself on an even keel under the highly competitive conditions which obtain, and that the forest wealth of the Nation will be liquidated without returning one dollar of realization to the industry unless regulatory measures are introduced. In this connection, it may be said that sustained yield forest management offers a practical solution to both the industrial problem and the forest problem--the industrial problem through a control of production at the source of the raw product, and the forest problem through an orderly and remunerative development of extensive private forest property now seeking early liquidation in an over-saturated market.

The introduction and practical application of a program of sustained yield forest management to the remaining forests of the United States presents many problems for solution. Chief among these is probably the degree of over-expansion which obtains and the difficulties which will be experienced in connection with the wrecking of a considerable part of the over-investment in manufacturing plant and equipment which exists in some of the industrial centers. However, the whole question lies within the possibility of logical solution through the application of the principles of unification, coordination, and cooperation suggested in the Mason Report and although such a solution may have only a limited beneficial influence with respect to the present economic situation, nevertheless it will go a long way towards the permanent stabilization of the business of lumbering and forestry in the United States, and will operate to create a permanent industry from one which now bids fair to destroy itself within the life span of this generation.

### 3. Sustained Yield and Indian Forests

The application of a program of sustained yield forest management to the forest resources of the American Indian, like all other procedure concerned with the principles of conservation, is faced with the involved land status problem

so common to Indian property, the restricted degree of trusteeship authority over allotted lands which is vested in the Commissioner of Indian Affairs, and the necessity of liquidating capital values for the purpose of providing funds for the educational and industrial advancement of a dependent people.

Recognizing the serious obstacle which the existing uncertain status of Indian land offers to the practice of forestry on areas chiefly valuable for the production of timber, Mr. J. P. Kinney, Director of Forestry in the Indian Service, has for many years earnestly urged the creation of Indian forest reserves. A general bill authorizing the Secretary of the Interior to reserve forested land on Indian reservations was presented in 1911 and bills applicable to particular reservations were prepared later. However, only the act of May 18, 1916 (39 Stat., 137), creating the Red Lake Indian Forest of 110,000 acres, has so far been attained. Four Bills, namely, S. 2488, 2489, 2490, 3166 and H. R. 6863, 6864, 6865 and 8529, for the establishment of the Colville, Klamath, Warm Springs, and Yakima Indian forests are now pending in Congress. The enactment of this legislation would place 2,500,000 acres of Indian forest land in a permanent status, insure its future management on a sustained yield basis, and promote the welfare of all the people. Additional legislation will also be required for several other important forest units and preliminary action should be initiated in this connection at an early date.

The creation of Indian forest reserves will constitute a major forward step towards the practical participation of Indian timber resources in a program of sustained yield forest management for the Nation. Such procedure will operate to remove the principal obstacle confronting the administration of this forest ownership and make possible a high degree of cooperation with respect to the farsighted forest policy proposed in the Mason Report. However, if definite steps are not taken in this direction, there is a grave possibility that it may prove necessary to liquidate a substantial part of the merchantable timber on Indian reservations without making full provision for sustained yield.

Before proceeding to a detailed discussion of the application of the principles of sustained yield forest management to the forest resources of the American Indian, a brief inventory of these resources, together with a history of development and depletion in connection therewith, is essential to a comprehensive understanding of the entire problem. This has been provided in Chapters III and IV, which follow in regular order.

## CHAPTER X

### SUSTAINED YIELD UNITS OF THE OLYMPIC PENINSULA

#### 1. Definition of the Units

The Olympic Peninsula is situated in the northwest portion of the State of Washington, covering a total land area of 6,330 square miles or an area approximately equal to that of the states of Connecticut and Rhode Island combined. Bounded on the east by the Hood Canal and Puget Sound, on the north by the Straits of Juan de Fuca, and on the west by the Pacific Ocean, it is almost wholly surrounded by water and very favorably located with respect to both deep sea and inland water transportation.

Because of topography, harbor facilities, existing and proposed lines of transportation, market outlets, and degree of development, the Peninsula may be divided into three major economic territories which, for descriptive purposes, will be designated as the Grays Harbor Unit, the Straits Unit, and the Hood Canal Unit. Before proceeding to a definition of these areas, passing mention should be made of the controversy which resulted over the "Allocation of the Timber in the Olympic National Forest," proposed by the Aberdeen Chamber of Commerce in the year 1923, and attention should be directed to the fact that the boundary lines drawn in this report are merely tentative and illustrative of the broad economic territories which will necessarily be effected in the practical application of a plan of sustained yield forest management.

Without entering any further into a discussion of this phase of the problem, and with the distinct understanding that the arbitrary lines drawn herein should in no sense be interpreted as reflecting our opinion with respect to an allocation of the timber resources of the Olympic Peninsula, the three units above named may be broadly defined as follows:

#### The Grays Harbor Unit

Grays Harbor County and the western two-thirds of Jefferson County, comprising a total land area of approximately 3,070 square miles. Although the western part of Jefferson County constitutes two-thirds of its surface area, this portion carries approximately 80% of the merchantable timber in the county and the estimate for the Grays Harbor Unit, which is exhibited in a following paragraph, has been determined on the basis of this ratio.

#### The Straits Unit

Clallam County, comprising a total land area of 1,726 square miles.

## The Hood Canal Unit

Mason County and the eastern one-third of Jefferson County, comprising a total land area of 1,534 square miles.

### 2. Forest Resources

The chief economic values of the Olympic Peninsula lie in its vast stands of commercial saw timber and pulpwood resources and in its forest producing possibilities. The present stand of commercial timber is estimated to contain a volume of 71,723,000 M. ft. B. M., or more than 25% of the total commercial timber in the State of Washington.

The forests of the Olympic Peninsula are located within the Douglas Fir Region, which is so named because of the principal species, namely, the Douglas fir tree. This tree occurs in varying mixtures with the western hemlock, white fir, western red cedar, Sitka spruce and western white pine. The mixture varies materially, according to site and location, but will average about as follows for the area as a whole, namely:

Douglas fir	33%
Western hemlock	30%
Western red cedar	15%
White fir	15%
Sitka spruce	6%
All others	1%

The rate of growth and yield on the Olympic Peninsula are exceedingly favorable, in fact, there is little doubt but that commercial stands can be produced in a rotation of from 60 to 80 years. The yield of saw timber 12 inches and over in diameter, in fully stocked stands, varies from 23,000 feet B. M. per acre on fair soils to 62,000 feet B. M. on good soils at 60 years, and from 45,000 feet B. M. per acre on fair soils to 92,000 feet B. M. on excellent soils at 80 years. Growth in the virgin stands is limited, if existent, and the increment now taking place is confined almost wholly to the second growth, in connection with which it is estimated that there is sufficient volume being added to the forest to take care of the last 15 years in the 60-year rotation assumed.

The volume of commercial timber on the Olympic Peninsula is divided among the various ownerships as follows:

TIMBER ESTIMATE--OLYMPIC PENINSULA

M. M. FEET B. M.

<u>County</u>	<u>Private</u>	<u>State</u>	<u>N. Forest</u>	<u>Indian</u>	<u>Total</u>
Grays Harbor	9,054	590	4,760	3,103	17,507
Jefferson	5,652	3,475	10,571		19,698
Clallam	16,800	1,261	8,608	916	27,585
Mason	<u>3,820</u>	<u>501</u>	<u>2,552</u>		<u>6,933</u>
Total	35,386	5,827	26,491	4,019	71,723

TIMBER ESTIMATE--ECONOMIC UNITS

M. M. FEET B. M.

<u>Unit</u>	<u>Private</u>	<u>State</u>	<u>N. Forest</u>	<u>Indian</u>	<u>Total</u>
Grays Harbor Unit					
Grays Harbor Co.	9,054	590	4,760	3,103	17,507
Jefferson Co. (20%)	<u>4,522</u>	<u>2,780</u>	<u>8,457</u>		<u>15,759</u>
Total	13,576	3,370	13,217	3,103	33,266

Straits Unit					
Clallam Co.	16,800	1,261	8,608	916	27,585

Hood Canal Unit					
Mason Co.	3,820	501	2,552		6,933
Jefferson Co. (20%)	<u>1,130</u>	<u>395</u>	<u>2,114</u>		<u>3,939</u>
Total	5,010	1,196	4,666		10,872

5. Economic Situation

From the standpoint of unliquidated capital values, future possibilities in the production of new economic wealth, industrial development past, present and future, and the continued welfare of the whole people, the forests of the Olympic Peninsula command a place of unequalled importance. The flow of raw wood, from its source in the Olympic forests down through the buzzing wheels of modern industry to its final resting place in the homes of the Nation, results in the creation of more than 70% of the industrial payroll of the region and fully 50% of its annual revenue. The dominant position which is held



by the wood-using industries of the Olympic Peninsula is readily visualized from the following pertinent data, namely:

<u>County</u>	<u>Total Population</u>	<u>Wood-Using Industry</u>	
		<u>Number Employed</u>	<u>Annual Payroll</u>
Grays Harbor	60,000	10,150	\$20,500,000.00
Clallam	19,000	2,350	6,750,000.00
Jefferson	8,000	600	1,027,000.00
Mason	10,000	1,600	3,202,000.00
Total	97,000	14,700	31,479,000.00

Dependent upon the forest resources of the Olympic Peninsula and located principally in and in close proximity to the leading industrial centers of Aberdeen, Hoquiam, Montesano, Olympia, Shelton, Port Townsend, Port Angeles, etc., etc., there are in the neighborhood of 125 manufacturing plants engaged in the production of lumber, pulp and paper, veneer and plywood, boxes, doors, furniture and other wood products. The normal daily 8-hour production of those mills and plants, together with that of the logging camps which supply the raw product of the region, is exhibited in the analysis which follows:

<u>County</u>	<u>Production 8-Hour Day</u>	
	<u>Camps - Feet</u>	<u>Mills - Feet</u>
Grays Harbor	5,000,000	4,640,000
Clallam	1,350,000	637,000
Jefferson	250,000	340,000
Mason	1,650,000	300,000
Total	8,450,000	5,917,000

The drain on the forest is approximately at the rate of 1,350,000 M. ft. B. M. per annum for the Grays Harbor Unit; 550,000 M. ft. B. M. for the Straits Unit; and 500,000 M. ft. B. M. for the Hood Canal Unit, or a grand total of about 2,400,000 M. ft. B. M. per annum for the Peninsula as a whole. Practically all of the volume taken from the forests tributary to Grays Harbor is manufactured at or near that industrial center. However, a substantial part of the volume depleted from the forests of the other two units enters the Puget Sound log market and is consumed by the manufacturing institutions of Tacoma, Seattle, Everett, and Bellingham.

Although the investment in wood-consuming plant and equipment is not seriously out of line with respect to available volume in the Straits Unit and possibly the Hood Canal Unit, the substantial amount of frozen economic capital which has been diverted into the channels of lumber production in the Grays Harbor Unit has undoubtedly attained an unbalanced state with regard to a practical application of a plan of

sustained yield forest management which must eventually control if this forest-dependent community is to endure. The investment in manufacturing plant and equipment in the Grays Harbor Region approaches a total valuation of approximately \$35,000,000.00 and the amortization thereof, when predicated on the basis of a sustaining realization, reflects an annual volume requirement of somewhere in the neighborhood of 1,400,000 M. Ft. B. M. A consideration, therefore, of this required volume in its relation to the visible supply of old growth timber undoubtedly indicates that the virgin stands will be fully depleted in a period of from 20 to 25 years and that the end thereof will result in a total loss of the substantial investment in plant and equipment. The protection of this economic capital, the future of the wood-using industry and the continued welfare of the community, rest largely upon what can be accomplished in the way of a conservative liquidation and a practical perpetuation of the available timber supply.

Modern trends toward the remanufacture of lumber at its source, the fabrication of the log into veneer and plywood, the displacement of raw lumber producing sawmills with more highly diversified plants, the utilization of sawmill waste by the pulp and paper mills, and a closer utilization in the woods will all assist materially in prolonging the available supply. However, little short of a real miracle can operate to sustain the Grays Harbor industry at its present rate of consumption and if a serious economic set-back is to be avoided, regulatory measures must be introduced within the next five years.

#### 4. Sustained Yield Forest Management

A consideration of the regulation of the cut covering the Grays Harbor, Straits and Hood Canal units, for the purpose of insuring sustained yield forest management, must concern itself with the following:

##### Merchantable Timber

All aged stand of Douglas fir, western hemlock, cedar, white fir, spruce, etc., containing a total estimated merchantable volume of 71,723,000 M. Ft. B. M. and distributed to the economic units as follows:

- (a) The Grays Harbor Unit - 33,266,000 M. Ft. B. M.
- (b) The Straits Unit - 27,535,000 M. Ft. B. M.
- (c) The Hood Canal Unit - 10,372,000 M. Ft. B. M.

##### Growth

Growth so favorable that merchantable stands can be produced in from 60 to 80 years. Increment in the virgin stands is negligible, but second growth now on the ground is laying on sufficient volume to provide the cut for the last 15 years in the rotation.

An outline of the technical phases of the proposed plan of sustained yield forest management for the three economic units under consideration follows:



The Rotation

The natural rotation of the forest is about 350 years. However, commercial stands can be produced in from 60 to 80 years. A rotation of 60 years and a cutting cycle of 30 years is assumed.

Silvicultural Practice

Economic selective logging by machine settings is assumed. The plan provides for a removal of 66-2/3% of the stand during the first cutting cycle of 30 years.

Regulation of the Cut

- (a) Rotation - 60 years.
- (b) Second growth sufficient to take care of the last 15 years at the end of the rotation so the old growth must last for 45 years.
- (c) Sustained yield capacity - Grays Harbor Unit: 33,266,000 M. ft. B. M., divided by 45, or nearly 740,000 M. ft. B. M. per annum.
- (d) Sustained yield capacity - Straits Unit: 27,535,000 M. ft. B. M., divided by 45, or 613,000 M. ft. B. M. per annum.
- (e) Sustained yield capacity - Hood Canal Unit: 10,872 M. ft. B. M., divided by 45, or 240,000 M. ft. B. M. per annum.

5. Distribution of the Cut

Grays Harbor Unit

<u>Ownership</u>	<u>Old Growth</u> M.M.Ft.B.M.	<u>Total Cut</u>		<u>Annual Cut</u>	
		<u>Per Cent</u> of Stand	<u>Volume</u> M.M.Ft.B.M.	<u>First</u> 20 yrs.	<u>Last</u> 20 yrs.
Private	13,056	66-2/3	9,050	452	0
State	3,370	66-2/3	2,246	75	75
N. Forest	13,217	66-2/3	8,811	143	535
Indian	5,103	66-2/3	2,070	70	70
<b>Total</b>	<b>33,266</b>	<b>66-2/3</b>	<b>22,177</b>	<b>740</b>	<b>740</b>

Straits Unit

<u>Ownership</u>	<u>Old Growth</u> M.M.Ft.B.M.	<u>Total Cut</u> <u>First Cycle</u>		<u>Annual Cut</u> M.M.Ft.B.M.	
		<u>Per Cent</u> <u>of Stand</u>	<u>Volume</u> M.M.Ft.B.M.	<u>First</u> <u>20 yrs.</u>	<u>Last</u> <u>20 yrs.</u>
Private	16,300	66-2/3	11,200	400	320
State	1,261	66-2/3	840	23	28
N. Forest	2,608	66-2/3	5,740	165	244
Indian	<u>916</u>	<u>        </u>	<u>610</u>	<u>20</u>	<u>21</u>
Total	27,585	66-2/3	18,590	613	613

The indicated cuts of not less than 70,000 M. ft. B. M. per annum from Indian lands in the Grays Harbor Unit and 20,000 M. ft. B.M. per annum from lands of this ownership within the Straits Unit, as set forth above, are offered as approximate averages of the volumes to be removed from these areas under a program of sustained yield forest management. The cut from Indian forests in the Straits Unit does not at present equal the volume allocated and approved contracts now in effect require a removal of only 10,000 M. ft. B. M. per annum. However, the cut from Indian forests in the Grays Harbor Unit is now practically double the allocation and approved contracts require a removal of 111,000 M. ft. B. M. per year up to and inclusive of 1934. From this date forward the volume to be removed from Indian lands can be regulated, provided a program of sustained yield forest management is acceptable to the Indians and meets with the approval of the Indian Service. By far the greater part of the Indian timber in the Grays Harbor Unit is allotted and the management thereof is more or less subject to the degree of cooperation which is possible of establishment with the individual Indian owners.

**THE STATUS OF INDIAN FORESTS**  
**IN RELATION TO**  
**A NATIONAL PROGRAM OF SUSTAINED YIELD**

**Official File Copy**

Enclosures Files

90-2-20

DEFENDANT'S EXHIBIT NO. H-185

Court of Claims

Docket No. \_\_\_\_\_

by

**LEE MUCK**  
**Assistant Director of Forestry**

**PERCY E. MELIS**  
**Assistant Forester**

CHAPTER II

SUSTAINED YIELD FOREST MANAGEMENT

1. Definition of the Term

Sustained yield forest management may be defined as that practical business procedure which aims to perpetuate forest resources through conservative economic use. The principal objective sought, namely, the continued flow of a balanced volume of wood from forest to factory, is accomplished by regulating the cut in such manner as to utilize a quantity of wood equal to the volume which is produced by the forest annually. Fundamentally, sustained yield forest management seeks to develop a forest property into a normal business enterprise, with the income proportional to the investment. It establishes method and order in the turnover of the investment in tree capital and sets up a balanced relationship between available volume and yield.

Effective practice under these principles results in a perpetual annual yield of approximately the same volume and value, secures a maximum growth under given conditions of site, species and rotation, and provides the greatest degree of safety from fire, insects, and other destructive agencies. Both over-cutting and under-cutting are avoided; there is a constant, regulated flow of wood from forest to market; and the forest capital is maintained in a state of equilibrium.

2. Sustained Yield and Lumber Industry

It is a matter of common knowledge that the erratic trends which have been so common to the lumber industry during recent years and the comparatively unstable position of the business as a consequence are due to the improper balancing of the fundamental factors of supply and demand, and the chronic tendency towards overproduction. The comparatively irregular flow of the volume of lumber trade, the optimistic peaks and pessimistic valleys of the business, and the extreme changes so common to its price levels, are the direct result of over-investment in plant and equipment and the maladjustment which exists between potential capacity and normal volume requirements.

Although the total volume of lumber produced in the United States has declined from an average of almost forty billion feet B. M. per annum for the five-year period 1907 to 1912 to less than thirty-four billion feet per annum during the five-year period ended December 31, 1930, and per capita consumption has declined from an average of slightly over 300 board feet during the former period to slightly more than 200 board feet during the latter, it is a strange fact that the potential capacity of the industry and the investment in lumber producing plant and equipment have increased substantially. Between 1900

and 1925, there was an increase of over 250% in the number of sawmills which annually produce more than 50,000,000 feet of lumber, and a corresponding increase in the investment. During the same period the number of mills producing from 10,000,000 feet to 15,000,000 feet declined 6% and those cutting from 5,000,000 feet to 10,000,000 feet declined 32%. Exact information is not available with respect to the portable mills cutting less than 5,000,000 feet B.M. per annum. However, it is generally conceded that they have increased materially, especially in the Southern States. Similar to industry in general during recent years, the lumber industry has reflected a trend towards mass production, large and expensive manufacturing plants, and top-heavy capital investments. The recent depression has forced down production, volume of business, and prices to subnormal levels and a spirit of conservation prevails with respect to expansion. However, the unbalanced capital investment, with its involved financial structure, still exists and there is every reason to believe that it will be forced into liquidation through the channels of mass production at the earliest opportunity offered in the lumber market.

It has been conclusively demonstrated during the past twenty-five years that the lumber industry can not maintain itself on an even keel under the highly competitive conditions which obtain, and that the forest wealth of the Nation will be liquidated without returning one dollar of realization to the industry unless regulatory measures are introduced. In this connection, it may be said that sustained yield forest management offers a practical solution to both the industrial problem and the forest problem--the industrial problem through a control of production at the source of the raw product, and the forest problem through an orderly and remunerative development of extensive private forest property now seeking early liquidation in an over-saturated market.

The introduction and practical application of a program of sustained yield forest management to the remaining forests of the United States presents many problems for solution. Chief among these is probably the degree of over-expansion which obtains and the difficulties which will be experienced in connection with the wrecking of a considerable part of the over-investment in manufacturing plant and equipment which exists in some of the industrial centers. However, the whole question lies within the possibility of logical solution through the application of the principles of unification, coordination, and cooperation suggested in the Mason Report and although such a solution may have only a limited beneficial influence with respect to the present economic situation, nevertheless it will go a long way towards the permanent stabilization of the business of lumbering and forestry in the United States, and will operate to create a permanent industry from one which now bids fair to destroy itself within the life span of this generation.

### 3. Sustained Yield and Indian Forests

The application of a program of sustained yield forest management to the forest resources of the American Indian, like all other procedure concerned with the principles of conservation, is faced with the involved land status problem

so common to Indian property, the restricted degree of trusteeship authority over allotted lands which is vested in the Commissioner of Indian Affairs, and the necessity of liquidating capital values for the purpose of providing funds for the educational and industrial advancement of a dependent people.

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The creation of Indian forest reserves will constitute a major forward step towards the practical participation of Indian timber resources in a program of sustained yield forest management for the Nation. Such procedure will operate to remove the principal obstacle confronting the administration of this forest ownership and make possible a high degree of cooperation with respect to the farsighted forest policy proposed in the Mason Report. However, if definite steps are not taken in this direction, there is a grave possibility that it may prove necessary to liquidate a substantial part of the merchantable timber on Indian reservations without making full provision for sustained yield.

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Dependent upon the forest resources of the Olympic Peninsula and located principally in and in close proximity to the leading industrial centers of Aberdeen, Hoquiam, Montesano, Olympia, Shelton, Port Townsend, Port Angeles, etc., etc., there are in the neighborhood of 125 manufacturing plants engaged in the production of lumber, pulp and paper, veneer and plywood, boxes, doors, furniture and other wood products. The normal daily 8-hour production of those mills and plants, together with that of the logging camps which supply the raw product of the region, is exhibited in the analysis which follows:

<u>County</u>	<u>Production 8-Hour Day</u>	
	<u>Camps - Feet</u>	<u>Mills - Feet</u>
Grays Harbor	5,000,000	4,640,000
Clallam	1,330,000	637,000
Jefferson	250,000	340,000
Mason	<u>1,630,000</u>	<u>300,000</u>
Total	8,410,000	5,917,000

The drain on the forest is approximately at the rate of 1,350,000 M. ft. B. M. per annum for the Grays Harbor Unit; 550,000 M. ft. B. M. for the Straits Unit; and 500,000 M. ft. B. M. for the Hood Canal Unit, or a grand total of about 2,400,000 M. ft. B. M. per annum for the Peninsula as a whole. Practically all of the volume taken from the forests tributary to Grays Harbor is manufactured at or near that industrial center. However, a substantial part of the volume depleted from the forests of the other two units enters the Puget Sound log market and is consumed by the manufacturing institutions of Tacoma, Seattle, Everett, and Bellingham.

Although the investment in wood-consuming plant and equipment is not seriously out of line with respect to available volume in the Straits Unit and possibly the Hood Canal Unit, the substantial amount of frozen economic capital which has been diverted into the channels of lumber production in the Grays Harbor Unit has undoubtedly attained an unbalanced state with regard to a practical application of a plan of

sustained yield forest management which must eventually control if this forest-dependent community is to endure. The investment in manufacturing plant and equipment in the Grays Harbor Region approaches a total valuation of approximately \$35,000,000.00 and the amortization thereof, when predicated on the basis of a sustaining realization, reflects an annual volume requirement of somewhere in the neighborhood of 1,400,000 M. Ft. B. M. A consideration, therefore, of this required volume in its relation to the visible supply of old growth timber undoubtedly indicates that the virgin stands will be fully depleted in a period of from 20 to 25 years and that the end thereof will result in a total loss of the substantial investment in plant and equipment. The protection of this economic capital, the future of the wood-using industry and the continued welfare of the community, rest largely upon what can be accomplished in the way of a conservative liquidation and a practical perpetuation of the available timber supply.

Modern trends toward the remanufacture of lumber at its source, the fabrication of the log into veneer and plywood, the displacement of raw lumber producing sawmills with more highly diversified plants, the utilization of sawmill waste by the pulp and paper mills, and a closer utilization in the woods will all assist materially in prolonging the available supply. However, little short of a real miracle can operate to sustain the Grays Harbor industry at its present rate of consumption and if a serious economic set-back is to be avoided, regulatory measures must be introduced within the next five years.

#### 4. Sustained Yield Forest Management

A consideration of the regulation of the cut covering the Grays Harbor, Straits and Hood Canal units, for the purpose of insuring sustained yield forest management, must concern itself with the following:

##### Merchantable Timber

All aged stand of Douglas fir, western hemlock, cedar, white fir, spruce, etc., containing a total estimated merchantable volume of 71,723,000 M. Ft. B. M. and distributed to the economic units as follows:

- (a) The Grays Harbor Unit - 33,266,000 M. Ft. B. M.
- (b) The Straits Unit - 27,535,000 M. Ft. B. M.
- (c) The Hood Canal Unit - 10,922,000 M. Ft. B. M.

##### Growth

Growth so favorable that merchantable stands can be produced in from 50 to 80 years. Increment in the virgin stands is negligible, but second growth now on the ground is laying on sufficient volume to provide the cut for the last 15 years in the rotation.

An outline of the technical phases of the proposed plan of sustained yield forest management for the three economic units under consideration follows:

### The Rotation

The natural rotation of the forest is about 350 years. However, commercial stands can be produced in from 60 to 80 years. A rotation of 60 years and a cutting cycle of 30 years is assumed.

### Silvicultural Practice

Economic selective logging by machine settings is assumed. The plan provides for a removal of 66-2/3% of the stand during the first cutting cycle of 30 years.

### Regulation of the Cut

- (a) Rotation - 60 years.
- (b) Second growth sufficient to take care of the last 15 years at the end of the rotation so the old growth must last for 45 years.
- (c) Sustained yield capacity - Grays Harbor Unit:  
33,266,000 M. ft. B. M., divided by 45, or  
nearly 740,000 M. ft. B. M. per annum.
- (d) Sustained yield capacity - Straits Unit:  
27,535,000 M. ft. B. M., divided by 45, or  
613,000 M. ft. B. M. per annum.
- (e) Sustained yield capacity - Hood Canal  
Unit: 10,372 M. ft. B. M., divided by  
45, or 240,000 M. ft. B. M. per annum.

### 5. Distribution of the Cut

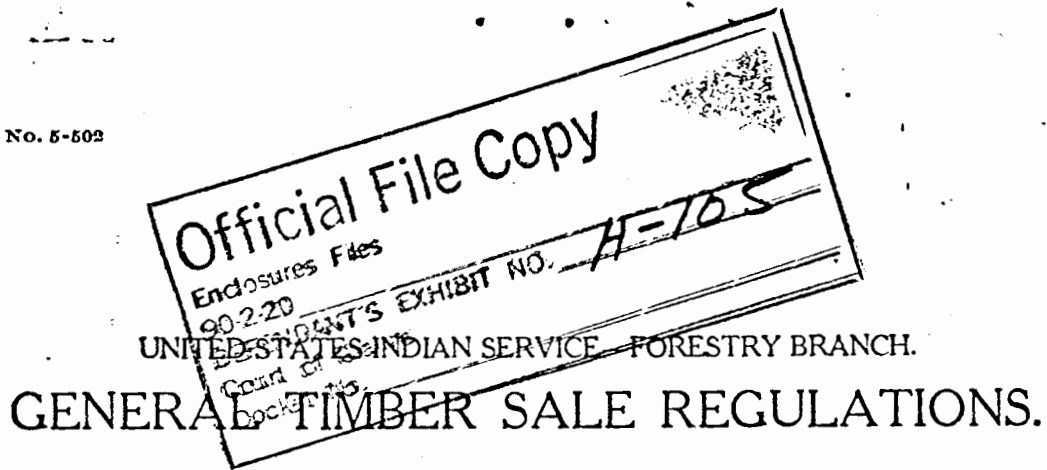
#### Grays Harbor Unit

<u>Ownership</u>	<u>Old Growth</u> M.M.Ft.B.M.	<u>Total Cut</u> <u>First Cycle</u>		<u>Annual Cut</u> M.M.Ft.B.M.	
		<u>Per Cent</u> <u>of Stand</u>	<u>Volume</u> M.M.Ft.B.M.	<u>First</u> 20 yrs.	<u>Last</u> 20 yrs.
Private	13,875	66-2/3	9,050	452	0
State	3,370	66-2/3	2,246	75	75
N. Forest	13,217	66-2/3	8,811	143	535
Indian	3,103	66-2/3	2,070	70	70
Total	33,265	66-2/3	22,177	740	740

Straits Unit

<u>Ownership</u>	<u>Old Growth</u> M.M.Ft.B.M.	<u>Total Cut</u> <u>First Cycle</u>		<u>Annual Cut</u> M.M.Ft.B.M.	
		<u>Per Cent</u> <u>of Stand</u>	<u>Volume</u> M.M.Ft.B.M.	<u>First</u> <u>20 yrs.</u>	<u>Last</u> <u>20 yrs.</u>
Private	16,300	66-2/3	11,200	400	320
State	1,261	66-2/3	840	23	28
N. Forest	2,608	63-2/3	5,740	165	244
Indian	<u>916</u>	<u>        </u>	<u>610</u>	<u>20</u>	<u>21</u>
Total	27,585	66-2/3	18,590	613	613

The indicated cuts of not less than 70,000 M. ft. B. M. per annum from Indian lands in the Grays Harbor Unit and 20,000 M. ft. B.M. per annum from lands of this ownership within the Straits Unit, as set forth above, are offered as approximate averages of the volumes to be removed from these areas under a program of sustained yield forest management. The cut from Indian forests in the Straits Unit does not at present equal the volume allocated and approved contracts now in effect require a removal of only 10,000 M. ft. B. M. per annum. However, the cut from Indian forests in the Grays Harbor Unit is now practically double the allocation and approved contracts require a removal of 111,000 M. ft. B. M. per year up to and inclusive of 1934. From this date forward the volume to be removed from Indian lands can be regulated, provided a program of sustained yield forest management is acceptable to the Indians and meets with the approval of the Indian Service. By far the greater part of the Indian timber in the Grays Harbor Unit is allotted and the management thereof is more or less subject to the degree of cooperation which is possible of establishment with the individual Indian owners.



1. The word superintendent as used in these regulations signifies the Superintendent of the Indian Agency or School within the jurisdiction of which the land covered by any contract is included.

2. The term officer in charge, wherever used in these regulations, signifies the forest officer of highest rank assigned to the supervision of timberwork on the reservation within which the sale area is situated or such other officer as may be designated by the Commissioner of Indian Affairs to supervise a sale.

3. Log scalers will be appointed by the Commissioner of Indian Affairs and receive their instructions from the officer in charge.

4. No timber other than that sold may be cut by the purchaser on the sale area without a separate contract of sale therefor, and timber on allotments within a general sale area held under trust or restricted patents can not be logged without a contract with the owners of the allotment approved by the proper officer.

5. Other sales within a sale area may be made of products and kinds of timber not sold under a previous sale, provided such sales will not, in the judgment of the officer having authority to make such sale, interfere with the operations of the previous purchaser. Rights of way may be granted through portions of the sale area during the contract period, provided they do not interfere with the operations of the previous purchaser.

6. Title to the forest products covered by any contract will not pass to the purchaser until such products are paid for.

7. Cash deposits in advance of cutting will be required. If at any time the stumpage value of the timber cut and unpaid for shall exceed the total amount then on deposit with the Indian Service, an additional deposit shall be required. At the close of each month a statement of all timber cut during the month will be rendered to the purchaser as a demand for payment of the full stumpage value of the timber covered by such statement. As soon as payment is made of the amount covered by such statement, the full amount previously deposited will become available as an advance deposit on timber cut subsequent to the period covered by such statement. At any time that the stumpage value of the timber cut shall exceed the amount of advance deposit cutting operations shall be suspended.

8. The general advance deposits required by a contract which includes both allotted and unallotted land will be credited so far as necessary on allotments cut during the period covered. The fact that special advance payments have been made on allotments which are about to be cut will not operate to reduce the size of the required general advance deposit, but rather will postpone the necessity of making demand for it until the advance payments on the particular allotments being cut have also been exhausted. The deposit made with the bid for the timber will be applied as a general advance deposit.

9. The areas to be logged in any season may be designated by the officer in charge when in his judgment this is necessary to prevent deterioration from fire, worms, or other cause or

to insure the logging of the sale unit in such manner as to fully protect the interests of the United States and the Indians. When logging is begun on an allotment or natural logging unit, it will not be discontinued and started elsewhere without the written consent of the officer in charge.

10. **Selective logging**, or the logging of areas in such manner as to preserve a part of the merchantable timber, promote the growth of young trees, or preserve the forest cover, will be practiced on all lands chiefly suitable for the production of timber crops. Live trees of diameters below those named in the contract may be designated for cutting, and larger trees may be reserved from cutting in the discretion of the officer in charge. If live trees which are not designated for cutting are cut, or are seriously injured through lack of care, they will be double scaled and so charged and paid for. In the discretion of the officer in charge, a strip not exceeding three hundred (300) feet in width on each side of streams, roads, and trails and in the vicinity of camping places and recreation grounds may be reserved, in which little or no cutting will be allowed.

11. **All dead trees** standing or fallen which contain one merchantable log or more will be logged for their merchantable contents, and wherever selective logging is required by the contract the purchaser will fell all other dry trees before the slash is burned.

12. **Firewood and improvements** will be made as far as possible from unmerchantable material, and material so used will not be charged to the purchaser. The use of such material from allotments may be restricted in the discretion of the officer in charge. Wood and improvements taken from merchantable material will be scaled or measured, charged, and paid for at its maximum value.

13. **Young growth** will be protected as far as possible in every branch of the logging operations, and its use in the construction of improvements may be restricted by the officer in charge.

14. **Stumps** will be cut low so as to avoid waste, and the mean height of any stump will not exceed one-half its diameter, except where because of defect or deformity this height is considered impracticable by the officer in charge, provided that the minimum height required will be twelve inches.

15. **Waste in high stumps, butts, tops, breaks, skids, and partially sound logs and all trees designated for logging which are not logged and all trees which are left felled or lodged or badly damaged by the logging operations** will be scaled for their merchantable contents and charged against the purchaser. All cutting shall be done with a saw when possible.

16. **Carelessness on the part of fellers or other employees of the purchaser that results in unnecessary breaking of trees** will be penalized by scaling such trees full as if they had not been broken.

17. **The log lengths and products taken from each tree** will be such as to completely utilize the merchantable material in the tree and to yield the maximum stumpage value. Trees improperly cut into lengths or products of a lesser value shall be scaled, counted, or measured as if cut so as to yield the maximum value.

18. **The Scribner Decimal C log rule** will be used in scaling logs. The rule will be read to the nearest inch on the average top diameter inside bark. Logs exceeding the maximum length allowed by a contract will be scaled as two or more logs, with proper allowance for the increase in diameter at the points of division.

19. **The overlength allowed on logs for trimming** will not exceed one inch to each four feet of length. Logs which overrun this allowance will be scaled as if cut two feet longer. Logs longer than the maximum scaling length named in the contract will be scaled as if bucked into two or more shorter logs and with the top diameters they would actually have if so cut.



20. Proper deductions will be made for rot, shake, hollow, and other defects which make a log partially unmerchantable, including sweep exceeding one inch in each four feet of log length, but deductions will not be made for any defect or damage due to the act or neglect of the purchaser or his employees.

21. A check scaler employed by the purchaser may at hours convenient to the scaler and with the consent of the officer in charge compare his scale of logs with that of the scaler. A copy of the regular scale reports will be furnished to the purchaser through the officer in charge.

22. For convenience in scaling the logs or other products will be bunched as the scaler may direct on the land where cut or at the landing or point of shipment and will not be moved therefrom until he has scaled, numbered, and stamped them. Logs that are moved contrary to the scaler's instructions will be double scaled. Where a separate record of the scale of timber from an allotment or other area is necessary, the logs cut from such area will be marked by the purchaser with a distinctive brand as prescribed by the officer in charge.

23. A merchantable log is any log that will manufacture one-third or more of its total contents into sound lumber eight feet and longer, except as special provision is made in a particular contract. More defective logs and logs smaller than the merchantable size set in the contract will be culled if left in the woods, but any such logs that are taken for manufacture or sale will be scaled for their actual sound contents of lumber of any length. Any logs taken by the purchaser which are smaller than the minimum scaling length or diameter given on the log-scale rule will be scaled for their merchantable contents.

24. Railroad ties taken by the purchaser under a contract in which tie prices and specifications are not fixed will be scaled or counted as follows:

Eight-foot ties made from logs nine to twelve inches top diameter will be counted as thirty to the thousand feet board measure and six and one-half foot ties as thirty-eight to the thousand. Ties made from logs over twelve inches top diameter and long ties will be scaled. Ties made from logs less than nine inches top diameter will be counted sixty ties eight feet long and seventy-five ties six and one-half feet long to the thousand feet.

25. The slash resulting from the logging operations, including all branches up to four inches in thickness lopped from tops and logs, will at the time of skidding be piled compactly and away from reserved trees on the whole area to be selectively logged and on a strip at least ten rods wide around all other logging areas in units not larger than quarter sections, unless some other method of slash disposal is provided in the contract.

26. Burning of the slash by the purchaser will be done at such times and in such manner as may be required by the officer in charge, who may at that time assume direct charge of the crew of the purchaser engaged at the work of burning. Slashing will not be burned during any period of fire danger. Whenever fire runs through a slashing, except in compliance with the instructions of the officer in charge the purchaser may be required to lop or to pile and reburn the slash.

27. Unsatisfactory disposal of the slash will be cause for the officer in charge to suspend all operations of the purchaser until the unsatisfactory condition is corrected.

28. Forest fires on the sale area or adjacent lands during the contract period will be prevented or suppressed by the purchaser, his employees and subcontractors, whenever possible. When called upon by an authorized forest officer, they will work under his directions to suppress fires. If the purchaser or his employees or subcontractors were not directly or indirectly responsible by act or neglect for the origin or the spread of the fire, reimbursement will be made, except that such reimbursement shall not exceed one-half the cost of suppression within the sale area or within one-half mile of the same.



29. Donkey logging may be permitted in the discretion of the Commissioner of Indian Affairs. The ground around the donkey engine will at each setting be cleared of dry trees for a distance of ten rods and of all other combustible material for a distance of fifty feet in all directions during the season from May 1 to September 30 and any other season of fire danger.

30. All steam engines not burning oil for fuel during the period from May 1 to October 15 and all other seasons of fire danger will be equipped with spark arresters acceptable to the officer in charge, and, excepting locomotives, will have a steam force pump with not less than one inch discharge, one hundred feet of serviceable one-inch hose, six twelve-quart pails, six shovels, and a constant supply of not less than the equivalent of twelve barrels of water. This equipment will be suitable for fire-fighting purposes and kept in serviceable condition and used when necessary for fighting fires.

31. A watchman employed by the purchaser and kept on duty during the noon hour at each engine in actual use and not burning oil, and during the night if fires are kept up, may be required by the officer in charge during the period from May 1 to October 15 and any other period of fire danger.

32. Rigging will not be slung on trees reserved from cutting without the use of bushing, and only in a manner satisfactory to the officer in charge.

33. Clearing the right of way of the logging railroad and its spurs and the careful burning of all combustible material for a distance of fifty feet on each side of the track is required of the purchaser unless the officer in charge shall, in writing, prescribe a lesser width. And the purchaser shall for such periods as may be required by the said forest officer in charge patrol all railroad tracks after the passage of each locomotive.

34. The vicinity of logging camps and stables will be kept in a clean and sanitary condition, and rubbish will be removed and properly burned or buried during the occupancy and upon the removal of the camps and stables.

35. Streams will not be obstructed by felled trees or otherwise except by the improvements hereinbefore provided for, nor will they be polluted by sawdust, manure, or any other refuse from a camp or mill.

36. Damage to land or other property of the Indians or the Government resulting from rights of way, dams, and other improvements or operations of the purchaser will be appraised by the officer in charge, and if not offset by the value of the permanent improvements made by the purchaser will be charged against the purchaser.

37. Existing telephone lines, fences, roads, trails, and other improvements will be protected as far as possible in the logging operations, and whenever they are broken or obstructed the purchaser will promptly repair the damage. If he fails to make the repairs promptly, the officer in charge may make the repairs and purchasers may be charged with double the expense thereof.

38. Telephone lines constructed by the purchaser within the Indian reservation will be open to the free use of all Indian Service officers for official business, and the purchaser may for their construction and repair cut and use free of charge all necessary poles which are not otherwise merchantable and subject to regulation by the officer in charge.

39. Improvements necessary to execute his contracts such as camps, sawmills, railroads, roads, telephone lines, chutes, bridges, sluices, and dams may be constructed and maintained by the purchaser on and across the contracted area and other tribal lands, subject to regulation by the Commissioner of Indian Affairs.

40. Free transportation of Indian Service employees engaged in official business will be allowed over all such railroads, and such employees may, at their own risk, operate hand cars or speeders over the track in such manner as not to interfere with the use of the railroad by the purchaser.

41. **Improvements already on the area or on other lands of the reservation and which are necessary for logging purposes may be used by the purchaser, subject to regulation by the Commissioner of Indian Affairs.**

42. **The time limit for the removal of the improvements and other property of the purchaser is one year after the expiration of the contract. After that time the title to improvements, including camps, will attach to the land, and no personal property of the purchaser will thereafter be removed except with the written consent of the officer in charge: *Provided*, That improvements necessary for the logging of other Indian timber may be left for such time and on such terms as may be prescribed by the Commissioner of Indian Affairs.**

43. **Extension of time for the performance of any contract may be granted the purchaser by the officer approving the contract, in his discretion and subject to such conditions as he may impose.**

44. **If extension of time to cut and remove the timber is not granted by the officer approving a contract, the purchaser can cut no timber after the expiration of the contract, but he may remove the timber, previously cut and paid for, within one year of the expiration of the contract. If not removed within the time allowed, the title will revert to the vendor notwithstanding the purchaser may have paid for the timber.**

45. **Assignment of any contract in whole or in part by the purchaser will not relieve him of his contract obligations unless the assignment is approved by the officer approving the contract nor until the bond is satisfactorily renewed.**

46. **Refunds of overpayments will be made to the purchaser by the approving officer provided all terms of the contract have been fulfilled, and the approving officer may also, in his discretion, reduce the amount of timber that is required by the contract to be paid for and removed in any one year.**

47. **Indian labor will be employed by the purchaser at the same wages as other labor and in preference to other labor not already in his employ whenever the Indian labor seeks employment and is competent.**

48. **All regulations relative to the maintenance of order on Indian reservations and the introduction of intoxicating liquors will be complied with by the purchaser.**

49. **In compliance with law and Executive order, no Member of Congress or any Delegate thereto shall have any interest, direct or indirect, in the contract of which these regulations are a part (sec. 3741, R. S., and secs. 114-116, act of Mar. 4, 1909, 33 Stat. L., 1109), and no person undergoing a sentence of imprisonment at hard labor shall be employed in carrying out any contract (Executive order, May 18, 1905). The cutting or removal of timber from Indian Lands in breach of the terms of any contract and without other lawful authority, or the leaving of fires unextinguished, will render the offenders liable to the penalties prescribed by section 6 of the act of June 25, 1910 (36 Stat. L., 857). Section corners, quarter section corners, or meander posts on any Government line of survey shall not be destroyed, defaced, changed, or removed to any other place, nor shall any witness trees or any tree blazed to mark the line of a Government survey be cut down in the carrying out the provisions of this agreement. (See sec. 57, act of Mar. 4, 1909, 35 Stat. L., 1099.)**

50. **The expenses of examining, advertising, marking, scaling, and protecting the timber and of general supervision of the sale will be paid out of a timber expense fund, for which purpose not over ten per cent of the gross proceeds of the sale will be set aside.**

51. **All the records of the purchaser and his subcontractors pertaining to the logging operation and the manufacture and sale of the products thereof will be open to inspection at any reasonable time by the officer in charge or other officer designated by the Commissioner of Indian Affairs, and the information so obtained will be regarded as confidential. The pur-**

chaser will furnish the officer in charge, at such times as he may request, the amount of lumber sold and the average grade prices received f. o. b. the mill during certain periods; also the amount of box lumber sold, with average price per M; the amount of ties and timber sold, with average price per M; and the amount of by-products sold and the total receipts for same.

52. Suspension of the purchaser's operations may be made by the officer in charge if any requirements of the contract and of these regulations are disregarded and until there is satisfactory compliance. Persistent failure to comply with any one of the requirements of the contract or regulations after written notice addressed to the purchaser by the superintendent or the officer in charge will be ground for revocation by the officer approving the contract of all rights of the purchaser under this and other contracts and the forfeiture of his bond and of all moneys paid, and the purchaser will be liable for all damage resulting from his breach of contract.

53. Complaints by the purchaser arising from any action taken by the forest officer in charge under the terms of any contract will not be considered unless made in writing to the Commissioner of Indian Affairs within thirty (30) days of the alleged unsatisfactory action.

54. The decision of the officer approving any contract will be final in the interpretation of the contract and of the regulations, and the terms of the contract or regulations can not be varied in any detail without the written approval of the officer approving the sale.

55. Whenever any bond furnished to guarantee obligations under a sale shall be unsatisfactory to the officer approving the sale he may require a new bond which shall be satisfactory to him.

56. Failure of the purchaser to complete his contract or to log promptly an area damaged by fire, wind, insects, or other causes, or the commission by him of any act for which the officer approving his contract shall declare the contract forfeited, will render the purchaser and his bondsmen liable for the depreciation in the value of the remaining timber on an estimate of value and quantity to be made under the direction of the officer approving this contract.

The above General Timber Sale Regulations are hereby prescribed for use in all contracts for the sale of timber from Indian lands except as special provision shall be made by the Commissioner of Indian Affairs or the Secretary of the Interior in particular sales.

CATO SELLS, *Commissioner.*

Approved, April 10, 1920,  
S. G. HOPKINS, *Assistant Secretary.*

*Quinalt File*

*Richard draft for 306*

COPY

H-269

Docket No.

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RESOLUTION

WHEREAS, the Quinalt Tribe has been advised of the introduction in the 87th Congress of bill number H.R. 3529, which would amend the Act of June 25, 1910 (36 Stat. 857, 25 U.S.C. 406), and

WHEREAS said bill would authorize the Secretary of the Interior to limit sales of timber on unallotted reservation lands in accordance with the so-called principle of "sustained yield," and

WHEREAS the Tribe believes the principle of "sustained yield" has in practice and in some cases come to mean unduly severe limitations on the amount of timber which may be sold, irrespective of whether the limitations make sense considering the situation of the Tribe and its members, or whether it would make sense if the interest were owned by non-Indians; and

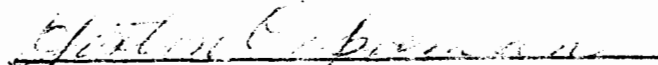
WHEREAS, Congressman Olsen has recently introduced a bill, H.R. 5585, which authorizes what the Tribe believes to be a more acceptable principle, viz. "prudent management"; and

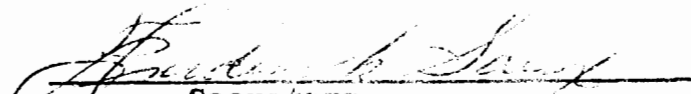
WHEREAS, H.R. 3529 would validate the Secretary's past practice of deducting 10% of the sales price of timber on individual allotted or restricted land, which practice the Tribe regards as unlawful under the principles of the case of Squire v. Horton Capoeman, 351 U.S. Reports p. 1, 1956, which this Tribe caused to be taken through the U.S. Supreme Court;

ratifies the Secretary's past unlawful practice of collecting  
10% of timber sales.

BE IT FURTHER RESOLVED that the Tribe support  
H.R. 5585, which endorses the principle of "prudent management."

Adopted March 30, 1961

  
Chairman

  
Secretary

Enclosures 20  
10-20  
COUNTY OF THE  
Court of Claims  
Department No.

FILE NO. 14-308

*Richardson draft for 38*

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PRELIMINARY STATEMENT BY JAMES JACKSON ON THE REPORT OF THE QUINAULT TRIBAL COUNCIL TO COMMISSIONER BENNETT

AS A REPRESENTATIVE OF THE GOVERNING BODY OF THE QUINAULT INDIANS, I AM MOST HAPPY TO ACCEPT THE INVITATION OF COMMISSIONER BENNETT TO DESCRIBE THE CONDITIONS, THE PROBLEMS, AND THE PLANS OF MY PEOPLE.

IN THE REPORT OF THE SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS ON THE NOMINATION OF COMMISSIONER BENNETT, IN THE COMMISSIONER'S RESPONSE TO THE COMMITTEE, IN THE ADDRESS BY SECRETARY OF INTERIOR UDALL AT SANTA FE, AND IN THE SPEECH OF ERMA WALZ AT SPOKANE, ONE POINT IS STRESSED AGAIN AND AGAIN. THAT POINT IS THAT THE GOVERNING BODIES AND LEADERS OF INDIAN TRIBES SHOULD HAVE A STRONGER VOICE IN THE PLANNING OF THEIR OWN DESTINIES.

THE QUINAULT TRIBE IS READY TO PUT THIS PROPOSITION TO A TEST. ENOUGH OF OUR PROPOSALS HAVE BEEN LOST IN THE PONDEROUS MACHINERY OF THE BIA TO MAKE US SKEPTICAL, BUT WE ARE READY TO TRY AGAIN. WE WILL TRY AGAIN BECAUSE WE KNOW THAT IT IS OUR HERITAGE, OUR RESOURCES, AND THE FUTURE OF OUR CHILDREN THAT ARE AT STAKE.

THE WHITE MAN AND HIS GOVERNMENTS ARE ALWAYS IN A HURRY WHEN THEY WANT THE INDIAN TO DO SOMETHING. THEY WANT HIM TO HURRY UP AND FORGET HIS TRADITIONS, HIS LANGUAGE, AND HIS VALUES SO THAT HE CAN BE CAUGHT UP INTO "THE MAIN STREAM OF AMERICAN LIFE." WE NOTICE, HOWEVER, THAT WHEN THINGS ARE CAUGHT IN THE "MAIN STREAM" OF OUR RIVERS THEY END UP AS DRIFTWOOD ON THE BEACH. THEN PEOPLE CARRY THEM AWAY AS CURIOS. THIS IS ALSO THE STORY OF MANY INDIANS WHO HAVE LEFT THEIR OWN HERITAGE. IT IS THE STORY OF TERMINATION.

WE DO NOT RESIST CHANGE, BUT WE WILL RESIST BEING DEPRIVED OF OUR RIGHTS OF SELF-DETERMINATION TO THE LAST MAN. QUINAULTS GOVERNED THEMSELVES ON THIS LAND

BEFORE ANYONE ELSE REACHED ITS SHORES. WE WILL CHANGE OUR METHODS, BUT WE WILL MAINTAIN OUR IDENTITY AND TRADITIONAL CONTROL OF OUR LAND AS LONG AS WE ARE A PEOPLE. FOR THIS REASON WE CONSIDER THE FREQUENT REFERENCES TO FORCED TERMINATION AND STATE JURISDICTION OVER INDIAN TRIBES A DANGER AND A THREAT. IF YOU ARE SINCERE IN YOUR STATEMENTS ABOUT GIVING TRIBAL LEADERSHIP A STRONGER VOICE YOU WILL NOT BE HASTY IN REMOVING FEDERAL PROTECTIONS FROM INDIAN LANDS AND PEOPLES.

AS A QUINAULT I SPEAK FROM EXPERIENCE. I HAVE MET WITH STATE OF WASHINGTON OFFICIALS ON EVERY LEVEL. I HAVE SPENT MANY HOURS IN THE ROOMS OF THE STATE LEGISLATURE TALKING WITH THE STATE LAWMAKERS. I HAVE MET WITH THE STATE DEPARTMENT OF FISHERIES, THE STATE DEPARTMENT OF COMMERCE, THE STATE LAND COMMISSIONER, AND I HAVE BEEN ASKED TO SERVE ON AN ADVISORY BOARD TO THE GOVERNOR ON INDIAN AFFAIRS. SOME OF THESE SESSIONS HAVE BEEN FRUITFUL AND SOME HAVE BEEN ANTAGONISTIC. WE STAND READY TO WORK WITH LOCAL GOVERNMENT AND TO USE LOCAL SERVICES ON ANY PROJECT THAT IS MUTUALLY BENEFICIAL. YET WE KNOW THAT IN ANY QUESTION OF TREATY RIGHTS THE STATE IS OUR ENEMY. WE HAVE HAD TO TAKE THE STATE TO COURT TO MAINTAIN OUR FISHING RIGHTS. WE WILL DO IT AGAIN IF WE MUST.

WE DO NOT BELIEVE IT IS WISE TO SPEAK OF DEVELOPING TRIBAL LEADERSHIP AND TERMINATING FEDERAL SERVICES IN THE SAME BREATH. MR. BENNETT, WE FAVOR YOUR PROPOSAL THAT THE BUREAU ASSUME A "TUTORIAL AND ADVISORY RELATIONSHIP" WITH INDIANS TO REPLACE THE PATERNALISTIC ONE. WE ARE NOW USING THE SERVICE OF THE BUREAU TO ASSIST US IN CARRYING OUT OUR TRIBAL GOVERNMENT, LAW AND ORDER, HOUSING, AND RESERVATION DEVELOPMENT PROGRAMS. IF YOU ARE WILLING TO BACK US BY KEEPING TREATY BREAKERS AND TERMINATIONISTS OFF OUR BACKS WE WILL BE ABLE TO ENTER INTO COOPERATIVE RELATIONSHIPS WITH LOCAL GOVERNMENTS AS WELL. THE DEVELOPMENT OF THE QUINAULT INDIAN RESERVATION WILL MEAN A GREAT DEAL TO THE ECONOMY OF GRAYS HARBOR COUNTY AND THE STATE OF WASHINGTON. WE INTEND FOR IT TO MEAN SOMETHING TO THE QUINAULT INDIANS ALSO.

SOME DAY WE WILL SPEAK TO YOU OF TERMINATION. BY THIS WORD WE DO NOT MEAN TERMINATION OF THE QUINAULT TRIBE OR OF ANY TRADITIONAL RIGHTS. TO US, TERMINATION MEANS INDEPENDENCE FROM BUREAUCRATIC CONTROL. THAT DAY WILL COME WHEN THE QUINAULT TRIBE HAS ASSUMED ACTIVE CONTROL OF THE LAND IT NOW CONTROLS ON PAPER. IT WILL COME WHEN WE ARE HARVESTING THE ECONOMIC BENEFITS OF THE GREAT RESOURCES WE HOLD: WHEN OUR GOVERNING BODY HAS AN EDUCATED AND COMPETENT LEADERSHIP, AND WHEN OUR TRIBAL CIVIL AND CRIMINAL JURISDICTION IS PROPERLY IMPLEMENTED THROUGH CONTRACTUAL RELATIONSHIPS WITH FEDERAL AND COUNTY GOVERNMENTS. IT WILL COME WHEN WE ARE READY, AND AT OUR REQUEST.

WE HAVE LEARNED TO PUT OUTBOARD MOTORS ON OUR DUGOUT CANOES AND TRAVEL A DISTANCE UP OUR RIVER IN TWO HOURS THAT FORMERLY TOOK THREE DAYS. IN THE SAME MANNER WE ARE NOW TRYING TO PUT MODERN EDUCATION, MODERN ECONOMICS, AND MODERN GOVERNMENTAL PROCEDURE BEHIND OUR GREAT HUMAN AND NATURAL RESOURCES. WHEN WE SUCCEED WE WILL TRAVEL FAST: IF WE DON'T SUCCEED WE WILL BE LOST. IN ORDER TO SUCCEED WE NEED THESE THINGS:

1. THE RESPECT AND GOOD WILL OF OUR NEIGHBORS
2. AN EDUCATIONAL PROGRAM WHICH IS TAILORED TO THE CHARACTERISTICS AND NEEDS OF OUR PEOPLE
3. ASSURANCE THAT THE TERMS OF OUR TREATY WILL BE RESPECTED AND PRESERVED
4. THE TYPE OF FINANCIAL ASSISTANCE WHICH WILL ENABLE US TO ACHIEVE ECONOMIC INDEPENDENCE THROUGH THE DEVELOPMENT OF OUR OWN RESOURCES
5. THE TECHNICAL ASSISTANCE OF ALL GOVERNMENT AGENCIES, FEDERAL, STATE, AND LOCAL, WHICH ARE CAPABLE OF UNDERSTANDING AND PROMOTING THE GOALS OF THE QUINAULT TRIBE

SOME OF THESE THINGS WE HAVE IN PART; OTHERS WE HOPE FOR. THE SPECIFIC PROBLEMS AND PROPOSALS WHICH WE NOW PRESENT ARE RESPECTFULLY SUBMITTED WITH THE DESIRE TO CLARIFY OUR POSITION AND TO PROVIDE A BASIS FOR SOLUTIONS.



## QUINAUT RESERVATION FISHERIES

### Introduction

Four major river systems support the fisheries of the Quinault Tribe. These are the Quinault, Queets, Raft, and Moclips Rivers. In addition, five small, independent drainages to the Pacific Ocean produce Salmon and trout. Sockeye, chinook, silver, and chum salmon are taken in the Reservation's fisheries in addition to steelhead and sea-run cutthroat trout.

Salmon have always been the backbone of the Quinault Indians' livelihood. Historically they were the principal food source and were used as a trade item with other tribes and nations. Today, the tribe's livelihood depends on selling a large portion of the catch to interests outside the reservation and a smaller portion retained for direct consumption. This conversion from the past has resulted because of adaptation of the Indians to whiteman's manner of living, however, the salmon remain the principal economic source.

Fewer fish are available to our people today than in the past. This reduction has been caused by two indisputable factors; namely, the recent growth of a massive sport and commercial (domestic and foreign) fisheries for salmon in the ocean and destruction of the salmon's freshwater habitat by logging and other activities. These facts are well documented in reports of Federal, State, and Canadian fisheries agencies. Before whitemen the need for conservation was not disputed, but ingrained ceremoniously into our ancestors' livelihood and religious activities. They were not faced with problems of pollution, obstruction, and diversion of the rivers or the high demands of the ocean fisheries on dwindling fish stocks. Today we must gear our conservation work to offset the prevailing adverse factors.

The Quinault Tribe has enforced fishing regulations for more than 50 years that were formulated in cooperation with the Bureau of Indian Affairs.

This was done in the interest of protecting and improving salmon runs. Revised or additional regulations will be established as proved necessary to insure adequate escapement of spawning stocks. In addition to regulating the fishing we have been aware that numerous other management techniques are needed to cope with the multitude of factors affecting the fish populations. We have solicited the advice and assistance of Federal, Canadian and other fishery workers to outline a comprehensive plan of management.

#### Current Program

In 1962 the tribe passed a resolution adopting a fisheries rehabilitation program. It specifically called for stream clearance and protection, construction of a fish hatchery on Cook Creek, and technical assistance from Federal fishery specialists. It proposed a restriction on dam construction on the streams of the Reservation. As background for our proposal we consulted with representatives of the U. S. Fish and Wildlife Service, the International Pacific Salmon Fisheries Commission, Bureau of Indian Affairs, and others. In 1963 the Bureau of Sport Fisheries and Wildlife of the Fish and Wildlife Service established an office in Olympia to work closely with us. We have worked jointly since that time and have attempted to consider all aspects of fishery management needs.

In February 1963 work was begun to clear logging debris from our streams. Jams formed by logging debris block or delay salmon migration to spawning areas, destroy spawning grounds, and reduce fish food production. The work was concentrated on Moclips River which was badly choked with jams formed after logging conducted 35-40 years ago. Also, a considerable amount of work was accomplished on Raft River and the south side tributaries to the Quinault River. In total, over 50 miles of streams were reopened to fish use and the work acclaimed as a major step in fishery rehabilitation.

During the stream clearance it became evident that present logging operations were causing considerable damage to our streambeds and watershed areas in some cases, causing direct loss of fish life. It is obvious that logging and associated activities are the principal factors affecting our stream spawning and rearing areas and definite controls are badly needed: Working with the biologist of the Bureau of Sport Fisheries and Wildlife we have attempted to gain the cooperation of logging firms and foresters to correct this matter.

The Bureau of Sport Fisheries and Wildlife studied various potential hatchery sites on the reservation during 1963 and concurred with us in selection of Cook Creek. Monies were appropriated by Congress and construction is underway on this facility which will be named the Quinault National Fish Hatchery. Principal production of the Hatchery will be silver, chinook, and chum salmon. Sockeye will not be raised on a production basis at the hatchery. In the final phase of development it will produce about 250,000 pounds of young salmon annually. Most of the fish will be stocked in our river, but service to other coastal Indian Reservations is anticipated.

Silver salmon fingerlings have been planted in the Moclips River and Cook Creek since 1963 from the Quilcene National Fish Hatchery. A combined total of over 400,000 fish have been planted annually with the intention of rehabilitating the Moclips River and bolstering the broad stock available on completion of the new hatchery. Stocking from Quilcene will continue until our Hatchery is in full operation.

In 1960 we closed the Moclips River and Raft River to all fishing for the protection of the small remaining salmon population. Our stream rehabilitation has been a tribal effort and consequently it was planned that as the salmon runs recovered, harvest would be accomplished by a single Moclips River trap operated by the tribal body. Cost of operation would be a responsibility of the Tribe. It

would be a facility for harvest of fish surplus to spawning escapement needs as prescribed by the Bureau of Sport Fisheries and Wildlife. The trap would provide a facility to take eggs for the hatchery program and to conduct studies jointly with the latter Bureau. It was so agreed and a trap, designed by the Bureau, was constructed and operated during 1965. While the salmon run had not reached its maximum expected number enough fish were available so that more than one ton was taken for sale and distribution to tribal members. Over 300,000 eggs were taken for incubation at the Quilcene National Hatchery. A large number of salmon that were fin-marked as fingerlings and released into the Moclips River in 1964 were recovered at the trap and it was possible to calculate the contribution of the marked fish to the tribal catch and that of the ocean fisheries. Population studies were conducted by tagging salmon at the trap and releasing them to travel upstream.

Using the trap to manage the river fishery is regarded as an excellent technique which is possible only in areas such as our Reservation. Continued use of the trap is planned with much knowledge to be gained about our fish runs and greater harvest opportunities anticipated for the future.

Most of the accomplishments in our recent fishery program have benefited all species of salmon and trout except sockeye. There is no evidence that sockeye can fit into the hatchery program. Fisheries workers in Canada and the U. S. have demonstrated that sockeye populations can be maintained at optimum levels best by proper regulation of the harvest, protection of the natural stream and lake habitat, and construction of near natural (artificial) areas for spawning and rearing. We have not had an opportunity to study the condition of our sockeye populations or their freshwater environment except to a limited degree. We know that almost all spawning occurs upstream from the Reservation boundary in the Quinault River and its tributaries and that Lake Quinault is vital as a rearing

place during the first one to two years of life. We concur with the biologist of the Bureau of Sport Fisheries and Wildlife that adverse conditions in the spawning ground area may be a limiting factor. Flooding conditions which frequently occur in the upper river scour the streambeds and often destroy large portions of the annual spawn. Flood control structures to protect these natural areas and/or construction of artificial areas probably are the solution.

More studies are needed to determine the type and feasibility of measures to protect and insure improvement of our fishery resources. Much information is needed about all salmon populations and their distribution into Reservation streams. We should have population estimates, and data about the location and success of spawning activities, and impact of our harvest. We need to know the condition of the spawning and rearing areas and the quality and quantity of water. We need to know the location of natural migration barriers and blocks caused by logging and the feasibility of their passage or removal. There are several sites on the reservation for development of artificial spawning and rearing areas, and impoundment of water for improved stream flows during summer months. These need to be studied in detail.

During the past year there has been a growing interest among tribal members to bring our razor clam beach under contemporary management methods. Harvest of razor clams has always been an important income source for many of our people. It is particularly attractive to the young and elderly who have difficulty finding full-time employment elsewhere. We have asked the biologist of the Bureau of Sport Fisheries and Wildlife to assist our Conservation Officer in studies and formulation of a management program and limited investigations are under way.

In 1961 a tribal enterprise was established to operate under control of the Council for the purpose of purchasing and marketing salmon and shellfish taken by Indian residents of the Reservation. This was done for the convenience and

benefit of the individual fishermen and clam diggers and if managed properly could become an important asset to the Tribe. During the first years of operation the managers encountered considerable competition from outside buyers, had difficulty finding satisfactory prices, and had other managerial difficulties and the Enterprise became a deficit. However, during the past two years a vigorous effort by the manager to seek more profitable markets (some in eastern U. S. and Europe) and place more stringent control on the preparation of the fish for market has resulted in a profitable undertaking. Still the Enterprise is plagued by competition of other fish buyers on and near the reservation. Most tribal members feel that profitable operation of the Enterprise would strengthen our local economy and are hopeful that expansion into other aspects of the fishing industry may be possible eventually.

#### Discussion

The Quinault Indians maintain the right to hunt and fish on the Reservation without restriction by outside interest. With that right we also accept the responsibility of properly managing the fish and wildlife resources which are so vital to the economy and cultural sustenance of our people.

While our ancestors were not progressive in terms of the whiteman we have not damaged, diverted, and polluted our rivers, poisoned the air, ravaged the soil, and destroyed whole species of birds and other wild animals. We feel that, as resource conservation was basic yesterday, it is basic today. Wise use must continue to be our theme. We cannot control the mass of society outside our boundaries and we are aware that, except for a tragic few, the general public is very passive about the fate of the salmon. We cannot afford to be passive and if assistance and support is adequate will endeavor to provide leadership in the field of fisheries management. We intend to adopt measure suitable to meet contemporary problems.

Salmon spawned in our streams make a sizeable contribution to the sport and commercial catches of American fishermen in the ocean. We are aware that in the case of some species the ocean take may be as much as six fold that by our river fishermen. While we cannot agree that this is an equitable balance, we are proud of our contribution to the economy on the local and national level.

On the basis of high seas tags recovered from sockeye returning to the Quinalt River we know that our fish also are taken by fishermen of foreign countries. It is not known to what extent other nations are taking our stocks on the high seas. Without some control it is conceivable that they could reduce salmon populations to a dangerous level. We encourage the proponents of international negotiations, such as Senator Magnuson, to protect this resource.

During the past four years we have worked closely with the Bureau of Sport Fisheries and Wildlife, primarily through the Olympia Office. Together we have guided the stream clearance and watershed protection work, studied the needs of a hatchery and selected the site for construction, operated the Moclips River fish trap, stocked salmon in the streams, and conducted a limited number of field studies. Much additional study and technical assistance is needed to develop a comprehensive fishery management program. Of particular concern to our people is the declining number of sockeye returning to our rivers in recent years. Sockeye are the most important salmon in our fishery and we feel that a full scale investigation into the problems confronting this species is mandatory.

The Olympia Fishery Office is staffed with only one man. He is responsible for providing assistance to all Federal lands and Indian Reservations in Western Washington. This includes all of the Indian Reservations, military bases, two National Parks and miscellaneous Federal and State cooperative projects. These other areas are demanding an increasing amount of his time and he is not able to devote enough attention to our needs. We are confident in working with this agency

in our fishery program and feel that a substantial increase in the Western Washington staff and operating cost are essential.

The Tribal Council has attempted to retain a full time Conservation Officer selected from residents of the reservation. His duties are to enforce fishing regulations and assist the biologist in field studies. He has participated in the hatchery site survey, spawning ground counts, and salmon nest distribution and egg incubation studies, operation of the Moclips River trap, and stream clearance work. The position of the Conservation Officer is considered by the Council to be invaluable to the fishery program, however, funds have not always been available to support the required salary and the position has been left vacant for disturbingly long periods of time. Bureau of Indian Affairs support to fund this position would be extremely worthwhile.

#### Proposals

To insure the perpetuation of our salmon runs into the streams we have the following proposals:

1. That the Tribe formulate and adopt measures to control all activities by anyone in the streams and affecting the watersheds for the effective protection and improvement of fish populations and habitat.
2. That the Bureau of Indian Affairs and the Bureau of Sport Fisheries and Wildlife assist the Tribe in the formulation and implementation of stream and watershed protective measures.
3. That dams, industrial pollution, water diversions and other adversities that will affect our fishery resources be forever prohibited from the streams.
4. That the Congress of the United States be encouraged to withdraw the Quinault and Queets Rivers from all unnatural uses which will harm



the aquatic life and destroy the scenic values. The above to be in terms compatible with Tribal rights and policies.

5. That every effort be given to promote Congressional support for increasing the staff and operating budget of the Western Washington office of the Bureau of Sport Fisheries and Wildlife to the extent necessary to meet current and future needs.
6. That the Bureau of Indian Affairs establish a budget to support the salary of a full time Conservation Officer selected by the Business Committee.
7. That the United States, through the Department of State or other appropriate bodies, conduct negotiations with all foreign nations active in fishing salmon on the high seas, and agree on proper controls which will protect stocks native to our Reservation and other North American streams.

(c)

## TRIBAL JURISDICTION

The question of jurisdiction of the Quinault Tribe over its reservation is the most vital one facing us. All treaty rights, including the economically vital rights of hunting and fishing, the right to regulate the activities of non-Indians on its lands, and the right to develop and regulate the development of the reservation lands all hinge upon the sovereignty of the Quinault tribe over its lands.

The governor of the State of Washington rescinded his proclamation of State jurisdiction over the Quinault Indian Reservation on the ground that the Quinault Tribe was opposed to state rule. Since that time the state legislature passed a law assuming partial jurisdiction over all Indian reservations within the state, whether they wanted it or not. The Quinault Tribe opposed this in court on the ground that it is contrary to the State Constitution. This is where we stand.

Because of the special status of Indian reservations and the provisions of the treaties with Indians, state governments have neither the political capacity nor the legal structure to administer jurisdiction over them in a manner which satisfies treaty rights. Neither do the state and local law enforcement agencies have the funds, the personnel, nor the facilities to do the job, by their own admission.

After the Governor's action the Bureau of Indian Affairs worked promptly in setting up a law enforcement agency on the Quinault Indian Reservation. It includes a fine staff of officers and excellent facilities, including offices, living quarters, and a jail.

The Quinault Tribe has adopted a law code which we feel is adequate to meet our present needs. If the confusion arising from mixed jurisdiction can be dispelled we will have reason for optimism.

PROBLEMS

I. MIXED JURISDICTION

Apart from the position of the tribe that the present state jurisdiction law is illegal, we also consider it to be unworkable. Utter confusion would reign if the state tried to enforce it. They claim to have full jurisdiction over fee patented land on our reservation, and partial jurisdiction over the trust land. This provides us with two sets of problems:

- A. If the State claims full jurisdiction over alienated land, what happens to our hunting and fishing rights on that land? What about our treaty based right to regulate the movements and activities of non-Indians within the external boundaries of the reservation?
- B. The Quinault Tribe has certain laws applicable to the entire reservation which the state cannot enforce. One of them is the liquor law which is written into our treaty.

Prior to Public Law 280, both the Attorney-General of the United States (23 Op. A. G. 214) and the Solicitor of the U.S. Department of the Interior (55 I. D. 14) ruled that the tribe had jurisdiction over fee patented as well as trust land within the reservation; therefore the present state law is in violation of our treaty. We are aware that P.L 280 opened the door for actions of this kind, and protest its present form for this reason. We believe that any reduction of Indian treaty rights should be made only by mutual consent of both parties to the treaty.

We have always cooperated with the state on matters of law, but we will not do so at the price of surrendering our treaty-guaranteed sovereignty. We will not accept a subordinate role to the State of Washington in any jurisdictional matter within the boundaries of our reservation.

II. LACK OF COOPERATION FROM THE PORTLAND AREA OFFICE OF THE BLA

The Portland Area Office has consistently followed policies which promote state jurisdiction, erode our land base, and ignore the recommendations of the Quinault Tribe.

A. The Portland Office has failed to act on a moratorium on land sales on the reservation, which we worked out in conjunction with the Superintendent of the Western Washington Agency.

B. The Portland Office has failed to cooperate in our action against the State of Washington to contest the imposition of state cigarette taxes on the reservation up to the time of this report.

C. The Portland Office has not cooperated in our jurisdiction suit which was recently before the Ninth Circuit Court of Appeals. (Perhaps this is because a Solicitor of the Bureau of Indian Affairs, in his testimony before Congress, admitted that the Bureau is working against the tribe to introduce state jurisdiction as a step toward termination).

D. The Quinault Tribe requested that the Portland Office define the tribal rights on its beaches. The regional solicitor refused to establish a boundary for these beach rights on the ground that he questioned that it would be "generally useful to the tribe." Now certain real estate operators are selling this beach to outsiders.

E. The Portland Office has refused to carry out the provisions of the law with respect to the residence on our reservation of undesirable persons.

Each of the above instances have reference to the attempts of the Quinaults to carry out their responsibilities with respect to the protection of their property and the exercise of their jurisdiction over the reservation. We are forced to ask why the Bureau's Portland Office refuses to back the tribe. If they be-

lieved in the Treaty, perhaps the State of Washington would show more respect for it. (Since the above report was made, a meeting was held with representatives of the Portland Area Office. Progress was made on two of the above problems: tribal beaches and state cigarette tax).

#### PROPOSALS

- I. THE QUINAULT TRIBE PROPOSES THAT THE BUREAU TAKE POSITIVE STEPS TO ADVISE THE STATE GOVERNMENT OF THE LEGAL RIGHTS OF THE QUINAULT INDIANS, AND THAT THEY BE PREPARED TO ENFORCE THOSE RIGHTS WHEREVER THEY ARE VIOLATED.

We doubt that the State of Washington would have passed a law which violates our treaty if the Bureau had been willing to offer advice to them on the terms of the treaty.

- II. THE QUINAULT TRIBE PROPOSES THAT A CONTRACTUAL ARRANGEMENT BE SET UP FOR LAW ENFORCEMENT ON THE QUINAULT INDIAN RESERVATION AS FOLLOWS:

- A. That the Quinault Tribe, as the governing body of the Quinault Indian Reservation, contract with the United States to enforce federal and tribal law as it applies to Indians and non-Indians.

- B. That the Quinault Tribe contract with Grays Harbor County to enforce local and state law on the Quinault Indian Reservation as it applies to non-Indians. Since tribal laws do not apply to all activities of non-Indians, and since we do not wish to exclude them from the reservation, we feel that this method would provide for the maintenance of law and order without abrogating tribal jurisdiction.

- III. THE QUINAULT TRIBE PROPOSES THAT THE COMMISSIONER TAKE ACTION TO CHANGE THE NEGATIVE ATTITUDE OF THE PORTLAND AREA OFFICE WHICH IT NOW EXERCISES TOWARD PROPOSALS OF THE QUINAULT TRIBE.

The Quinault Tribe now enjoys a good working relationship with the Superintendent of the Western Washington Agency. If the above proposal does not appear to be possible, we would prefer that our relationship with the Portland Area

Office be abolished. In the past the Western Washington Agency has acted as our direct line of communication with the Washington, D. C. Office, and we would prefer to have this policy re-activated rather than to continue with the present road block.

IV. THE QUINULT TRIBE PROPOSES THAT THE BUREAU WORK WITH THE TRIBES IN THEIR EFFORTS TO HAVE PUBLIC LAW 280 AMENDED TO INCLUDE A CONSENT CLAUSE

The Indian tribes ceded lands to the United States which had incalculable value. In return for this the United States entered into agreements with those tribes to provide certain services. It is not in keeping with the high ethical standards of the United States Government to terminate such an agreement or any part thereof unilaterally.

## EDUCATION

Because education is the key to our future, we recognize it as the most important function of our community. We are happy with the progress we have made in education, but we will not rest until we realize our goals.

Here is what we believe about education:

### I. EDUCATION SHOULD BE LOCALLY CONTROLLED.

In Taholah, we have proven that this does not lead to backwardness, for we have there one of the richest elementary programs for Indians that exists in the State of Washington. Board members and community leaders who live with and know their people can exercise the wisest judgments in helping teachers build a good program. It is now being generally recognized that middle-class school boards directing middle-class teachers have failed to provide an appropriate educational program for vast numbers of children. All the talk about segregation and racial balance is meaningless to us. We simply believe a local school should reflect the character of the community which it serves. If people can live together they can learn together.

### II. EDUCATION SHOULD BE INVOLVED IN COMMUNITY LIFE AND DEVELOPMENTS.

When educators are close to the pulse of the people, and lending their gifts and ideas to the solution of their social and economic problems, then, and only then, will the school program be relevant to the needs of the community. We are doing this on the Quinault Indian Reservation, and will continue to do so if we can get financial support and resist the efforts of the state to dissolve our local school district.

III. THE EDUCATIONAL PROGRAM, FROM PRE-SCHOOL THROUGH HIGH SCHOOL AND BEYOND, MUST BE ADAPTED TO REALISTIC GOALS FOR THE STUDENTS.

We need pre-vocational and distributive educational programs right on the reservation. The economic developments we are proposing elsewhere in this report go hand in hand with this concept. If we could provide an educational program which would prepare our youth to actively participate in the growing economy of our reservation; if they could receive preliminary training in local government, cultural heritage, business management, fisheries management, forestry, motor repair, carpentry, plumbing, food processing, electricity, etc., along with the three R's, education would mean something to them.

If the Bureau of Indian Affairs had spent as much money building facilities for this type of education on the reservation as they have spent in relocating Indians to distant cities, we would have all this now. We want the Bureau to stop taking our leaders away from us--we need them here. The present school system on the reservation is capable of being expanded into these types of learning centers, and we are ready to accept assistance in doing it.

Certainly the students could take advance training elsewhere, as some are already, but the foundations should be laid at home first. Then, when their talents are sufficiently developed, they can bring them back to the reservation. This is a good place to live. It is where the Indians want to be. It is where they belong. We say this not because it is a reservation--we say it because this is our land. We love it--we have owned it since the beginning of time--and we plan to keep it for all time to come.



## PRESENT CONDITIONS OF EDUCATION ON THE QUINAULT RESERVATION

There are four public schools presently serving Indian children on the Quinault Reservation--the Taholah Elementary School, the Queets-Clearwater Elementary School, Moclips High School, and Quinault High School. We also have 13 students in Indian boarding schools and five young people in college programs.

We have the same problems as other Indian groups have with education. In general terms, these are a lower than average achievement level and a higher than average drop-out rate. We do believe that we are making progress in alleviating these problems. The Queets-Clearwater School has a Quinault Indian on its Board of Directors, and the Taholah School has the only all-Indian school board in the state. We believe that this type of representation has produced good results and that it should continue. We are against the tendency in the State of Washington to arbitrarily force the consolidation of our local school districts with larger districts which are directed by people with whom we have difficulty in communicating.

The Queets community has a Head Start program for pre-schoolers which was begun in the fall of 1965 under the Community Action Program. It is a great success. The teachers of the Queets-Clearwater School are developing a special curriculum to meet the needs of the Indian and white students who attend there.

We are especially proud of the Taholah School. We believe that it is ahead in the field of Indian education. It provides classes from nursery school through the sixth grade, with remedial and special education classes besides. Our sixth grade teacher, Clarence

Pickernell, is a Quinault Indian. We also have Indian cooks and teacher aides. The Tribal CAP provides educational counselors and physical education instruction. In the fullest sense, the community is involved in the educational process in Taholah.

## PROBLEMS IN EDUCATION

### I. INADEQUATE FACILITIES

#### A. For the Present Programs

The Queets-Clearwater School is old and difficult to maintain. A modern, functional plant would be the first step in upgrading the program there. The Taholah School has a good plant, but it is not large enough. One class is conducted in a small book room and the special and remedial classes are conducted in a trailer. A centralized library is needed.

#### B. For Expanded Programs

Part III of the introduction discussed the need for special types of secondary education. Two years ago, nine leaders of the community including the school board and most of the Tribal Business Committee visited the State Office of Public Instruction to discuss a junior high school program at Taholah. We were told at that time that we should set up the plans and present them to the State Board of Education. The first steps in such planning should include a discussion of the building program for classrooms, shops, and library facilities for the type of program we desire.

### II. THREAT OF FORCED CONSOLIDATION

Our reasons for desiring to maintain local school district control are clearly stated above. We believe that we can work out our own education problems if given the opportunity. We point to

instances where public schools have been taken from local control with dismal results for Indian students. Last year our local state legislators went to bat for us and frustrated the move to force consolidation through legislative action. The battle is coming up again, and we will have to fight it again.

### III. INCOMPLETE SECONDARY PROGRAMS

We have no desire to blame our problems upon the local high schools. They are operating good secondary college preparatory programs which meet state standards. We must point out, however, that many of our Indian students need something different from this. In order to hold Indian students, a secondary educational program needs to provide alternatives for those students who plan their lives around the economy and culture of the area. Some such alternatives are pre-vocational and work experience programs.

The U.S. Department of Public Health has lately come to the conclusion that it is more economical financially, as well as in terms of human well-being, to operate a health program on the reservation. Preventive medicine works only as professionals communicate effectively with the people. The same holds true for education. A secondary program in the Indian community which is articulated with the culture and the economy of the area would cure the drop-out problem. We have an attendance law in our tribal code, and we have attendance officers and counselors in our Community Action Program. Our present problem is not juvenile delinquency, it is merely "good" educational programs into which our Indian youth do not fit.

#### IV. STATE EQUALIZATION OF P.L. 874 FUNDS

Through state and federal aid to education, our elementary school has been operating a highly enriched program to meet the needs of the students. This is an expensive process, but it is not as expensive as neglecting the children. A very important source of funds that has made this possible is P. L. 874 money provided by Congress to relieve the impact of federal land ownership upon local districts. Two years ago the myth was circulated that this money is a "windfall" that is making some local schools too rich. As a result, the state is now equalizing this money on a progressive scale, and plans to eventually remove 85% of it from the local district revenue by this method. We believe this is contrary to the intent of P. L. 874 and protest it on that ground. If the Congress wishes to alleviate local revenue problems caused by federal impact, the State should not interfere.

#### V. BIA SCHOLARSHIPS

We appreciate federal scholarships of various types which are available to Indians. However, some of our young people have complained that they have entered college on the promise of tuition grants from Bureau personnel and have gotten into trouble with the colleges because the promised funds did not arrive.

#### PROPOSALS

##### I. BUREAU OF INDIAN AFFAIRS SUPPORT FOR EXPANDED EDUCATIONAL FACILITIES AND PROGRAMS ON THE RESERVATION

Public Law 815 has a special section for Indian programs. An application from the Taholah School is forthcoming, and we solicit the support of the Bureau in getting the application approved. We

understand that the Congress is also planning to make special provisions for the Bureau to use funds from Title I of Public Law 89-10, and that this title will be liberalized to include funds for facilities.

## II. SUPPORT FOR LOCAL CONTROL OF RESERVATION SCHOOLS

Because the State of Washington administers considerable sums of federal money designated for Indian Education, it is suggested that the Bureau sustain an advisory capacity to the State in such programs. We further suggest that sound advice takes into consideration the wishes of the Tribal Councils affected. The Quinault Tribe goes on record as strongly favoring continued local control of its school district.

## III. SECONDARY PROGRAM FOR INDIAN STUDENTS

We propose that our views on this subject as expressed above be given consideration in discussions and plans for the immediate future. Although we have some local resources, we are largely dependent upon other agencies for our educational programs. The climate has never been so favorable for bold attack on educational problems as it is now. Educational leaders are asking for innovations in education. We believe that we know what needs to be done, and we are asking for advice and assistance in carrying it out.

## IV. EVALUATION OF STATE POLICIES IN EQUALIZING PL 874 FUNDS

Since the State of Washington is in a position to follow a policy of equalization that is not subject to interference, it is suggested that the Bureau of Indian Affairs could re-assess its own policies in distributing the Johnson-O'Malley Indian Education Fund. Specifically, we would hope that where Indian students suffer a substantial loss through changes in state policies effecting P.L. 874

Eds  
monies that the Johnson O'Malley fund could be used to fill the gap.

#### V. ADMINISTRATION OF BUREAU SCHOLARSHIP FUNDS

Since we do not know why our students have been left out on a limb several times, we can only suggest these programs be more closely coordinated with the policies of the colleges involved. The nature of the problems our students have had indicates that there has been poor communication between them and their BIA advisors. To avert this, we propose that these advisors counsel with the high school seniors who are college prospects and assist them in working out their budgets and financial affairs well in advance of their entrance into college.

## COMMUNITY IMPROVEMENTS

### I. COMMUNITY ACTION PROGRAM

After a full year of local committee meetings and public discussions, an extensive Community Action Program was approved for the Quinault Indian Reservation on July 7, 1965. This program has had a considerable impact for good in our reservation communities. We are fortunate in having a highly competent CAP Director, Miss Blanche Pennick, who was formerly the Grays Harbor County Superintendent of Schools. Under her direction, needed services have been provided which have never been available to us before.

- A. Recreation. The Recreation Program, under the supervision of a Quinault Indian, has served our youth in providing many wholesome free-time activities.
- B. Adult Education. In cooperation with the Taholah School, this program encouraged and assisted four of our people to pass the General Educational Development test of high school equivalency.
- C. Pre-school. The Pre-school program has been well-accepted, and now continues as a Head Start project.
- D. Educational Counseling. Through this program high school dropouts have been averted, some serious educational problems alleviated, and valuable services have been rendered to the schools.
- E. Neighborhood Youth Corps. Two summer NYC programs have been conducted, and the youth have worked enthusiastically on community improvement projects.
- F. Health Services. With the cooperation of the Indian Division of the U.S. Public Health Service, a program has been set up to serve the entire tribe. The Community Action Program provides a registered

nurse and the Public Health Service provides a doctor and two trailer clinics. In its few months of operation this program has already produced marked improvements in the health level of our people. Emergency cases have been treated and hospitalizations have been significantly reduced.

## II. HEALTH AND SANITATION

- A. Water systems. Thanks to the excellent planning and cooperation of the Division of Indian Health, a completely new water system has been provided for Taholah. Similar plans are under way for Queets. The Quinault Tribe has taken over operation of the water system and the users are paying regular fees to the tribe.
- B. Plumbing. Another Division of Indian Health project has provided inside plumbing for the majority of the homes on the reservation.
- C. Garbage Disposal. The Quinault Tribe now contracts with a private disposal company to remove refuse from the homes. This service is paid by a local fee.
- D. Sewage Disposal. There is a need for central sewage disposal plants in Taholah and Queets. Such a project is already under way at Queets and plans for Taholah are being studied.
- E. Clinic. The Division of Indian Health has announced plans to build permanent medical facilities on the reservation. This will replace the temporary facilities now in use, and will meet a long felt need. There is good evidence that these permanent facilities will be more economical than the contract medical care program was.

## III. HOUSING

- A. Queets. There are now twenty-four new houses under construction in the village of Queets. This constitutes a renewal of most of the



village. This special program of the Bureau of Indian Affairs has alleviated one of the worst housing problems in the entire area.

B. Taholah. Since early 1964 the Quinault Tribe has been actively interested in entering a mutual self-help housing program for the betterment of the community of Taholah. The Business Committee, aided by its attorneys, the Bureau of Indian Affairs and local volunteers, prepared a proposal for such a program resulting in the adoption on December 7, 1964 of Tribal Ordinance 64-1, establishing the Quinault Housing Authority. Until March of 1966 the Housing Authority was unable to apply for a housing program because of technical problems having to do with the definition of membership of the Quinault Tribe. In April of 1966 the Authority received word from the Housing Assistance Administration that an application would be accepted. The application has now been completed for sixty mutual-help houses and twenty low-rent houses to be constructed in Taholah.

## LAND

One of the most urgent problems facing the Quinault Tribe is the maintenance of its land base. The United States has ruled that we have sovereign power over all reservation lands. Yet this is a meaningless term unless it is implemented by judicious control and planned development of that land by and for the Quinault Indians.

### PRESENT CONDITIONS

As of the present, the majority of people living on the Quinault Indian Reservation are Quinault Indians. We regard this as a desirable situation. The two Indian communities of Queets and Taholah are ideally located. The people enjoy the full exercise of their hunting and fishing rights. Two-thirds of the reservation remains in federal trust on behalf of Indian allottees. One-third of the land is in non-Indian ownership. Two per cent of the land is owned by the tribe corporately. The last two items are of serious concern. Development of the land must be carried out with discretion, according to tribal plans which will provide the best use of all resources while preserving natural beauty and insuring wise use. Initial steps to prepare such a plan have been taken.

### PROBLEMS

#### I. REAL ESTATE EXPLOITATION

The most dangerous problem confronting us with regard to our land is the movement of private real estate developers to exploit tribal beaches. They are misrepresenting the facts by offering beach rights to buyers, they are permitting unsightly buildings to be erected along scenic highway rights-of-way, they are operating real estate offices on the reservation without tribal permission, they are dumping fill on the beaches to extend property lines, and they are planning to establish businesses of a type and in locations which are contrary to our interests.

## II. FRACTIONATED HEIRSHIPS

A problem of mounting concern is the fractionated heirship of allotted lands. Some of our people are selling their land out of Indian ownership because this is the only way they can untangle the mess and realize anything at all from it.

## III. IDLE LAND

It is a paradox that nearly all of our land is lying idle while over one third of our male work force is unemployed. We believe the land is capable of supporting many times the present population, through multiple use. This problem is explored more fully under the report on economic development.

## PROPOSALS

- I. WE PROPOSE A ONE YEAR MORATORIUM ON ALL LAND DEVELOPMENTS WITHIN ONE MILE OF OUR COAST LINE, WHILE TRIBAL PLANS FOR DEVELOPMENT AND ZONING ARE BEGUN.

This proposal has already been placed before the Secretary of the Interior and awaits his action.

- II. WE PROPOSE THAT THE BIA COOPERATE WITH THE TRIBE TO CURTAIL LAND SALES WHICH REMOVE RESERVATION LAND FROM INDIAN OWNERSHIP.

Such a proposal has been approved by the superintendent of the Western Washington Indian Agency, but it is blocked by the Portland Area Office.

- III. WE PROPOSE THAT A SYSTEMATIC PLAN FOR REGULAR PURCHASE OF LAND BY THE QUINAULT TRIBE BE IMPLEMENTED BY THE UNITED STATES.

The tribe cannot hope to become self-sufficient apart from this. Tribally owned land should be reserved for industrial sites, and strategic water front properties on the Quinault River, Lake Quinault, and the Pacific Ocean should be in tribal ownership. The scenic areas adjacent to our reservation beaches which are alienated from Indian ownership should be purchased by the United States on behalf of the Quinault Tribe while they are still undeveloped. Much of this property should be reserved for public recreation and natural areas. The balance can be developed as income property for the tribe. It is requested that the following

steps be taken as soon as possible to implement this proposal:

- A. Property evaluation. We request that the Bureau of Indian Affairs provide personnel to assess the values of all ocean front properties that are now fee-patented as a first step in negotiating the purchase of these lands.
- B. Condemnation Proceedings. It is anticipated that some property owners would be reluctant to sell land to the Quinault Tribe. In this event we take the position that condemnation proceedings by the United States are fully justified by the public interest. We desire to confer with the proper officials in order to set this process in motion.
- C. Planning The Quinault Tribe is not arbitrary in its request to protect its beaches from selfish interests. Our wishes are in harmony with the policies of the Secretary of the Interior to preserve the natural beauties of our country. We request the advice of those agencies best qualified to advise us on the proper use of the ocean front lands. We also need such consultation on a long range basis to determine which lands in the interior of the reservation should be purchased and developed in the interest of the tribe.

IV. WE PROPOSE THAT THE GOVERNING BODY OF THE QUINAULT TRIBE BE ASSISTED IN DEVELOPING A REASONABLE AND WORKABLE PLAN OF TAXATION OF TAXABLE LANDS AND BUSINESSES WITHIN THE BOUNDS OF THE QUINAULT RESERVATION.

Other local governments derive their operating funds by this means, and it is not reasonable to expect an Indian tribe to do the same job without such recourse.

## ECONOMIC DEVELOPMENT

We are not aware that the United States has done anything to assist the Quinault Tribe in economic development since the Bureau of Indian Affairs tried to make farmers out of us fishermen in the 1870's. The Taholah Agent at that time said that the huge spruce stumps on our land were a serious obstacle to agriculture. We don't know what has stood in the way of developments since then. We do know that multiplied millions of dollars worth of timber has been harvested on the Quinault Reservation and the reservation communities are very little the better for it.

The only thing we have learned from the past on this subject is that if anything is done to develop the economy of the reservation for Indians we will have to take the initiative.

The latest thinking of educational leaders is that the opportunity to function in society is more valuable to disadvantaged people than all kinds of special programs and assistance put together. For this reason we regard the economic development of the Quinault Reservation as the most urgent, and potentially productive effort in which we can engage. It is almost too late, and we must act quickly, because other people with more financial backing than we now have are planning to develop our lands in their own interests. Therefore we must use every service, every agency, and every resource at our disposal in this effort. We have met with a private consulting firm, the Bureau of Indian Affairs, the State Department of Commerce, the Grays Harbor County Planning Commission, and others. We are moving. We are happy to say that the BIA seems to be moving with us at this point.

## GOALS OF THE QUINAULT TRIBE FOR ECONOMIC DEVELOPMENT

### I. THE QUINAULT TRIBAL ENTERPRISE

The Enterprise is an organ of the Quinault Tribe, operated under a manager appointed by the Tribe. It is presently engaged in marketing salmon and other food fish harvested on the reservation. In the past the Enterprise has suffered setbacks, but the Tribal Council determined that it must become a success because of its potential for the future of the Tribe. For the past year the Enterprise has gained ground and is now showing a profit. Some of the possibilities of expansion that would improve the financial position of the Tribe and the economy of the reservation are listed.

- A. Local Markets. Quinaults have long felt that a local market for fish would be a profitable venture. Indian smoked fish is in much demand, and it would not be difficult to systematize the processing of smoked fish and build a local market for it on the reservation and in nearby communities. We already sell many fresh, unprocessed fish to local customers and tourists, and this market is capable of expansion.
- B. Food Processing. A custom cannery and freezing plant is a natural corollary to the expansion of fish markets. This would give the Enterprise the capacity to hold fish for good markets, and would meet a local need as well. Berries and other foods could also be processed in the plant.
- C. Laundromat. Many reservation residents now travel from ten to forty-five miles to do their laundry in public facilities. The need for such a facility is already established, and the Tribal Enterprise could provide this service either under direct ownership or contract with private enterprise.

## II. TOURISM

When roads through the Quinault Reservation now under construction are completed, there will be a steady stream of tourists traveling through the land. The Tribe has several concerns with respect to this trend.

### A. Tourist Facilities.

1. Campsites. Adequate public facilities must be provided for the numerous visitors. Through proposals described in the LAND section of this report the Quinault Tribe hopes to regulate the use of the natural recreational areas on the reservation so as to keep them unspoiled for this and future generations. This can be provided for in part by the development of public campsites and sanitary facilities. Tribal purchase of the strategic lands which have the potential for this use is essential to the carrying out of this plan. When the developments are completed, a nominal charge to users could assist in the cost of their operation.
2. Hotels, motels, and restaurants. When tribal proposals to gain ownership of the land have been carried out, the Tribe will then be interested in using capital which can be provided under the Economic Development Administration and other agencies to build hotels, motels, restaurants, and other similar facilities. These would create employment locally and provide income to the governing body of the Tribe for the carrying out of its functions.

The Quinaults are also willing to invite private capital to do the same thing, but only after plans have been carefully worked out to protect tribal interests in lands and jurisdiction. Until this is done the Tribe must restrain such devel-

opments as a matter of survival. This fact points up the urgency of these proposals.

3. Water Recreation. The Quinault Tribe intends to retain strict control of all its waterways. This control certainly allows for public use by Indians and non-Indians, subject to treaty rights and tribal regulations. Lake Quinault, the navigable streams, and the Pacific Ocean provide every potential for water recreation imaginable, and we are anxious to make provision for this in selected areas. We also wish to reserve other areas in their natural state.

- a. Grenville Bay has been studied as a potential small boat harbor. We are willing to think about plans of this nature when it is demonstrated that they will be in the interest of the Tribe.

- b. Lake Quinault is now open to public use, but it also has suffered much public abuse. The Tribe wishes to become more profitably involved in the development of this resource. A tribally-owned public beach and boat facility would be an excellent start. The Quinault Indians protested the turning over to the State of the government forestry facilities on the lake shore. We are still interested in owning that property, and we request that the subject be opened again.

- c. Reservation streams. Individual members of the Quinault Tribe now earn part of their living by providing guide service to non-Indian fishermen on the reservation. This service is capable of being expanded and managed in such a way as to increase the income to the Tribe itself as well.

4. Gasoline stations. There is a limited potential for this service at present, and it will greatly increase when the reservation roads are completed. Since the state highway 109 is a limited access high-



way by request of the Tribal Council, this development will need to be regulated by them. This is not to discourage private enterprise, but to protect the public interest.

### III. INDUSTRY

#### A. Forestry

With one exception, the forest products industry has been carried out in such a way as to bleed the reservation. This, of course, has been with aid of the BIA. At present, the bulk of timber being harvested is not even processed in this area, but is being exported. One local mill, owned by an Indian, employs more Indian help than all the other companies in the area combined. It is the intent of the Quinault Tribe that this trend be reversed. Forest industry can and should be developed close enough to the reservation to provide economic stability to the reservation communities.

Although it is generally considered that free enterprise will create its own opportunities through the laws of supply and demand, we believe that it is possible to stimulate the development of industrial potential.

We cannot wisely allow the reservation to be developed in a haphazard way. The Tribe is in a position to encourage certain developments because of the vast area it controls. We seek a plan that will encourage a systematic development of the forest resources industry in our own area. A few suggestions along this line are listed.

1. Salvage. We propose that the salvage of cedar shake boards and other merchantable salvage be placed under a reservation-wide plan that will produce regular employment until the job is done.
2. Native hardwood. The large stands of alder and cottonwood on the reservation could logically supply one mill and factory located

near enough to the source to provide employment for Indians.

3. Tree farms. We know that the U.S. Department of Agriculture has programs of reforestation and forest care that have not yet been made available to us. We should like to see the logged-off lands of the reservation brought under a reservation-wide program of land rehabilitation, tree-planting, thinning, and other measures to enhance reproduction.

It is a reproach to those responsible for forest management on the reservation that private forest lands receive government subsidies for such programs while much of our logged-off land on the reservation is a shambles. There is no reason why a unified plan could not be developed which would allow regrowth to be harvested on the reservation as a perpetual crop. This, of course, is another reason why we must regain title to fee patented land as rapidly as possible.

B. Agriculture.

The climate and character of our land make year-around agricultural development an attractive possibility. There are large, natural prairies on the reservation awaiting analysis and improvement. O'Took Prairie and Baker's Prairie are the main ones, but numerous smaller areas exist. The analysis we desire would be to determine what is agriculturally feasible for these lands. If crops are feasible we must consider this. There is ample reason to believe that stock would do well. The famous Tillamook dairy country of Oregon is quite similar in climate and ways to the land we live on.

C. Mining

Nothing has been done to develop mineral resources here, but studies indicate the presence of oil and natural gas. The presence of these resources could

have much to do with the character of industrial development in the future. We do not intend to let this treasure lie dormant until some one else owns it. We want it opened now, so that it can uplift the economy of this generation.

D. Real Estate.

Many city dwellers have the desire and the means to have a home by the sea. Commercial real estate developers have this to say: "Economical Recreational Advantages for Your Family," "A Second Home in Incomparable Northwest Recreational Area.....Fishing, Water Sports, Beach Combing on Community Beach...Learn How Easily You Can Own a Premium Site on Washington's Finest Ocean Front for Your Vacation Retreat or Permanent Home," etc.

The foregoing is sound, except for one thing--they are selling the reservation but forgetting that the Indians are still here! Our treaty says that this land was set apart for our exclusive use. We have not excluded non-Indians, and do not plan to at this time, but it is time for them to come to terms with us. We own the beach, and we propose to own the land. When we can lease the land to interested home builders, then we will also allow the use of the beach. We believe this is fair enough and invite those who disagree to find some other beach.

If we must borrow money to purchase this water front land, we can use the lease income to help amortise the loan. We must do this before the land is developed, so that the investment will not be beyond reach.

In the report on LAND, we have proposed that the beach developments be held off for one year under a moratorium. We have also proposed that the Bureau evaluate the land and take steps to begin condemnation proceedings where necessary.

#### IV. ECONOMIC SURVEY OF THE RESERVATION

The foregoing plans are partial and formulative. The machinery is already in motion to use the service of the Federal Government, the State of Washington, and the Grays Harbor County Planning Commission to make a massive survey of the entire economic potential of the Quinault Indian Reservation. We want all to know that we are not going to make this tremendous effort for the benefit of someone else. Our proposals for protecting our historic interests are set forth herein.

We are very pleased with the cooperation we are getting. We are sure that this great project will result in permanent gain for many others besides ourselves. A few selfish speculators will have to change their plans, but we will deal fairly and honestly with all, for the common good.

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## CLOSING STATEMENT

Reports which come from Congress express anxiety that we Indians reach a state of independence from federal services. The proposals in the report by the Quinault Tribe constitute a declaration of independence. If the United States is willing to do two things we will become independent in fact. These two things are:

1. Honor the Quinault Treaty with respect to control of the Quinault Indian Reservation by Quinaults.
2. Help us in developing the competence of our people through proper education, and the resources of our land through technical assistance and financial aid.

The carrying out of these proposals can be far more economical in every way than a continuation of the present policies.

There are many details to be worked out. We do not have all the answers, but we know what we want. We have spoken plainly. Some of our statements may seem harsh, but the issues before us are greater than any human emotion, including anger. We are not angry, but we are determined. If we are wrong on any point we are willing to face facts. But we will make sure they are facts. We are willing to listen to other ideas, but we are through being ignored. If you cannot hear what we are saying we will find someone, someday, who can.

Thank you.



TAHOLAH INDIAN AGENCY JURISDICTION

TEN-YEAR PLANNING PROGRAM

BY THE QUINALET INDIANS

OF THE

QUINALET RESERVATION, WASHINGTON

MARCH 1944

R E S O L U T I O N

WHEREAS, We, the members of the Business Committee of the Quinalt Tribal Council of the Quinalt Indian Reservation, State of Washington, have for the past three months, carefully studied and considered a Ten-Year Program at council meetings and with the general tribal membership of the Quinalt Reservation, and

WHEREAS, at such meetings, a representative employee or employees of the Taholah Indian Agency attended and furnished basic data, facts, and other information needed, all of which has resulted in formulating a Ten-Year Program to meet the needs of, and is satisfactory to the Business Committee and to the general membership of the Quinalt Reservation and Tribe.

THEREFORE BE IT RESOLVED, that at a special meeting of the Business Committee of the Quinalt Tribal Council, duly called and held this 25th day of March, 1944, in which the members convened at the village of Taholah, State of Washington, do hereby unanimously adopt the Ten-Year Program and recommend that said Program be submitted to the Commissioner of Indian Affairs for his review, approval, and recommendation for such funds and assistance as are necessary to successfully carry out the Program during the time specified.

BUSINESS COMMITTEE OF THE  
QUINALT TRIBAL COUNCIL,  
STATE OF WASHINGTON.

Robert S. Linn

Fanny Linn

Walter D. Dumas

Frank Pittman

Cleveland Jackson

Lee F. Alden

APPROVED: March 27, 1944.

[Signature]  
Superintendent, Taholah Indian Agency  
Hoquiam, Washington.



Taholah Indian Agency  
Hoquiam, Washington

QUINAIELT INDIAN RESERVATION

WASHINGTON

PART ONE - BASIC DATA

SECTION I - RESOURCES

1. Location, Date Established, and Area

The Quinaielt Reservation is located in extreme Western Washington, lying adjacent to that portion of the Pacific Ocean north of Grays Harbor and south of Destruction Island. Both of these reference points are frequently mentioned in earlier history of Washington Territory.

Prior to negotiations relative to the relinquishment of land by the United States for the exclusive use of the Quinaielt Indians, a rather large part of this coastal area of Washington Territory was being used by the Cizette, Clallam, Hoh, Quileute, Quetz, and Nalak Indians. This area is roughly described as follows:

Beginning at a point on the coast referred to as "Cizette" or lower Cape Flattery, thence easterly to the Summit of the Olympic Mountains, thence southerly along the crest of this range to the divide between the Chehalis and Quinault Rivers, thence westerly along this ridge, which would lie between the Naptulips and Quinault Rivers to the Pacific Ocean - to a point near or slightly south of the present Noclips River, and thence northerly along the coast to the point of beginning.

A treaty between the United States and the Quinaielt Indians was negotiated somewhere on the Quinault River July 1, 1855, concluded at the city of Olympia, January 25, 1856, ratified by the Senate, March 8, 1859, and proclamation issued by the President of the United States under date of April 11, 1859.

The treaty provided for setting aside or reserving a tract of land sufficient for the needs and for the exclusive use of the Quinaielt Indians, and in accordance with this provision a survey of such tract was initiated September 16, 1861. A brief description of the tract so set aside is as follows:

Beginning at a point on the south bank of the Moclips River at the Pacific Ocean, thence east a distance of 5 miles, thence north  $22^{\circ}$  W - on a course approximately parallel with the coast - to a point on the North Bank of the Quinalt River, thence west to Cape Elizabeth, and thence south ery along the coast to the point of beginning.

This survey of 1861 only enclosed an area of approximately 26,000 acres which was evidently not considered sufficient for the needs of the Indians, and reflected an erroneous interpretation of the terms of the treaty of 1855, as an executive order was issued by President Grant in 1873 to set aside additional lands for the exclusive use of the Quinalt Indians, and a new boundary was established in 1892 by Henry L. Bitch, Deputy Surveyor, under contract from the General Land Office. Four years later, or during 1902, the north and south boundaries were retraced and subdivision of townships completed by George R. Campbell, Deputy Surveyor. These surveys, which were accepted and approved by the General Land Office, definitely established the boundaries of the Quinalt Reservation as they now exist, briefly described as follows:

Beginning at the Pacific Ocean at a point on the south bank of the Moclips River - as established by survey of 1861 - thence east 5 miles to that point also established on the original surveys, - thence north  $37^{\circ}$  55' East to the most southerly part of Quinalt Lake, thence around the shore line to that point farthest northwest on the Lake shore, thence north  $72^{\circ}$  24' West to a point slightly north of the Queets River, thence north  $82^{\circ}$  33' West to a point on the Pacific Ocean north of the mouth of the Queets River. Total distance from point of beginning to northwest corner approximately 55 miles. The western boundary extends from this point south along the Pacific Coast at low water mark to southwest corner. The Reservation is located entirely within Grays Harbor and Jefferson Counties, Western Washington. See attached map for survey of 1861 and present boundaries.

#### Area - Statistical Information

1. Gross area of Reservation (including water)	196,644.97 acres
2. Land Area	129,620.99 "
3. Alienated Lands	14,620.99 "
4. Net Area of Reservation	175,159.03 "
5. Tribal land including Reserves as of 12/31/41	3,747.93 "
6. Trust Allotted Lands	171,389.46 "
7. Reserved by United States	22.61 "

#### 2. Population and Trend

Analysis of the population by sex and degree of blood in appropriate age groups, with vital statistics, as of September 30, 1943, is as follows:

**POPULATION - AGE, SEX, and RESIDENCE**

Group No.	Age Groups			Total		Residing on Reservation		Residing off Reservation	
		Male	Female	%	No.	%	No.	%	No.
1	1 to 6 years	94	94	10.4	178	8	150	1	28
2	7 to 18 years	272	254	28.2	526	16	302	13	224
3	19 to 30 years	216	200	19.4	416	8	150	14	266
4	31 to 50 years	182	222	24.9	404	8	160	13	244
5	51 to 65 years	126	118	11.2	244	6	112	7	132
6	Over 65 years	50	54	5.9	104	3	50	3	54
Totals		950	942	100%	1892	49%	924	51%	948

**DEGREE OF BLOOD**

Group No.	Age Groups	Less than 1/4	1/4 to 1/2	Less than Full	Full Blood	Tribe	
						Quinaieltas	Other
1	1 to 6 years	2	34	26	54	130	33
2	7 to 18 years	162	100	164	160	366	160
3	19 to 30 years	136	83	90	102	290	136
4	31 to 50 years	136	122	34	112	268	136
5	51 to 65 years	26	104	13	96	158	86
6	Over 65 years	8	42	4	50	52	52
Totals		410	410	333	584	1,304	615
Percentages		22%	22%	21%	31%	67%	33%

**Vital Statistics for 10 year Period - 1933 to 1942, Inclusive**

**DEATHS**

Cause of Death	Under 1 yr.	1 - 6 yrs.	7 - 10 yrs.	Over 12 yrs.	Total
Tuberculosis	4	4	8	13	29
Pneumonia	22	4	3	14	43
Meningitis	1				1
Veneral Disease			1	6	7
Whooping Cough	2	2			4
Dysentery	4			1	5
rickets & Malnutrition	3				3
Maternal Deaths				6	6
Stillbirths	3				3
Accidents		1	4	16	21
Old Age				30	30
Other causes, inc. Cardiac, Cancer & Premature Births	13	1	3	33	50
Totals	52	12	24	123	211
Annual No. of Deaths per 1000 of population	2.77	.64	1.23	6.74	11.38

## BIRTHS

During same period total live births	358
Annual number of live births per 1000 of population	19.1
Annual increase of live births over deaths per 1000 of population	7.7

Examination of the above charts, which indicate the general trend of the population, reveals the fact that 72 per cent of the population falls in age groups 2, 3 and 4 and that 54 per cent of these groups now reside away from the reservation. Further examination of the charts indicates that most if not all of Group 2 who are under 18 years of age will be supervised and provided for by those in Groups 3 and 4. During the next 5-year period as age groups move upward and the greatest mortality occurs in Group 6, it is apparent that a gradual decrease in the population residing on the reservation will continue. Information on vital statistics would indicate that an annual increase in population of 7.7 persons per 1000 of population may occur during a 10-year period, under average conditions. A number of the present generation are living and working away from the reservation. This trend, of course, has been accelerated by reason of the war effort.

## Elevation and Climate

With the exception of an area of from four to five thousand acres adjacent to the north boundary - west of Quinalt Lake - where elevations of from six to eighteen hundred feet are encountered, the reservation in general has an elevation of approximately 400 feet.

Characteristic of this northwest coastal area, annual precipitation in the Quinalt Reservation of from 70 to 110 inches is general, occurring usually between October 1, and April 30. The climate is moderate, being tempered to a great extent by the proximity of the Pacific Ocean and the Japanese current. Snowfall is very infrequent; usually light and of short duration.

## Topography

The Quinalt Reservation lies entirely within a rather broad coastal plateau extending eastward from the Pacific Ocean to the foothills of the Olympic Mountains. It is generally undulating in character with elevations from sea level to an average of 400 feet with an extreme elevation of 1800 feet at the northeast boundary. The area is characteristic of most of the coastal territory with all drainage to the dominant streams which flow to the Pacific. Numerous small valleys or bottom lands are prevalent along the streams interrupted frequently by high clay and sandstone bluffs, which determine and regulate to a great extent the course and flow of the main streams.

### Classification of Reservation Lands

(a) Gross Area of Reservation		175,159.05 Acres
(b) Area Forested ( not logged	112,900.00 Acres	
(c) Area " Logged to 12-33-42	62,259.05 "	
(d) Grazing Land	None	
(e) Agricultural Land	None	
Total Area	<u>175,159.05 Acres</u>	

### 5. Geology and Soils

In most of the area along the Pacific Coast are to be found extraneous outcroppings of sedimentary character, which differ greatly from similar deposits in other parts of the western states. This is termed by Geologists as the Hoh formation, and is a composition of sandstone, shale, and conglomerate. The bed rock has been covered rather unevenly with clay, sands and gravels of fluvial origin, mostly resting in a horizontal position. It is only where streams and tributaries have carved their channels through natural barriers or erosion has occurred by reason of wind and surf in prominent headlands along the coast that the underlying bed rock has become exposed. The original covering of the basic formation has through the years been supplemented by a top layer of humus created by reason of the luxurious growth of herbaceous shrubs and plants which are prevalent throughout the area. The depth of this top soil varies greatly, reaching its maximum at the lower elevations on bottom lands adjacent to the main streams.

Notwithstanding the fact that a large portion of the land area has been denuded by the removal of old growth timber, little if any erosion is taking place as the original forest cover is rapidly replaced by either natural reproduction or a dense growth of bracken and other plants which adequately control run-off to the tributaries or primary drainage. However, conditions do occur on the main rivers, viz: Quinalt and Quets, where a loss of bottom lands and standing timber result from these streams changing their course by reason of down timber and driftwood obstructing the channel. It is believed that this condition may be overcome more readily by annual maintenance or clearing of the channel, rather than through efforts towards bank protection or the regulation of stream flow, which would be a costly project and one requiring continual maintenance.

### 6. Agronomy

As will be noted in the classification of the area following the data on topographic features, no agricultural land as such is to be found on the Quinalt Reservation.

### 7. Rango Lands

While there may be some slight value in the forage found within the area, it can be classed generally as of low palatability and the accumulation

of windfalls, logging slash and other debris would make it entirely impractical to utilize any of this resource for the grazing of domestic animals.

### 8. Timber Resources

Inasmuch as lands on the Quinalt Reservation are suitable only for the growing of timber, the entire land area whether denuded or not has been included at a nominal figure in the value of the resources which are as follows:

(a) Value of timber exclusive of land based on remaining estimated stand of 1,850,500 M. B.Ft. @ \$3.00 per M	\$5,551,500
(b) Value of land exclusive of timber @ \$1.00 per acre	171,500
Total Value Land and Timber	<u>\$5,723,000</u>

### 9. Oil, Gas and Minerals

In much of western and southwestern Washington, formations are common which could readily contain petroleum deposits. On the western slope of the Olympic Peninsula, many small seepages of oil and gas occur, but the general opinion of most geologists is to the effect that there is no evidence at present available that would directly suggest that oil or gas in commercial quantities is present.

In 1901 two wells near the mouth of the Copalis River were put down a distance of 800 and 350 feet respectively, through a formation of sandstone and clay. No evidence of oil, but excellent water was encountered. In 1914 two wells were drilled on the reservation a depth of 250 and 408 feet with similar results.

During March and April 1939, the Sun Oil Company of Philadelphia, Pennsylvania, completed leases on thirty-three Indian allotments covering an area of 2,132.42 acres for a 10-year period with an annual rental of \$1,636.92. No development work has been initiated, and it is questionable if the leases will be renewed at the expiration.

### 10. Fish and Wildlife

#### Fur Bearing Animals

A few raccoon are taken annually but no accurate record of the number taken is available. Beaver are, however, taken to some extent. Records for the fiscal year 1945 indicate that 96 beaver were taken by six trappers and they secured an average price of \$20.00 per skin, or a total of \$1,920. It is quite apparent that trapping is not seriously depleting the number of animals nor are they increasing, and this number of pelts probably reflects a

fair average of the number that may be taken annually, unless restrictions on the taking of these animals are initiated.

Deer and Elk

No survey of the deer population on the Quinalt Indian Reservation has ever been made, and an accurate estimate would be rather difficult due to the dense cover and the fact that the similarity of the type or the lack of proper feed appears to affect the habits of the deer to the extent that they roam continuously and do not have any regular range for certain periods of the year.

Various estimates on the number of elk using the Reservation for range have been made and from all available information, it is believed that two bands of about 200 head each frequent the western portion of the Olympic National Forest and the Quinalt Indian Reservation most of the year. Probably 20 to 30 are killed annually by the Indians and used entirely for subsistence.

Fishing

The Quinalt Indians are one of the tribes originally referred to as the "Northern Fish Eaters", and the fish in the reservation streams prove to be one of the most lucrative and significant annual assets enjoyed by the tribe. The Indians do little if any fishing outside of the reservation and a relatively small number of persons participate in commercial fishing activities on the Reservation streams, but most if not all of the resident families fish extensively for subsistence purposes during the periodic salmon runs.

In the 6-year period 1937 to 1942 inclusive, Agency records indicate that fish were taken from the Quinalt, Raft and Quets River with a value as follows:

	<u>For Sale Commercial</u>	<u>Value for Subsistence</u>	<u>Total Value</u>
	\$653,305.00	\$72,234.00	\$725,539.00
Annual Average	108,884.17	12,042.33	120,926.50
Annual Resident per Capita	172.83	19.11	191.94

While the income from commercial fishing has been shown and calculated on a per capita basis, this result is not accomplished. Fishing grounds or locations are staked and designated through a long-established Indian custom as individual locations, and are handed down as inherited property to other members of the family, at such time as the original owner dies or is no longer able to fish his ground. Agency records disclose the fact that while approximately 40 persons fish commercially, 35 per cent of the annual revenue of \$59,826.29 is received by nine persons and 45 per cent of the fish with a value of 248,997.83 are taken by 31 persons who have the upstream locations, some of which provide only small returns even at the peak of the runs.

Other Resources.

None.

SECTION 2 - PRESENT DEVELOPMENT AND USE

1. Dry Farm Lands

None -- no present use.

2. Irrigation

None.

3. Range Lands

No grazing of domestic animals.

4. Timber Resources and Forest Lands

Development or liquidation of the timber resources of the Quinalt Indian Reservation was first made possible by the granting of Fee-Patents to certain individual allottees which permitted sales of the property to be made to logging operators or owners of timber land near or adjacent to the reservation. These land sales in general were made prior to the sale of stumpage under contract, which was first initiated on the Quinalt Reservation in 1921, and actual removal or cutting of timber began in 1922. With the exception of a certain period from 1929 to 1935 when operations were temporarily suspended, cutting under numerous contracts has been orderly and continuous throughout this 21-year period. Volume of timber removed by species with value to December 31, 1942, is as follows:

<u>Species</u>	<u>Volume B. Ft.</u>	<u>Value</u>
Douglas Fir	267,950,880	\$1,065,637.56
Sitka Spruce	287,452,450	1,086,902.14
Cedar	543,660,530	1,784,300.17
Hemlock	488,690,830	565,791.67
White Pine	27,431,010	30,611.30
Amabilis Fir	13,568,700	10,053.11
Totals	1,628,348,330	\$4,575,295.95

Sale of Land and Timber

As previously mentioned in discussing liquidation of timber resources, approximately 14,000 acres of timber land were sold for allottees for which they received the sum of \$62,938.89.

A summary of funds received from the sale of lands and stumpage and the disposition of these funds to December 31, 1943, is as follows:

Land Sales	\$ 62,938.89
sale of Stumpage	4,807,443.04
Less deduction for U.S.E.R.	<u>4,276,973.93</u>
Total Funds Received	



Funds Remaining on Deposit I. M.  
Total disbursed to Indians

645,860.17  
\$3,684,493.75

#### Timber Management Plans

The present timber management plans for the Quinalt Reservation consist of cutting under contract on a sustained yield basis. It is thought, however, that future contracts for the cutting of timber should be modified to the extent that a small percentage of the stumpage value would be withheld at the time of cutting, to be used exclusively for the construction of Fire Roads, Water Reservoirs, or other necessary improvements, in order that adequate protection facilities be provided to safeguard and conserve future values of the land which is only suitable for the growing of timber. Doubtless consent of the allottees for this small contribution could be secured at the time the sale was made, and would assist greatly in better cooperation and help of the Indians in conserving their resources by timely and appropriate effort towards better fire protection.

#### 5. Other Resources

While there are a few of the older Indians who supplement their income by the manufacture and sale of a few baskets, small totem poles, etc., the returns from this source are negligible and has had little influence on the general economic conditions.

### SECTION 3 - CULTURAL AND ECONOMIC CONDITIONS AND STANDARD OF LIVING

A comparison of present cultural and economic conditions and standard of living of the Indian population living either on or off the reservation may be considered as equal to that of non-Indians following similar occupations in the same area. As is characteristic of any group, Indians or non-Indians, a small percentage have no desire to improve their standard of living beyond a certain point even though an adequate income is available to do so. It may be stated that in general, Indians throughout this coastal area enjoy a fair standard of living. Indian children attending grade and high schools appear well dressed, and enjoy all of the advantages available to non-Indians in the same community.

#### Gross Income Per Family - All Sources - Resident Families Only

##### Quinalt Reservation

Calendar Year 1942

<u>Activity</u>	<u>Amount of Income</u>
1. Cattle or stock raising	None
2. Agriculture (Victory Gardens not considered)	None
3. Labor, including relief projects	\$ 24,511.00
4. Rentals, permits, etc.	2,234.00
5. Timber Sales	200,062.00
6. Relief (Clothing & Supp. \$1110.00. Funds \$410.00)	1,520.00
7. Social Security and other assistance	10,891.00
8. Arts and Crafts	1,175.00
9. Fishing, Furs, etc.	203,412.00
10. Interest, Annuities, etc.	9,726.00
11. From Business	4,400.00
12. Service men's allotments	2,200.00
<b>Total Gross Income</b>	<b>\$460,791.00</b>

Agency records indicate that this income is distributed among 140 families or consumptive groups and 50 single persons. Some of these single people live with families and some subsist themselves, and some of each group do not live on the reservation throughout the entire year.

#### Estimated Distribution of Income to Families

Type of Income	Under \$300	Under \$400	Under \$500	Under \$600	Under \$1000	Under \$1500	Under \$2000	Under \$3000	\$4000 & Over
No. Families	8	9	11	15	25	25	22	40 Single & 10 Families	10 Single & 15 Families

A further breakdown will indicate that the gross income is made up of earned income \$233,495 and unearned \$227,296. In considering the figures submitted, attention is called to the fact that the gross income is as accurate as possible from the information available.

## SECTION 4 - SERVICES PROVIDED BY GOVERNMENT

### 1. Social Services

Present social services are provided by the Grays Harbor County Welfare Department. Assistance in making contacts is given by regular Agency employees in connection with their other duties.

### 2. Education

The Indian children all attend Public Schools under a state contract.

Education services rendered by the Government consists of one employee, who makes routine visits to the public schools where Indian children are in attendance. He assembles and maintains records of all Indians attending public or other schools, prepares an annual census of school children, and assists in the completion of educational loans.

### 3. Health

The Field Nurse from the Agency spends one day each week at Taholah. Visits are made to the homes of those who are ill, clinics are held for school children who are treated for minor ills, injuries, and communicable skin diseases. Home visits are made for infant and preschool children care, medical social work, and tuberculosis. Making arrangements for medical and hospital care for the seriously ill is also attended to.

### 4. Law and Order

The enforcement of law and order is handled by one Indian Policeman and a Judge. Law and order has been a problem on the reservation for many years due to the lack of a law and order code, a satisfactory court set-up and sufficient police personnel.

### 5. Community Activities, Loans

An Agency employee devotes a portion of his time in assisting the Tribal Council in the preparation and completion of loan applications, other credit activities, promotion of improved and increased home gardening, community activities and general home improvement.

All loans are made from an appropriation of Quinault Tribal Industrial Assistance loan funds.

### 6. Land Administration

The Quinault Reservation has practically all been allotted and there

are many problems in connection with the administration of Indian land which are becoming more complex yearly with increasing costs of probate and other services. It would appear that the only practical solution would be liquidation of allotments and heirship interests either to the tribe or to the United States.

Until such time as a definite policy has been established and proper action initiated, no change can be effected by local agencies on reservations where tribal funds are not available for land acquisition, as is the situation on the Quinaielt Reservation.

#### 7. Forestry and Gracing

The present services provided by forestry are determined largely by the extent of timbersale activity and the maintaining of a fire protective organization. As set forth previously the forest resources on the Quinaielt Reservation are extensive and there is considerable timbersale activity.

The following are the timber resources at the present time:

Virgin timber	M ft. B.M.
112,00 acres	1,350,000 M ft.
Value at \$3.00 per M ft. - - - -	\$3,550,000.00

Timber sales and receipts for calendar year 1943 are as follows:

Timber cut, vol. bd. ft.	Value
72,954,530 ft. B.M.	\$278,017.57

In view of the fact that the Quinaielt Indian Reservation is all forest land and because of the very favorable growth rate the land is more suitable for timber than for other purposes and the future resources of the reservation will therefore consist almost entirely of forest values. The present forest organization should be maintained to the extent necessary for general administration including forest fire protection, but determined to a considerable extent by the amount of timber sale activity.

#### 8. Roads

The Agency Road Engineer devotes a percentage of his time to the Quinaielt Reservation. A road foreman and a small crew is maintained. The principal job of this organization prior to the liquidation of the C.C.C. was the maintenance of the Neelips-Taholah road. Since the discontinuance of the C.C.C. the roads department has taken over the repair and maintenance of all reservation roads and truck trails.

#### 9. Other Services

A traveling Indian Service dentist visits the Quinaielt Reservation at least once a year.

Probate Examiner

An examiner of inheritance makes visits to the jurisdiction to hold hearings and determine heirships. As time goes on and heirships become more involved additional time or more frequent trips will be necessary.

SERVICES TO BE FURNISHED

1. Education

(1). The school at Taholah village is without playground equipment. These facilities should be provided in the following manner: The U. S. Indian Service to level, and prepare the site; the community to provide material and erect the playground shed; and the school district provide the equipment if and when available, either new or used.

(2). Proposed consolidation of school districts will require transportation of all pupils above the 4th grade from Taholah to Koclips and necessitate the use of a larger school bus, which will be provided by the school district.

(3). Development of a program of musical instruction, which will require the purchase of band instruments--when available--and the employment of a part time instructor. Pupils will then be able to participate in band programs at Koclips High School. These services to be provided by school district.

(4). Promotion of a program of adult and community visual education through the use of appropriate sound films. This will require the purchase of a 16 mm sound projector to be provided by the Indian Service.

Estimated Cost - - - - - \$350.00

SUMMARY

Total cost to Government as proposed \$2,350.00

2. Conservation of Health

The health services now furnished by the Indian Service should be continued throughout the ten year period.

In addition, due to the prevalence of communicable diseases, additional health services and facilities from the health department are requested, listed as follows:

- (1). The appointment of a full time nurse to be stationed at Taholah village. Annual cost \$2,000.
- (2). Repair and remodeling of the Taholah Village Clinic. Annual cost \$1,000.
- (3). Transportation facilities for patients to and from the Tacoma Indian Service Hospital. Annual cost \$50.00

Estimate of costs:

	1st year	2nd year	3rd year	4th year	5th year	Total
Repairs	\$500.00	\$200.00	\$200.00	\$300.00	\$300.00	\$ 900.00
Labor	300.00	300.00	300.00	300.00	300.00	1500.00
Travel and Miscellaneous	500.00	500.00	500.00	500.00	500.00	2500.00

3. Law and Order

The Quinsigt Tribal Council has outlined a Law and Order Code for the Quinsigt Reservation, which has been submitted to the Indian Office for approval. In order to carry out the law and order code, it will be necessary to increase the salary of the Chief Judge and add another Policeman for at least six years.

Additional costs necessary:

	1st year	2nd year	3rd year	4th year	5th year	6th year	Total
Judge	\$500	\$500	\$500	\$500	\$500	\$500	\$3000
Policeman	1200	1200	1200	1200	1200	1200	7200

4. Community Activities, Credit, etc.

(1). Sewage Disposal Waholah Village.

Up to the present time no means of sewage disposal has been available for the village. The installation of an adequate and efficient system presents some difficulty by reason of the fact that the elevation of most of the village is only slightly above sea level. It is realized that construction of this utility cannot be undertaken until after the war, but is desirable to now make a complete survey with plans and estimates for the completion of the project when conditions permit. Funds required: Survey and Estimate \$2,500

(2). Additional Water Supply.

The original water supply system for the village of Waholah consisted of a deep well from which water was pumped to a supply tank. This tank is not now in use, and it is planned to dismantle the steel tower, move and erect at a new location in the village. This will provide an adequate supply of water for fire protection.

(3). Repair and Extension of Sea Wall.

Several years ago a pile bulkhead was constructed along that portion

of the village fronting on the Quinsigt River as high tides and surf was causing serious damage to property and buildings along the water front. Repairs to this existing structure are now needed, and a further extension of approximately 200 feet should be constructed on that portion nearest the ocean. This work can best be accomplished during the summer months, and pile driving equipment is available.

(4). To assist in the promotion of more and better gardens it is necessary that lots be cleared, leveled and filled. Individual families will provide or arrange for the necessary hand labor, but will require the assistance of Agency equipment for leveling and filling with top soil. It is believed that any cooperation given will encourage and be the means of promoting not only more and better gardens, but also poultry and other projects which will assist greatly in supplementing the family income.

The recent organization of an active Ladies Monkslers Club was appreciated and it will be our policy to have all community activities cleared through this organization which will cooperate closely with the mens' organization and through the efforts of both, better housing, sanitary conditions, and a revival of arts and crafts with the development of outside markets should result.

(5). The development of these community projects, and the fishing industry--which is the major source of earned income--is to a large extent dependent on having a source of credit available to the Indians who wish to establish themselves as an economic unit and become self supporting and independent. To obtain a reasonable measure of success it is necessary that the services of a community worker be secured for a period of six or seven years, to provide the necessary supervision and guidance for initiation of a community projects and activities, these are necessary if a higher standard of living is to be obtained.

##### 5. Land Administration

The allottees are not willing to transfer their allotments that have been logged or heirship lands to the United States for the tribe without adequate compensation. Lands which have been logged are of no value only for the growing of timber, therefore, the incentive to acquire such land for home or agricultural purposes is entirely lacking. In as much as artificial restocking of considerable cut over allotted land should be undertaken, also proper and adequate fire protection must be maintained indefinitely for a conservation of the remaining resources and as a matter of public safety, it appears only logical that a plan worked out to consolidate land ownership either in the tribe or the United States. Only a few of the allottees are financially able or willing to defray the cost of restocking and protection of their cut over land.

With the exception of a limited acreage reserved for administrative purposes the Quinsigt Reservation has all been allotted. The heirship problem exists, and affects tenure and ownership the same as on other reservations.



## 6. Forestry and Grazing

The past services of the forestry department have been determined principally by the extent of timber sale activity and the necessity of maintenance of a forest fire protective organization. In reference to the future management of the forest resources on a basis of attainment of desired production and utilization standards the expenditure of additional funds and the employment of additional technical personnel is necessary.

The following is a list of proposed forest activities and projects needed for the reservation:

### I. Forest Management

1. A detailed forestry survey and a complete forest management plan for the reservation.
2. Establishment of permanent sample plots for growth study purposes.
3. Tree planting projects.
4. Logging waste salvage studies.

### II. Fire Protection

1. Detailed fire protection survey and analysis of needs for water holes and conversion of trucking roads and old railroad grades for fire protection purposes.
2. Fire hazard reduction--snag falling.
3. Preparation of detailed fire protection plans for each protection unit, including outlining and mapping of water holes, truck trails, fire breaks, etc.
4. Fire equipment store houses, tool boxes and tool caches.
5. Special equipment such as radio towers, relay stations.

### III. Wildlife management

Surveys should be inaugurated and approval of projects obtained to carry out a wildlife conservation program for the reservation. Projects following should be given consideration: rodent and predator control, stream improvement, dams, screens, ladders and stream checks, fish planting, fish and game research, and enforcement of game regulations.

To accomplish the work as outlined in this program the appointment of a technical and supervisory staff should be secured with necessary appropriation of funds.

In reference to the proposed plan of development, the following is a brief inventory of the forest resources of the Quinalt Indian Reservation:

Total reservation area - - - - -	175,159 acres
Total forest area - - - - -	174,932 "
Total area cut to date - - - - -	80,500 "
Cut over area not stocked to reproduction - - - - -	37,000 "
Cut over area stocked to reproduction	13,500 "
Virgin timber area (not included within present sale contract) - - - - -	112,000 "
Estimate of timber - - - - -	1350,000 ft. B.M.
Estimated value @ \$3.00 - - - - -	\$5,350,000.

There is an additional estimated 250 million ft. B. M. on 11,520 acres of uncut timber within present contract areas, with an estimated value of \$750,000.

To accomplish an over-all rehabilitation plan for the reservation within a ten year period, for the year beginning 1946 through 1955, the assignment of extra technical and supervisory help should be made, and with appropriations for covering cost of approved projects. As the objectives of the plan are approached the services and annual costs can be gradually reduced to the end of the ten year period.

The following is estimated costs per annum for projects proposed for completion for a ten year program:

4 years - 1946-1949 Cost per annum - - - - -	\$145,000.
3 years - 1950-1952 Cost per annum - - - - -	95,000.
2 years - 1953-1954 Cost per annum - - - - -	70,000.
1 year - 1955 Cost per annum - - - - -	45,000.

Allocation of funds of proposed forestry projects:

1. For the years 1946-1949 Cost per annum:
  - (a). Forest management, utilization studies and tree planting projects - - - - - \$20,000
  - (b). Forest fire improvements including fire lines, reservoirs, etc. - - - - - 30,000
  - (c). Snag felling (fire protection measure) - - 20,000
  - (d). Wildlife - management - - - - - 5,000
2. For the years 1950-1955 - Cost per annum:
  - (a). Forest management, utilization studies and tree planting projects - - - - - 10,000
  - (b). Forest fire improvements including fire lines, reservoirs, etc. - - - - - 40,000
  - (c). Snag felling (fire protection measure) - - 40,000
  - (d). Wildlife - management - - - - - 5,000

3. For the years 1953-1954 Cost per annum:

- (a). Forest management and utilization studies, and tree planting projects - - - - - \$10,000
  - (b). Forest fire improvements including fire lines, reservoirs, etc. - - - - - 30,000
  - (c). Snag falling (fire protection measure) - - - - 30,000
4. For the year 1955 - Cost per annum:
- (a). Forest management and utilization studies, and tree planting projects - - - - - 5,000
  - (b) Snag falling - - - - - 20,000
  - (c). Forest fire improvements including fire lines, reservoirs, etc. (maintenance) - - - - - 20,000

After 1955 this special program can be terminated and the normal forestry activities under a completed forest management plan and including necessary timber sale administration would be continued.

7. Roads

The roads program for ten years consists of reconstruction, widening, draining, and maintaining the present road and truck trail system.

As logging progresses there should be means provided to extend rail-road grades and trucking roads to insure adequate fire protection.

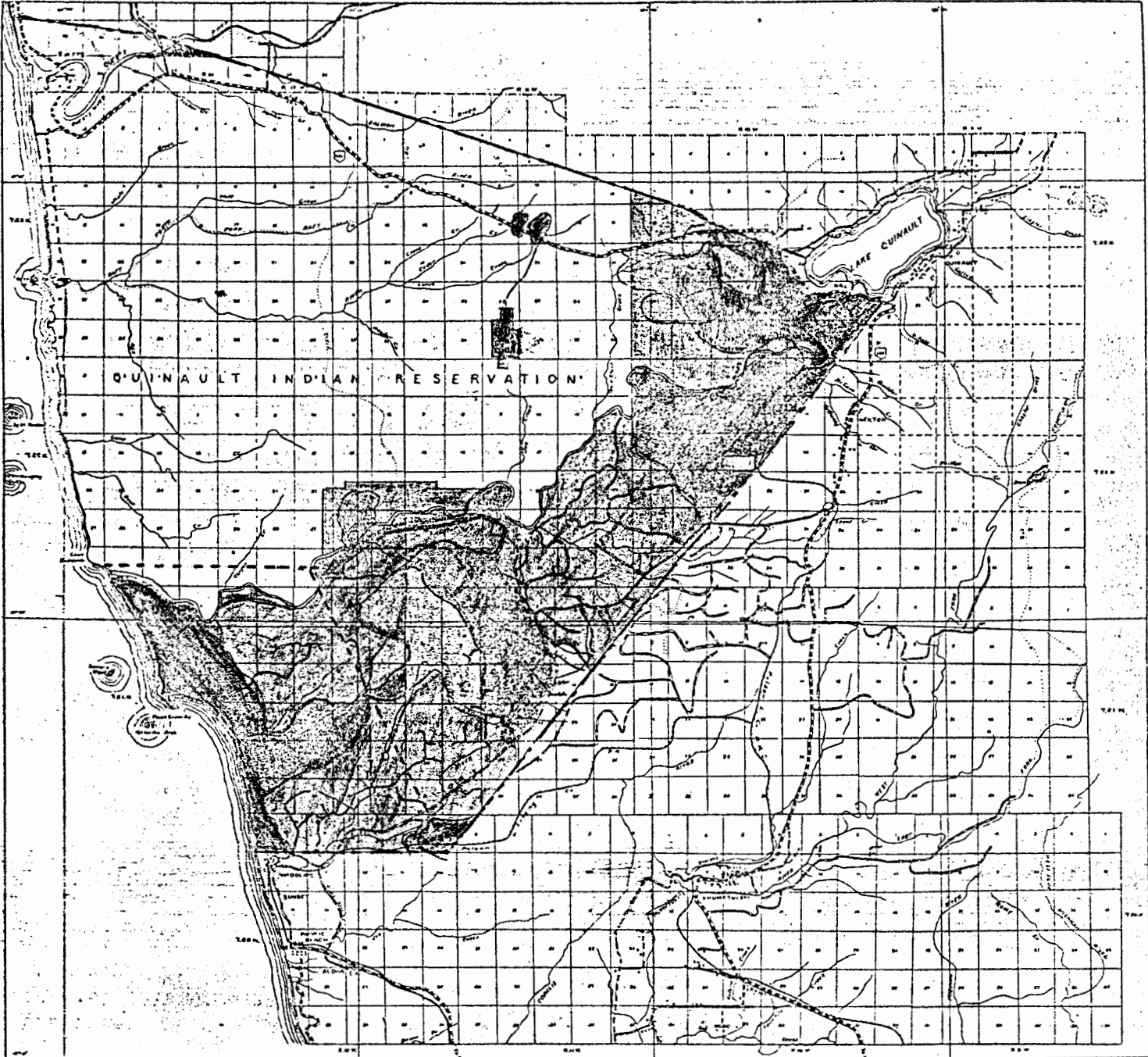
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


	1st year	2nd year	3rd year	4th year	5th year	Total
Reconstruction	\$40,000	\$30,000	\$25,000	\$10,500	\$10,000	\$115,500
New construction	5,000 each year for ten year period					60,000
Maintenance	12,000 each year for ten year period					<u>120,000</u>
						<u>\$295,500</u>





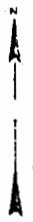
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-  CUT OVER LAND BURNED NO REPRODUCTION
-  CUT OVER LAND NOT BURNED GOOD REPRODUCTION
-  CUT OVER RESTOCKED
-  UNDER CONTRACT NOT LOGGED
-  UNSOLD NOT UNDER CONTRACT

--- BOUNDARY AS SURVEYED 1861

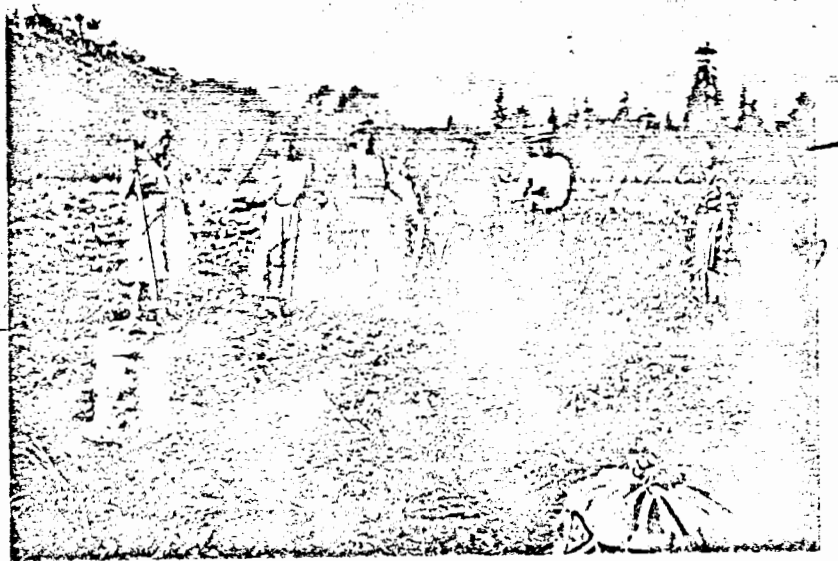
— PRESENT BOUNDARY

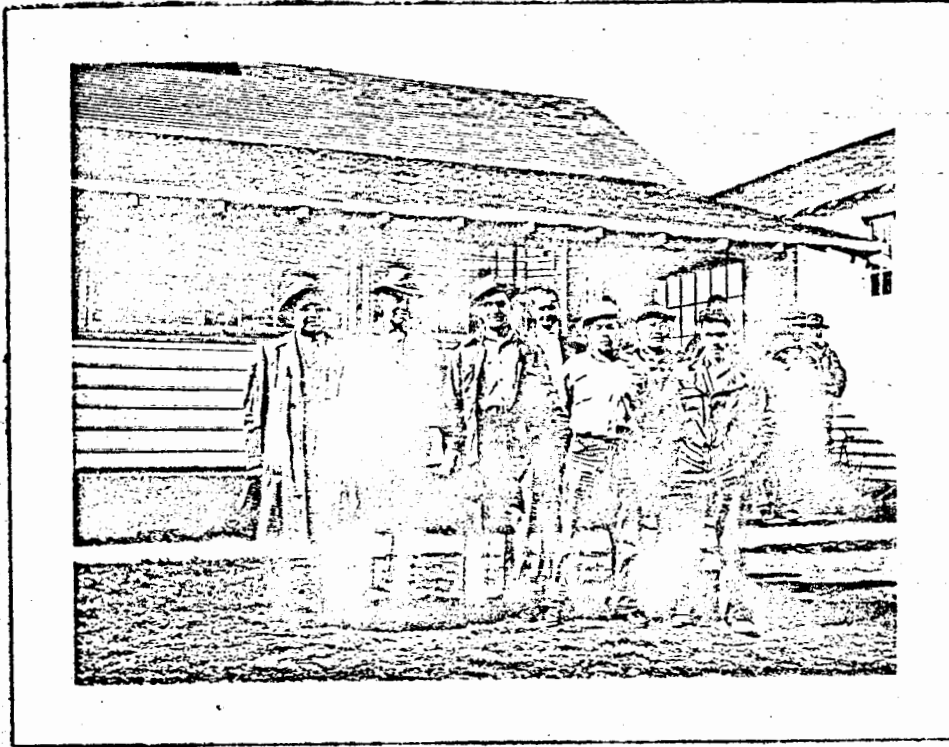




Mrs. Orvilla Sivonen  
proves that an excel-  
lent garden can be  
produced at Taholah.  
Received 1st prize  
award.

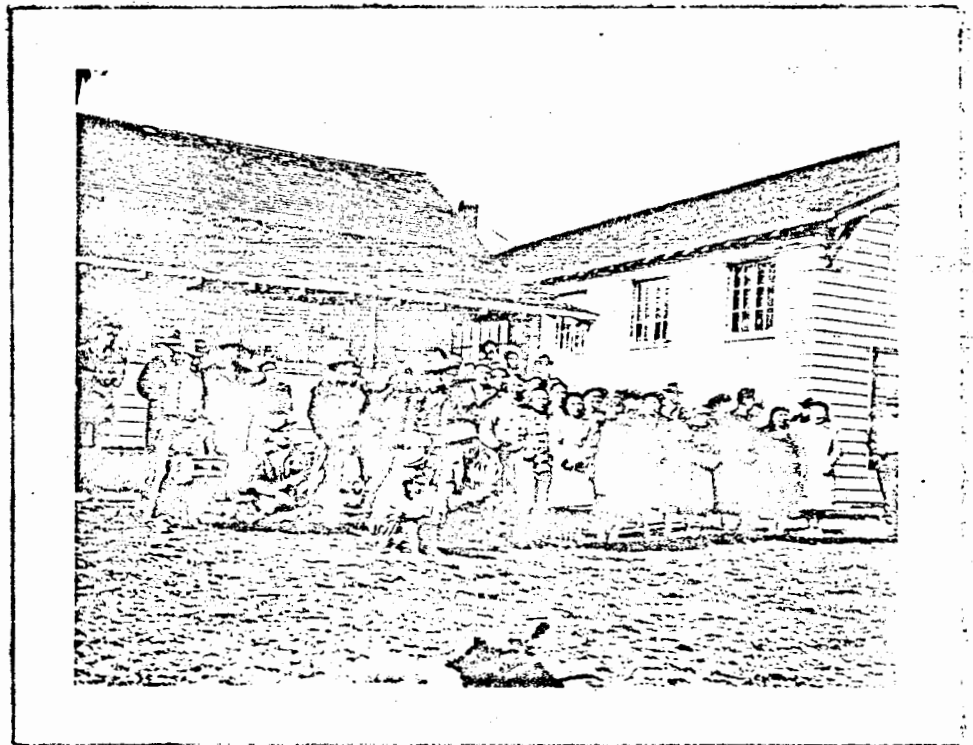
Your families take  
advantage of first  
nice day in a month  
to harvest their  
"Food for Freedom".



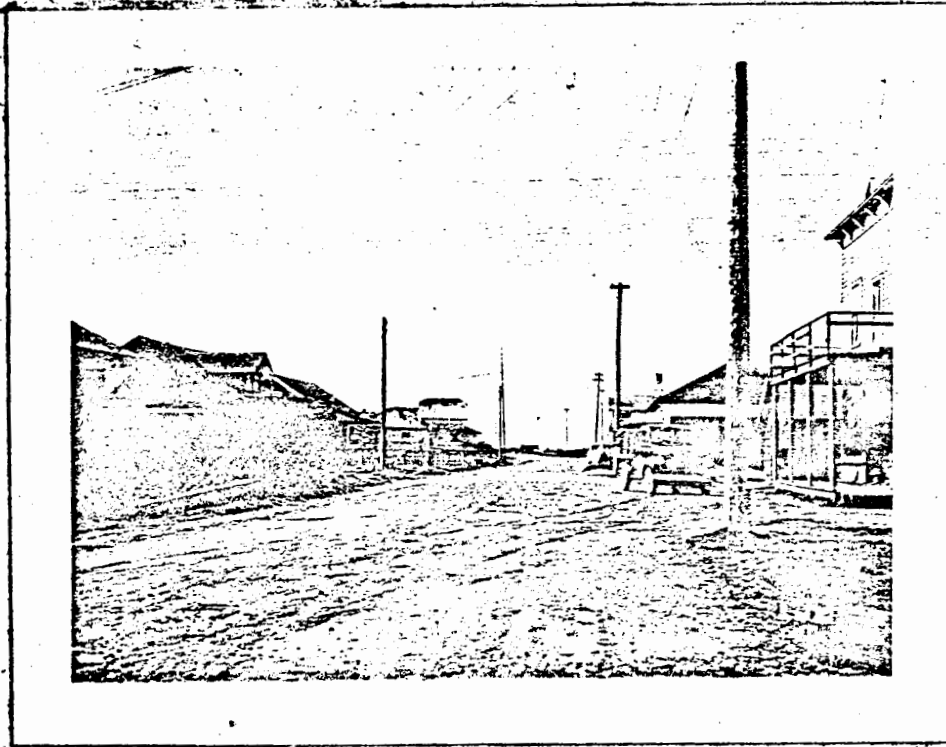


Reading from left to right - Supt. G.P. Lavette, and Robert Sampson, Clave Jackson, Lee Alden, Frankie Pickarnell, Henry Snel and Herb Caposman of the Business Committee Quinalt Reservation.

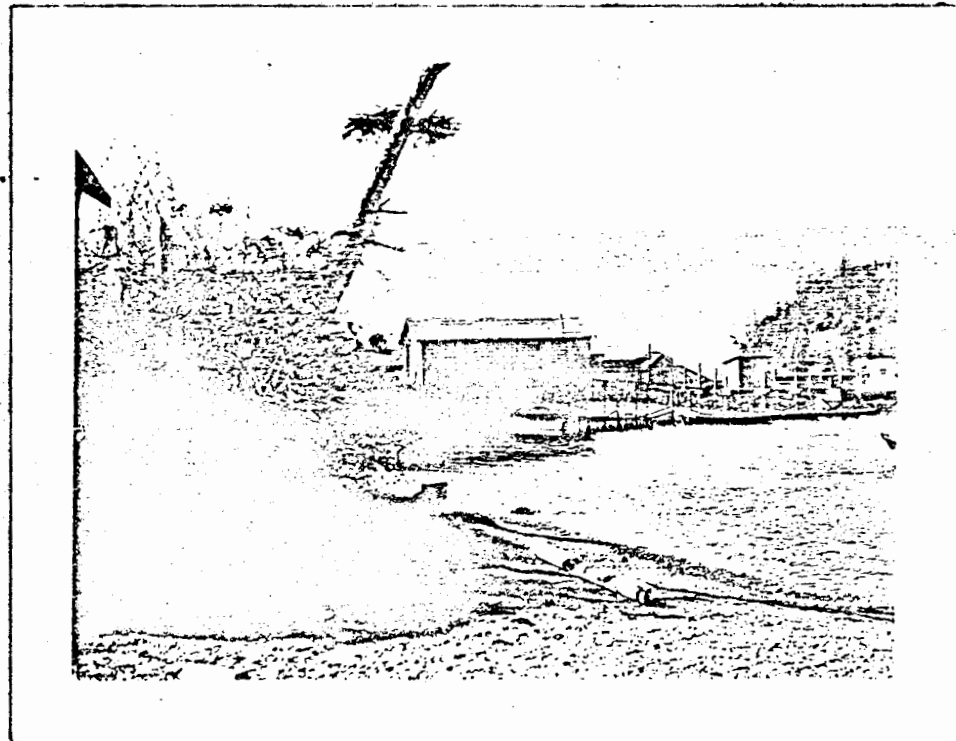
A group of Quinalt Indians attending the discussion of one of the Ten Year Planning Programs. March 25, 1944.



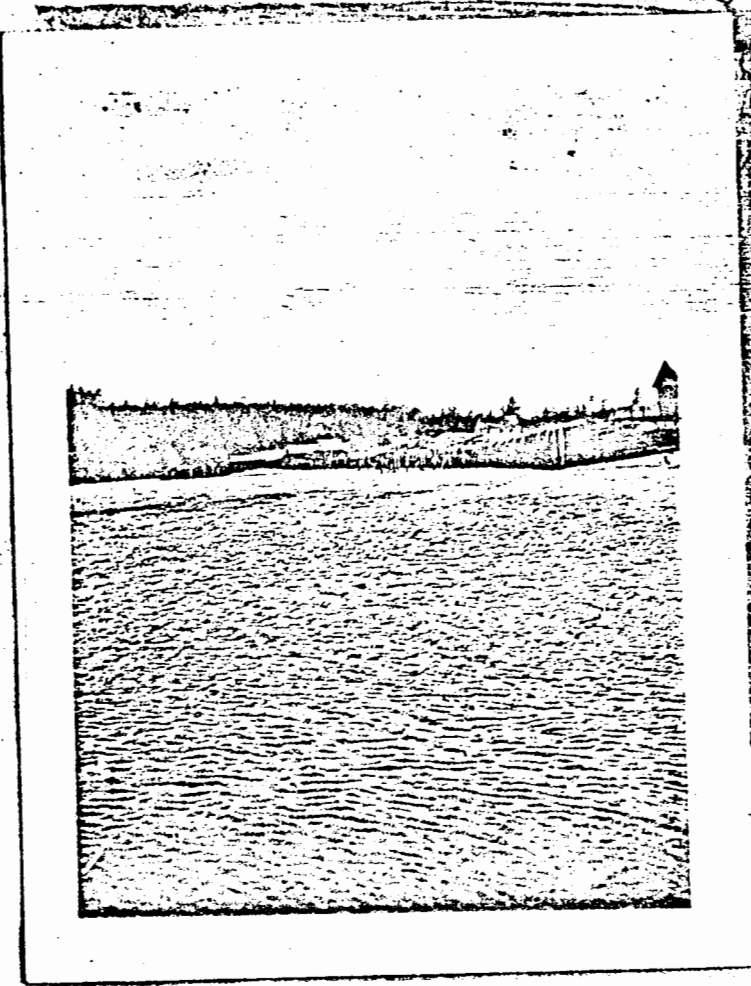




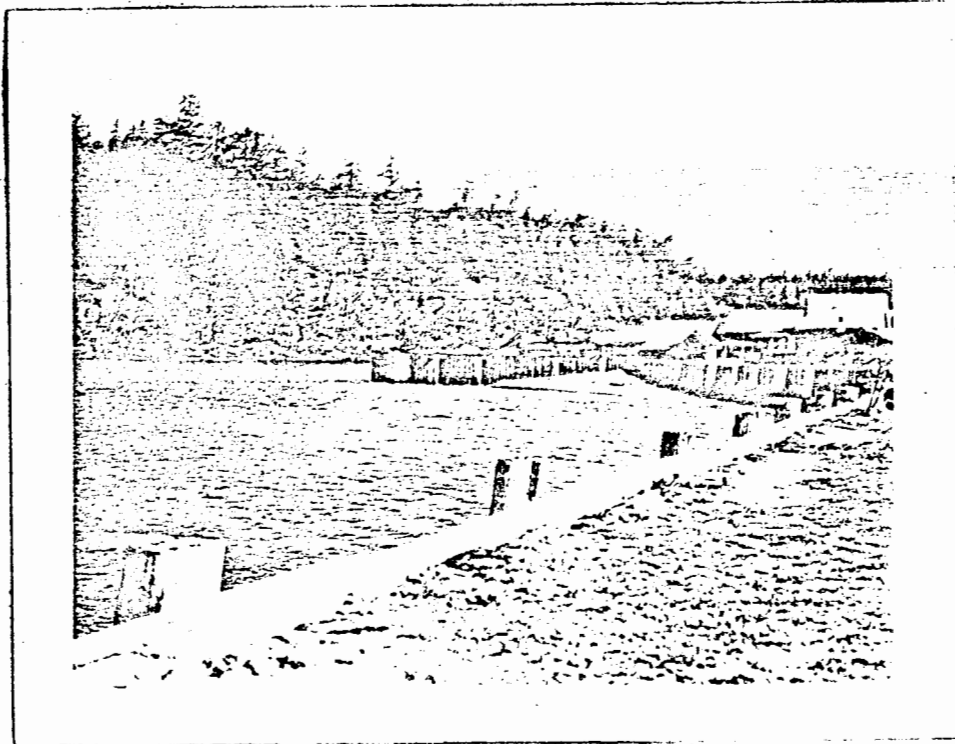
Main street in Taholah  
Village, Quinalt Res-  
ervation.



Fishing docks at Tah-  
olah, Quinalt Reser-  
vation.

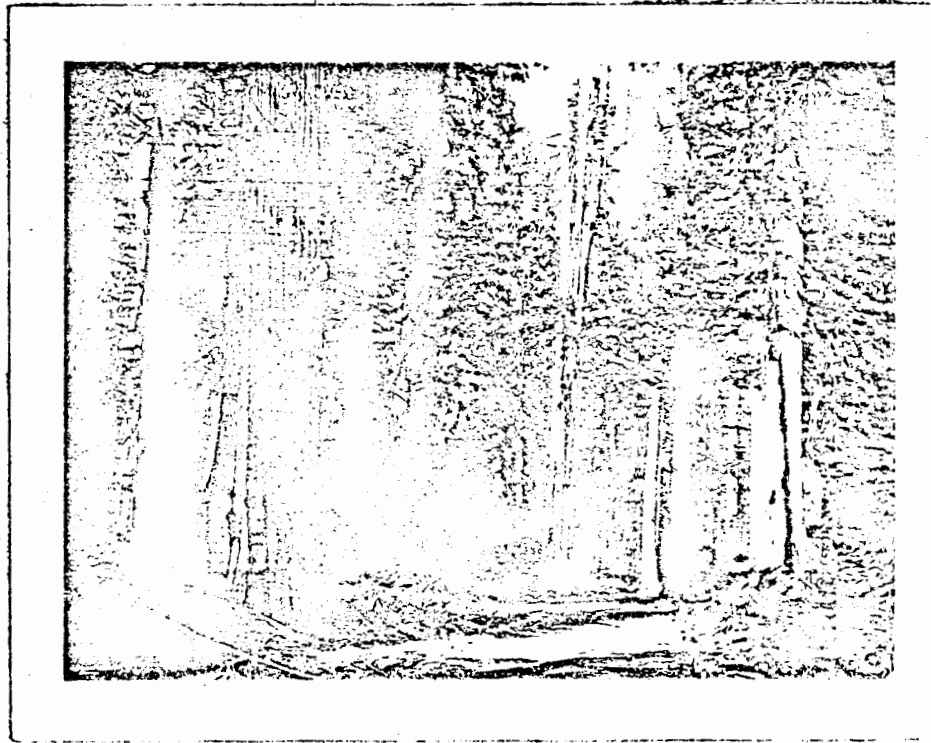


Two views of the sea wall  
at Taholish Village, Quin-  
slet Reservation.

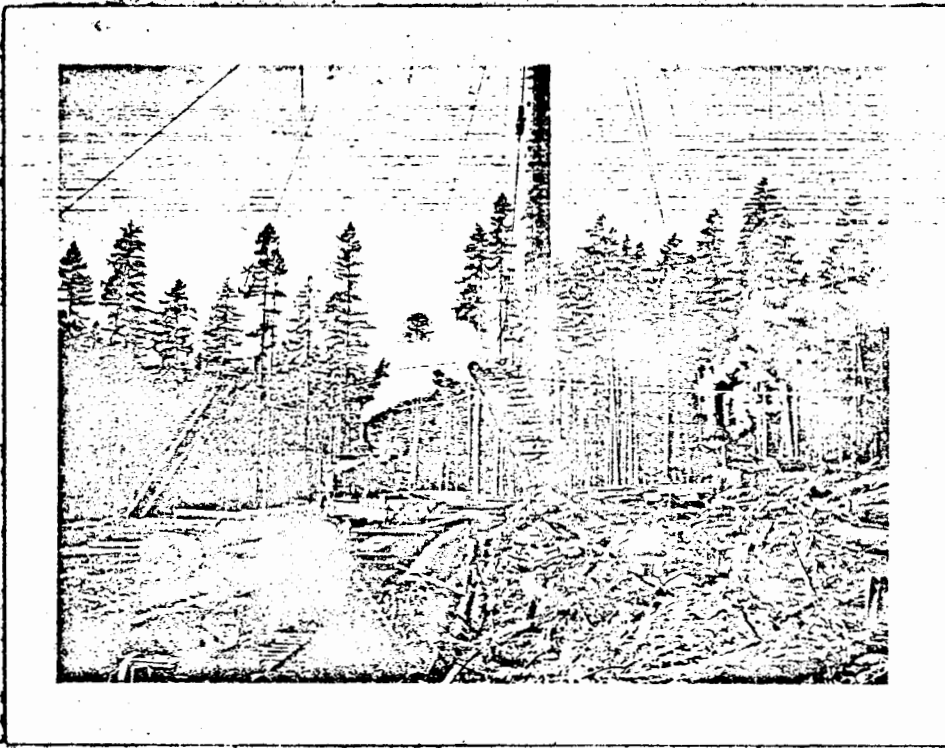




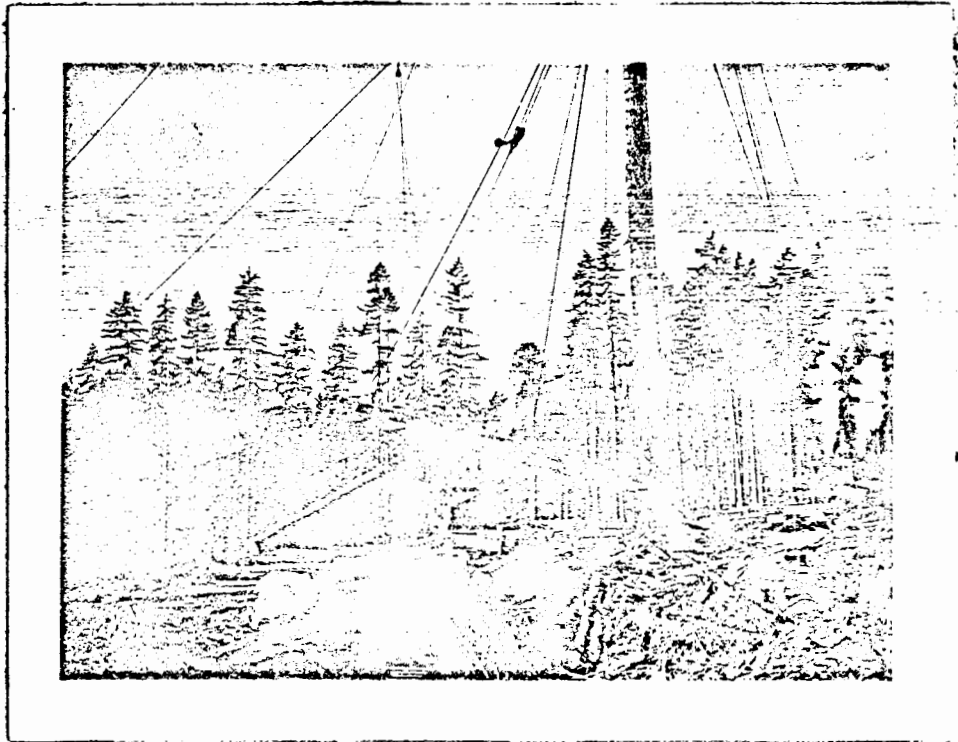
Hemlock timber stand  
along the Olympic  
Highway.



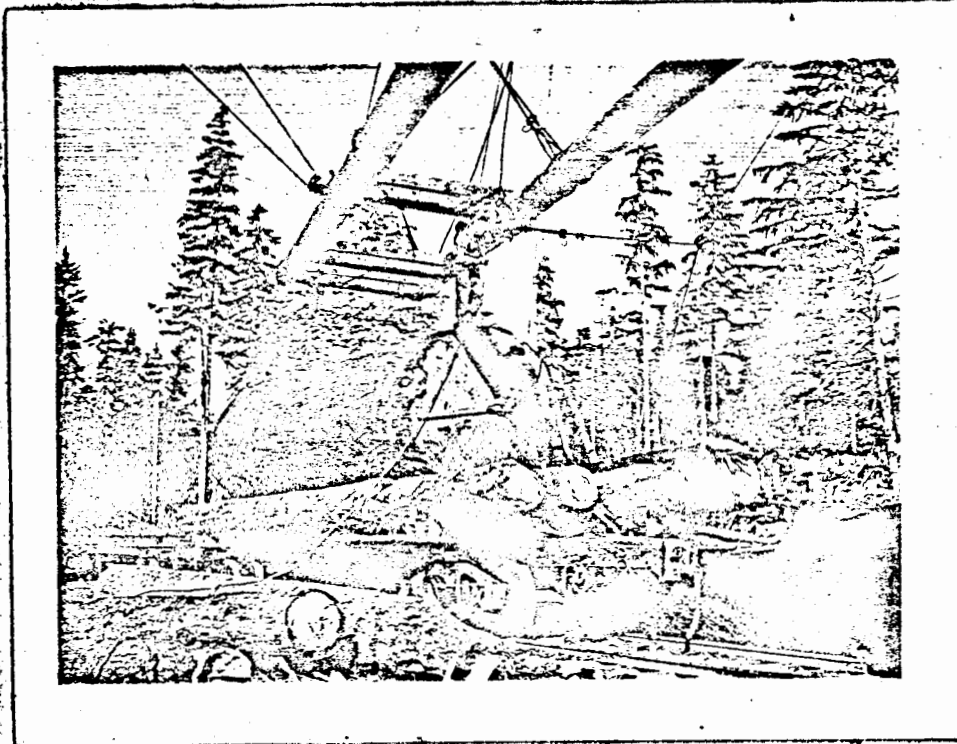
Cedar-Hemlock stand.  
Lunch Creek drainage.



Donkey Logging  
Spruce-Hecklock Stand.  
Skidding to spar tree



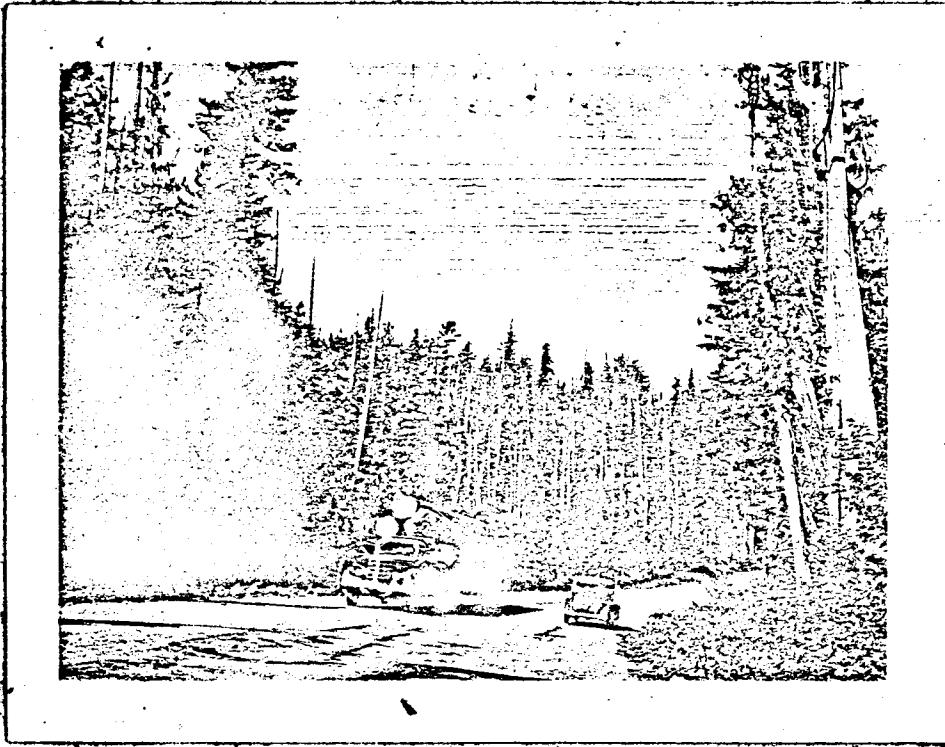
Donkey Logging.  
Loading.



Log Sealing. Douglas  
Fir Peeler Log.

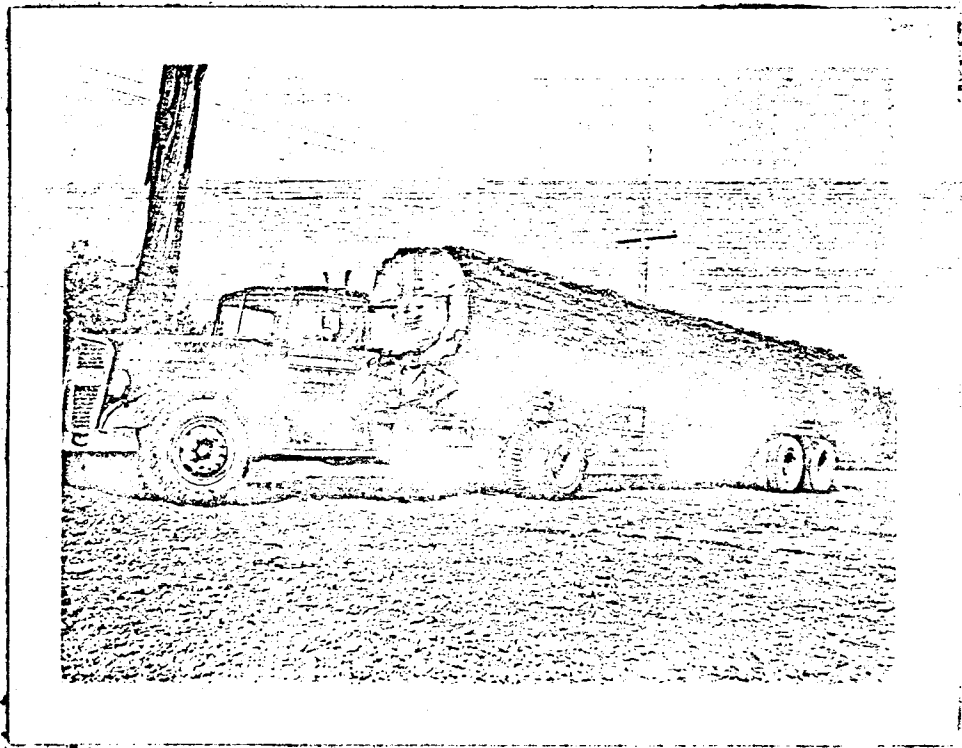


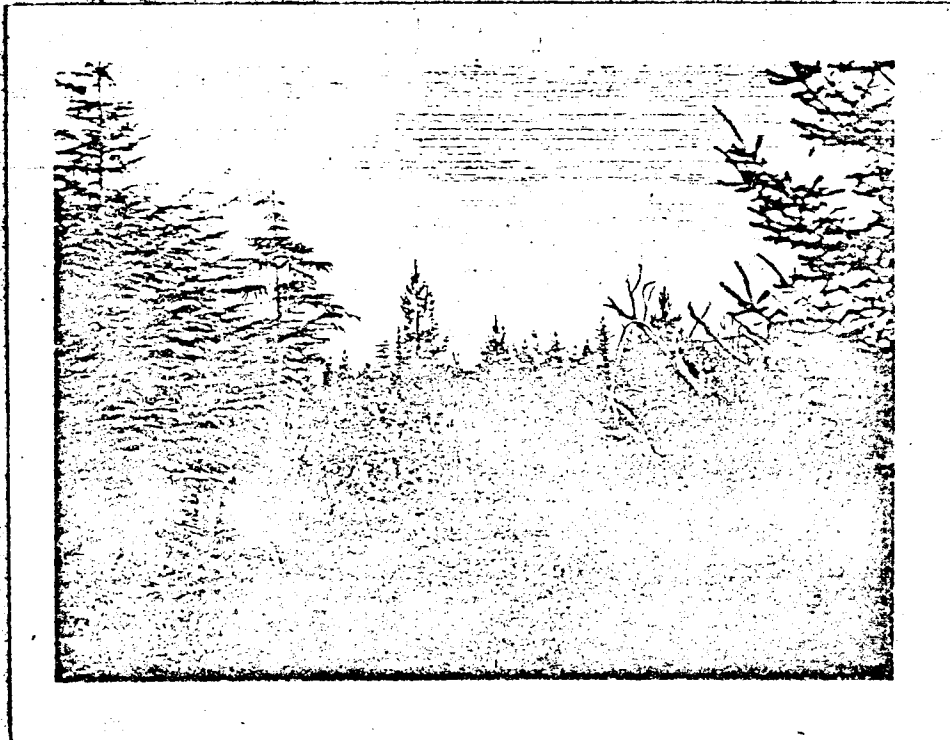
Log Sealing on Rail-  
road Cars.



Log transportation by  
truck, mixed timber  
stand in the background  
hemlock, cedar, spruce  
marialis fir, and white  
pine.

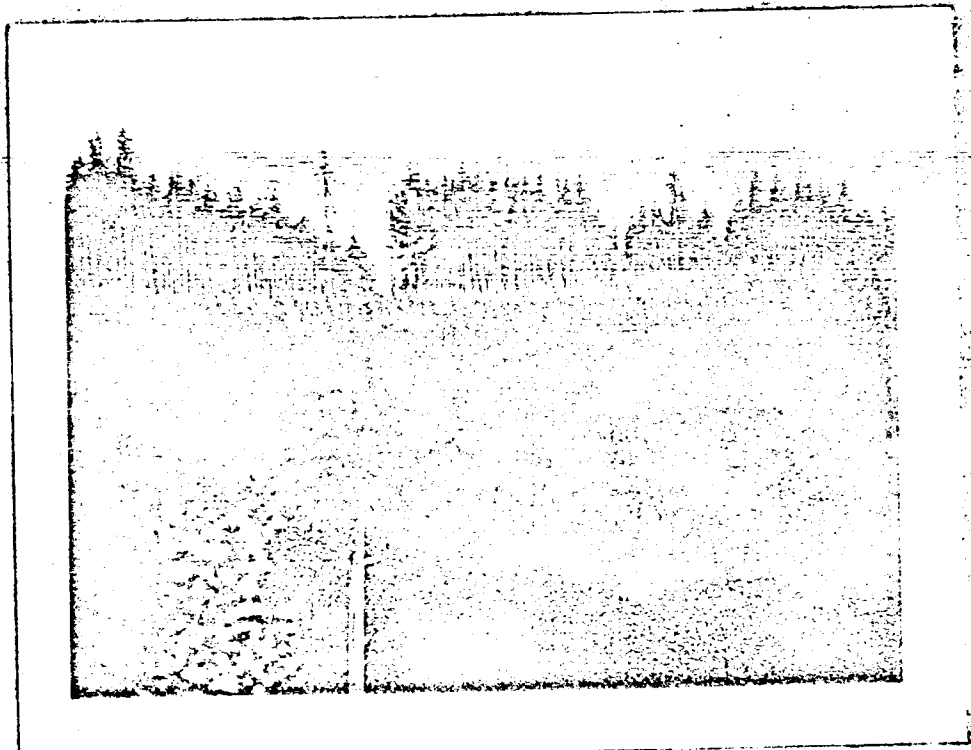
A one log load.



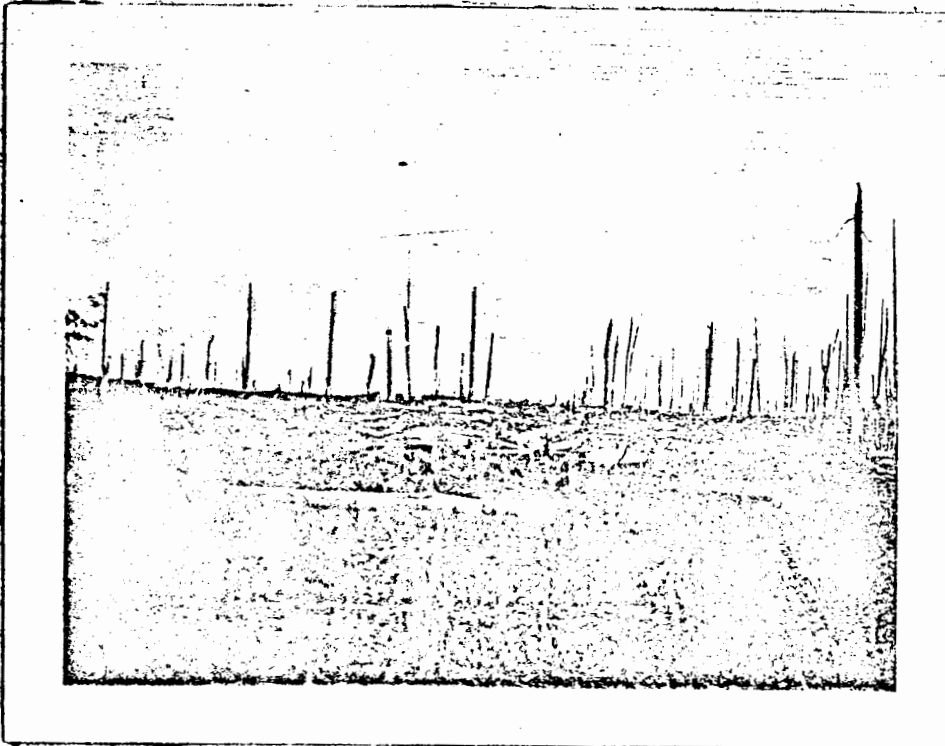


Reproduction after  
clear cutting. Hemlock  
Douglas fir, and white  
pine.

Hemlock reproduction  
on hill side. Alder  
in creek bottom in  
foreground.

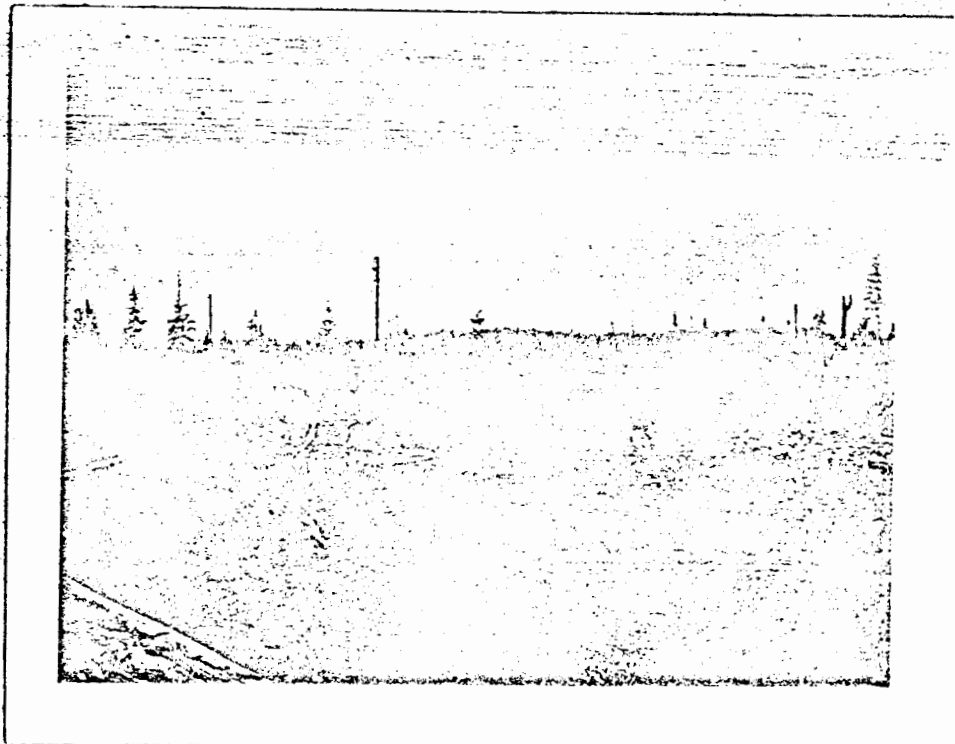




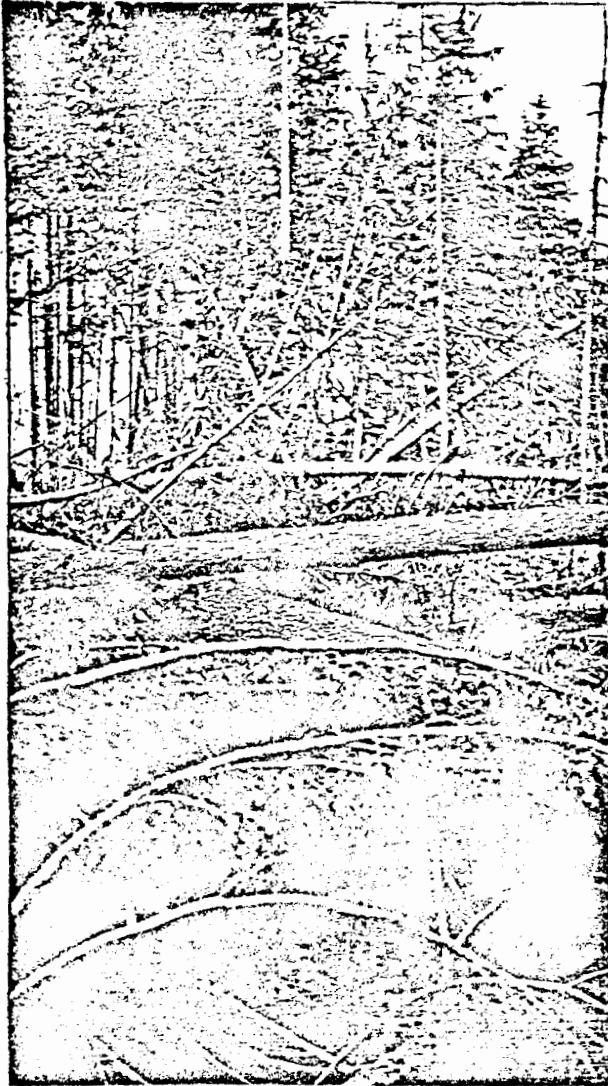


Cut over area, burned  
over and in need of  
reforestation through  
tree planting.

Typical bracken fern  
growth on burned over  
logged area. In need  
of reforestation.







Selectively logged areas after  
a severe windstorm, December 1940.  
Quinnilt Reservation.

