FOREST LAND USE IN OREGON

by

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A SEMINAR THESIS

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IMPORTANCE OF THE FOREST RESOURCES TO THE STATE

Oregon, now in possession of one-fourth of the remaining stand of merchantable timber in the United States, is one of the few states where it is not yet too late to adopt policies of sustained yield forest management, which would insure a permanent forest industry. The timber resource of the state is serving as the economic base of support for a large part of the population. It is important that it shall continue to do so, not for twenty or forty years to come, but permanently. Oregon's forest products are being used in every state of the nation and, as time goes on, this last great stand of old-growth timber will assume an even greater national importance.

In the utilization and preservation of the resource, there are many difficult problems: control of fire, control of certain tree-destroying insects like the pine beetle, control of forest tree diseases, and maintenance of the land in a condition favorable to silviculture. More critical than any of these, however, is the problem of finding ways and means by which ownership may be stabilized and placed on a sustained yield operation basis. The policy of destructive liquidation can lead only to economic and social disaster, and it cannot be avoided without careful planning and strenuous cooperative effort on the part of government and private enterprise.

The forests of Oregon have played a large part in the economic
development of the state, and employment of her citizens. A great heritage has become ours, and depending upon the orderly development of this valuable resource is the whole future of the state. Within the boundaries of the state are some 397 billion feet of timber. There are only 1,668 billion feet (2) in the entire United States. This great resource is largely in its original condition, and thus presents a problem in administration and utilization.

Economic Dependency on Forest Industry

At the time of the 1930 census, persons gainfully employed in the basic industries of Oregon were distributed as following:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Workers</th>
<th>%</th>
<th>Payroll</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All manufacturing</td>
<td>156,000</td>
<td>100</td>
<td>$118,321,000</td>
<td>100</td>
</tr>
<tr>
<td>Timber and wood prod.</td>
<td>52,000</td>
<td>61.1</td>
<td>75,177,000</td>
<td>63.5</td>
</tr>
</tbody>
</table>

| TABLE I (7) | PERSONS ENGAGED IN MANUFACTURING |

The above table shows that the timber and wood products industries was employing 52,000 persons, or 61.1 percent of those employed in manufacturing. All basic industries in the state employ 156,000 workers, and the 52,000 employed by timber and wood products industries makes up 33.5 per cent of the workers in all basic industries. The service industries in the state employ 239,000 workers, and based upon the ratio of the timber workers to the basic industry workers, 33.5 per cent or 80,065 of the service workers are dependent upon the 52,000 timber and wood products workers. When the family dependents are included it is found that a total of 307,711 workers and families, or 32 per cent of the total

* Numbers in parentheses refer to List of References.
population of the state are dependent upon the lumber industry.

The payrolls from our forest industries has been the major source of wealth to the workers of the state. From 50 to 64 percent of the income from production was returned through the forest industries.

While these figures for employment and dependency may be incorrect due to the severe fluctuations in production industry during the depression, they are not unduly high. Under a well devised system of sustained yield operations, the number could probably be raised until the forests were furnishing a major share of the support for perhaps half a million persons (7). This would require certain integration with various other seasonal employment industries, and in some cases, with agriculture. Work in the woods might become a source of cash income during the months when farm employment reaches its lowest ebb.

However, such an economic set-up will require real stabilization of the forest industry of the state. Elsewhere in the United States where the forests have been operated under a "cut-out and get-out" policy the employment in the forest and related industries has been decreasing for more than 20 years. So far, this has been due only in a small part to increased output per man. The principal reason is the decrease in total output. Only through sustained yield can forest employment and incomes be maintained and stabilized in this state.

Forestry and Employment

For European countries, where many forests have been under sustained yield management for a long time, there is considerable information on employment in forestry and forest industry.
In 1927 the state forest of Prussia gave work to 143,600 men and women. For the majority of these the forest work was supplementary to agricultural or other employment, for the men worked an average of only 98 days and the women 29 days. The total was equivalent to about 33,000 year-long employees for the 5,500,000 acres of forest, or 1 to 167 acres. By 1930 the ratio of employment was reduced to 194 acres per person. This includes logging, but not work in sawmills or other manufacturing industries. For all of Germany, with 31,000,000 acres of forest, from 1,500,000 to more than 2,000,000 persons are employed part or full time in forestry, logging and wood-using industries (11, p. 103).

Of course it will be many years before our forests can be organized on as intensive basis as those in Germany, but their results serve as some indication as to what can be accomplished.

Forests and Community development

The forests constitute a major tangible resource of many of our counties. They have furnished as the source of tax revenues along with other land uses such as agriculture and grazing. Such a distribution of the tax load has made the charge small and democratic. Under such favorable conditions agriculture has flourished, and the counties have prospered.

This state has developed fine roads, harbors, and schools with the assumption of their maintenance and sustained use. Such plans preclude stable industries, stable communities, and stable tax revenues. The only way to accomplish this stabilization is by putting our major industry, forestry, upon a sustained yield basis. Under the present system of destructive liquidation the basic resource of our state is being dissipated, and our institutions are being threatened with curtailment.

(Further development later).

Forestry and Public Finance

It is estimated that 30,000,000 acres in Oregon are best used for
the production of timber crops. At the present time 12,351,000 acres of forest lands are in private ownership, and are furnishing a tax revenue to the respective counties and the state. These tax revenues form a broad tax base that makes the tax per acre on all lands less because it is so widespread.

Gradually as the timber is removed from the land, they become less desirable to private holding, and thus in many cases are allowed to go tax delinquent. The result of this policy is two-fold: (1) the land ceases to pay taxes, and thus the tax base narrows and the load becomes heavier on the remaining taxable property, whether forest or agricultural land, (2) the land becomes a responsibility and an expense to the county.

As briefly outlined above, it can be seen that the forests of Oregon are of great value to the state. They furnish employment to a large number of the population, and are the source of much wealth, both as wages and as taxable property. At the present the forests on a large part are being liquidated without any plan, and this procedure is a threat to the welfare of the state.
THE MAJOR FOREST PROBLEMS

Forest lands constitute one of the major land uses in the state of Oregon. More than 29,864,000 acres, or 48 per cent (9) of the land area, is in forestry use today. The administration of such a large resource is most complicated, and presents many problems. The growth, the ownership, the protection, and management of this major land use are only some of the more important and pressing questions to be solved. A knowledge of these problems is necessary before any rational plans can be advanced for their alleviation.

Growth and Depletion

According to the best available information, the total stand of timber in Oregon is about 397 billion board feet (7). The extent and location of the standing timber is indicated by the map, B-115. It is noticeable that the northwestern portion of the state is facing the prospects of depletion. The situation was made materially worse by the heavy losses in the Tillamook fire of 1933. The rest of the cut-over areas in the Douglas fir region are scattered, and as yet present no serious problem.

As shown by map B-115, there is about 201 billion board feet which can be considered as economically available for operating under the lumber market conditions which prevailed from 1925 to 1929. An additional 142 billion board feet might be cut if economic conditions are somewhat better during the period just mentioned. The remaining 54 billion board feet are either low in quality or inaccessible. Out of
LEGEND

- Timber operable under normal economic conditions
  (Billion F.B.M. 201)

- Timber which may become operable under more favorable economic conditions
  (Billion F.B.M. 142)

- Timber of low quality or inaccessible
  (Billion F.B.M. 64)

- Areas cut-over or burned

- Non forest areas including cut-over areas now largely in agricultural use and areas of juniper and other miscellaneous noncommercial timber

- Protection forests

- County boundaries

- National forest boundaries

OREGON
ECONOMIC AVAILABILITY
OF STANDING TIMBER
STATE PLANNING BOARD

ORMOND E. BEAN - CHAIRMAN
V. B. STANERS - CONSULTANT

W. S. PROTEST O. P. 42-4-43
APRIL 17 1936

B-115

SOURCES OF DATA
U.S. FOREST SERVICE
REGION IX
FOREST PROBLEM IN OREGON 1934.
the total timber stand of the state, about 300 billion board feet are in the Douglas fir region, with 139 billion board feet or forty-six per cent available.

Much of the easily available timber in the Northwest has been cut heavily in the past. Large areas in western Washington have been logged as water transportation made the removal easy. The valuable old growth, commercial timber, Douglas fir and cedar, has been pretty largely removed in that state. Fifteen years at the present rate of cutting and this particular class of timber will be almost gone (2). Then Oregon will be the only place left to get substantial supplies of Douglas fir lumber. When this load is shifted to Oregon the same process of depletion will take place, resulting in the same distressing consequence that have marked the experience of other states where forests have been depleted without provisions for future crops.

Just how much of this load we can assume in Oregon is a question, as at the present the cut in Oregon exceeds the growth. The annual growth increment of Oregon's forests is not high, however, as they are mostly old growth timber in which the annual growth is largely off-set by deterioration. In recent years the annual growth increment of Oregon's forests has not been more than fifty per cent of the annual cut (7). Under proper methods of cutting, this rate of growth will be greatly increased. Removal of the old growth material in such a manner as not to destroy the young advanced growth and to get the maximum amount of reproduction will greatly increase the growth rate. It is estimated that with the most favorable cutting methods and highly efficient protection of the cut-over lands, the potential growth increment might be approx-
### TABLE II

**AREAS OF TIMBER LAND AND VOLUME OF TIMBER BY OWNERSHIP CLASSES**

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>Area in thousands of acres</th>
<th>Volume of timber in millions of board feet</th>
<th>Per cent by Log scale * volume</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WESTERN OREGON (DOUGLAS FIR REGION)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>7,284</td>
<td>137,402</td>
<td>46.</td>
</tr>
<tr>
<td>National Forest</td>
<td>5,365</td>
<td>112,598</td>
<td>37.</td>
</tr>
<tr>
<td>Revested grant lands</td>
<td>2,115</td>
<td>45,874</td>
<td>15.</td>
</tr>
<tr>
<td>Indian</td>
<td>17</td>
<td>255)</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>115</td>
<td>742)</td>
<td>2.</td>
</tr>
<tr>
<td>County &amp; municipal</td>
<td>398</td>
<td>2,781)</td>
<td></td>
</tr>
<tr>
<td>Other federal</td>
<td>283</td>
<td>1,499)</td>
<td></td>
</tr>
<tr>
<td><strong>WEST SIDE TOTAL</strong></td>
<td>15,577</td>
<td>300,792</td>
<td>100.</td>
</tr>
<tr>
<td><strong>EASTERN OREGON (PINE REGION)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>5,067</td>
<td>42,066</td>
<td>44.</td>
</tr>
<tr>
<td>National Forest</td>
<td>5,873</td>
<td>45,220</td>
<td>47.</td>
</tr>
<tr>
<td>Indian</td>
<td>1,165</td>
<td>7,914</td>
<td>8.</td>
</tr>
<tr>
<td>Other public</td>
<td>918</td>
<td>1,396</td>
<td>1.</td>
</tr>
<tr>
<td><strong>EAST SIDE TOTAL</strong></td>
<td>13,025</td>
<td>96,596</td>
<td>100.</td>
</tr>
<tr>
<td><strong>SUMMARY FOR THE STATE AS A WHOLE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>12,351 **</td>
<td>170,108</td>
<td>45.</td>
</tr>
<tr>
<td>National Forest</td>
<td>11,238 **</td>
<td>157,818</td>
<td>40.</td>
</tr>
<tr>
<td>Indian</td>
<td>1,182</td>
<td>8,170</td>
<td>2.</td>
</tr>
<tr>
<td>Other public***</td>
<td>3,829</td>
<td>52,292</td>
<td>13.</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>28,600</td>
<td>337,388</td>
<td>100.</td>
</tr>
</tbody>
</table>

* Volume estimates include both conifers and hardwoods. Of the latter there are about 3 billion board feet.

** Forest land only

*** State lands 125,415 acres, County and municipal 434,298 acres.

**** Oregon State Planning Board: Oregon's Forest Problems
The Present Condition of Private Forestry in the State

The privately owned timber lands are of primary importance because they comprise the great bulk of the most highly productive forest lands, and they contain the larger volume of the saw timber which has immediate commercial value.

The main problems of the private timber industry arises from the fact that investments in standing timber and operating facilities are too large considering the possible rate of conversion and use.

An immense body of timber was placed under private ownership through a mistaken public land policy. It then became subject to speculation, capitalization, taxation and other carrying charges incident to private ownership (10). The conversion of timber into money became the main motive of the industry. Not only during the depression, but for over twenty years, the pressure to liquidate has dominated the lumber industry of Oregon. The longer forest property is held, the more the cost per acre and per unit of timber volume arises. There is no comparable increase either in growth or in stumpage values. In many cases timber properties are bonded or otherwise mortgaged; interest charges are heavy, and with little or no income, owners are adverse to providing funds for interest, taxation, or protection. Consequently, timber must be liquidated even by a partial or entire write-off of stumpage investment in order to furnish working capital for current carrying costs of timber and operating plants. High fire risks greatly hasten liquidation in many parts of the region.

The existing tax system is particularly burdensome on timber held
over long periods. In the Douglas fir region, annual tax costs on standing timber range from one cent per thousand feet, or about seventy cents per acre in heavily timbered counties, to over eight cents per thousand feet, or over $4.00 per acre on individual tracts in the heavily depleted counties, the cost per thousand increasing year by year as the timber diminishes(10).

This has given rise to a great over-building of the sawmill capacity, and a rapid cut of the standing timber. In the Douglas fir region of Oregon and Washington, the existing sawmill capacity is estimated to be 50 per cent above the average actual production for the years 1925 to 1929, a period of high output(3). This excessive capacity naturally contributes to overproduction, as well as unstable economic and social conditions.

The "boom" which follows too rapid exploitation and liquidation of natural resources follows a more or less generalized pattern. A boom centering around lumbering begins with the first logging operation in a virgin timber area. Plant and equipment are quickly installed far beyond the sustained yield capacity of the tributary forests. Other logging operations and sawmills follow the first, and production gathers momentum as it goes. As the boom gets under way, local agriculture and business prosper and expand, and increases in taxes are accepted complacently by the tax-payers. Every community desires intensely to outdo some neighboring community in the excellence of its public buildings and its roads. As the income from taxes and business mounts, and without

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In the February, 1937 West Coast Lumberman, Mr. Ted Goodyear presented figures showing that it "costs a land owner $139.52 to carry an acre of growing timber for sixty years in the state of Washington."
calculating the cost to complete, a program of public improvements is launched. When the peak of the boom is passed, property values decline, and the burden of local taxation begins to bear heavily on the primary raw material industry and local citizen alike.

In Oregon we have all phases of this "boom" phenomenon illustrated. The coastal region of southern Oregon is just beginning to be opened up, and as a result there is a great influx into the region. Property prices are advancing, and business is brisk. The greatly over-built milling capacity at Klamath Falls is the direct result of such a policy. It is estimated that at the present rate of cut within twenty years, the timber will be removed from this area (7). Then the city and county will be left to get along the best they can with seriously reduced incomes and large bonded indebtedness. At Bend, the process has reached a more advanced stage than at Klamath Falls. Here there has already been a reduction in milling capacity due to lack of timber. The mills that are now operating, bring in logs from operations many miles away. The northwestern portion of the state is already faced with depletion. Several of the large milling operations in this region have just recently liquidated their equipment and gone out of business, as the country had been cut clean.

With the present installed sawmill capacity in these localities, operating at the present rate of cut, there will be a problem of exhausted private timber within the near future unless a plan of sustained yield management, which includes all the remaining private and government timber, is immediately adopted. Map, B-116, indicates the location and reported capacity of sawmills over 21,000 board feet per day as of
Oregon

Sawmill Locations

Principal Mills with Capacity of 21,000 F.B.M. and Over

State Planning Board

[Map details and legend for sawmill locations and capacities]
the last census reports. It will be noticed that the existing sawmills are heavily concentrated in the northwestern quarter of the state where the available timber is diminishing. With the increasing flexibility of transportation facilities and the continued improvement of roads and waterways, it may be possible to move the logs to the established mills. If this cannot be done, there will be considerable migration of the industry southward, and consequent problems of readjusting the industrial population of the northwestern section of the state.

The Breakdown of Private Forest Land Ownership.

Throughout the Northwest states there is a very rapid movement of cut-over lands to county ownership through tax delinquency and foreclosure. The process of transfer promises to be accelerated in the future since there is little inclination on the part of many private owners to hold land after the timber is removed.

One of the most difficult problems now confronting Oregon counties is the handling and disposition of lands acquired through tax foreclosures. Such lands have reached the high total of 1,794,684 acres, or 2.35 per cent of the entire rural area of the state and 7.02 of the rural land in private ownership(13).

Economists of the Pacific Northwest Forest Experiment Station recently found that of the forest land areas of 18 western Oregon and Washington counties, more than 3,200,000 acres were tax delinquent and almost 479,000 acres had been acquired by the counties for unpaid taxes

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In Oregon lands may be foreclosed by the county when three years delinquent if there is no tax certificate purchaser, and thereafter they become the property of the county, either to be sold or held. (Tax certificates are no longer offered for sale by the counties).
More than 37 per cent of the area of private and county-owned lands studied was involved in long-term tax delinquency. The owners of lands valued for tax purposes at more than $40,000,000 had either permanently or temporarily stopped paying taxes.

The situation implies and reveals the financial distress of these land owners. It has other serious aspects. The burden of supporting local government has been shifted to the owners who are continuing to pay taxes. As this burden becomes concentrated on a smaller and smaller number of property owners, the process of timber depletion are speeded up, and lands giving little promise of yielding early incomes are dumped into the delinquency hopper.

This situation is best illustrated in Oregon in the cut-over lands in northwestern Oregon. In a recent article C. J. Buck points out the situation in Clatsop County(3).

In Clatsop County, timber land in 1920 comprised 72 per cent of the area, and 43 per cent of the total assessed valuation. In 1920, 137,000 acres of land had been cut-over. Taxes were forcing rapid liquidation of the remaining timber. By 1930, the cut-over area had increased to 275,000 acres. Agriculture had taken practically none of this land. Cultivated acreage was less in 1930 than in 1920. Tax levying bodies were attempting to make the remaining timber carry the tax load that had previously been carried by all the timber. By 1932, seven per cent of the total area of the county had reverted to the county for taxes, and 37 per cent of the total area was delinquent for from two to five years. In 1918 timber lands paid 48 per cent of the county taxes; in 1930 they paid 32 per cent. The assessed valuation of the county had dropped from forty-one million dollars in 1920 to twenty-seven million dollars in 1931. The population had declined from 23,030 in 1920 to 21,124 in 1930.

The Protection of Timber Resources

The realization of a public responsibility for aid in the protection of the forests from fire, insects, and disease, dictates a policy
of government aid. In fire protection, the public use of private lands, public carelessness with fire, and fire hazard which is beyond the control of private owners makes it entirely fair and just for government aid in protection. In insect and disease protection work, the irregular epidemic character and special control methods may make the efforts of individual owners ineffective.

In Oregon approximately twenty-eight million acres of forest land requires protection from fire. Out of this total about eleven million acres are protected by the Forest Service, about fifteen and one-half million acres are under the jurisdiction of the State Forester, and the remaining one and one-half million acres are in the Indian Reservations and National Parks(13).

The heaviest losses occur on private lands, and here the public has a responsibility which has not been sufficiently recognized. A little over seventy-five per cent of all the fires were caused by sources of which the forest owners had no control. For this reason and also because the public has a vital interest in the protection of the forest resources, public funds for fire protection should be increased to provide for more adequate prevention and control facilities.

In Eastern Oregon depletion from pine beetles has been more serious than the fire losses (see map B-114). In fact, the beetle killed timber in Eastern Oregon from 1931 to 1935 inclusive, exceeded the amount cut for lumber. The beetle loss was 3,805,200,000 board feet as compared with cuttings of 3,398,256,000 board feet(13).*

*In 1936 the beetle loss amounted to about 400 million board feet as against 500 million board feet in 1935. A. J. Jaenicke in the Six-Twenty-Six-January, 1937.
OREGON
PINE FOREST AREAS INFESTED
BY WESTERN PINE BEETLE
STATE PLANNING BOARD

NORMAL INFESTATION—
LESS THAN 50 TREES PER SECTION
LIGHT TO MODERATE EPIDEMIC—
FROM 50-200 TREES KILLED PER SECTION
HEAVY EPIDEMIC—
OVER 200 TREES KILLED PER SECTION

SOURCES OF DATA
FROM 1935 SURVEY
U.S. BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
U.S. FOREST SERVICE—U.S. INDIAN SERVICE

OREGON STATE PLANNING BOARD
OREGON STATE—CHAIRMAN
V.A. STABEN—CONSULTANT
W.P.A. PROJECT G.P. 60-94-41
APRIL 16, 1936
This loss is nearly twenty times as great as the fire loss in this area. With emphasis in the past placed more or less upon fire protection and fire losses, there has been little public realization of this distinct threat to the pine forests of eastern Oregon. In 1921, the state of Oregon recognized the seriousness of the beetle infestation, and the legislature passed the insect pest control law. Since then much work has been done, but concluding from the great losses sustained, it is doubtful that much good has been derived from the control work. The greatest need at the present time is research into the subject in order to determine more economical methods of controlling the pest.

In the Douglas fir region, the hemlock looper has killed over five-hundred million board feet of fir and hemlock in a single epidemic. Other insects and forest tree diseases cause heavy damage.

The Problem of Unmanaged Public Lands

There is a great acreage of forest land and potential forest land, both in federal and state or county ownership that is unmanaged at the present time. To best utilize our forest resources we must at least have our publicly owned lands under some efficient system of management.

No discussion of the forests of Oregon would be complete without the mention of the "O and C lands". These consist of some two and a quarter million acres of federally-owned timber lands, scattered through eighteen counties in the western part of the state. The peculiar nature of this forest land problem may be quickly grasped by a glance at the map B-101. The black area represents the total acreage and the approximate location, but it was necessary to generalize the actual checkerboard pattern on this scale map in order to avoid the impression of a
mere dotted line.

The original grant, made by the federal government to the transportation companies, comprised the alternate odd-numbered section within the grant area which extended through western Oregon from the California to the Washington state lines. Before the grants were cancelled, practically all of the lands having agricultural value, and large portions of the timbered area had been sold by the companies. The remaining lands are in a somewhat scattered shotgun pattern.

On June 9, 1916 Congress passed the restated statutes known as the Chamberlain-Ferris Act (6). After laying claim to the lands in the name of the people of the United States, the act provided that the Secretary of Interior "after due examination in the field" should classify the land into three classes: (1) power site lands—those chiefly valuable for waterpower sites; (2) timberlands—those lands containing 300,000 board feet or over of timber to the forty acres subdivision; and (3) agriculture lands—all remaining lands.

The power site lands, negligible in point of area, were withdrawn from entry. The lands embraced in classes two and three were put upon the block for disposal and exploitation under the following procedure: Those in class three, which Congress declared were agriculture merely because they contained less than 300,000 board feet of standing timber to the forty acres, were thrown open to immediate entry under the general homestead laws, patents to issue upon cultivation satisfactory to the Secretary and upon payment of $2.50 an acre by the entryman. Class two lands—those containing 300,000 board feet and over of standing timber to the forty—the act provided, should be withheld from entry until the timber had been sold and cut when they should be thrown open to home-
stead entry free of cost to the entryman.

To remove the timber so that the lands might be available to settlers, the Secretary of Interior was directed to sell it for cash "at such times, in such quantities and under such plan of public competitive bidding as in the judgment of the Secretary of the Interior may produce the best results" (4).

Once the standing timber is bought and paid for, operators have been permitted to lumber it as they see fit.

For years these O and C operators were permitted to let the slash from logging lie where it fell. No disposal was required by the department, even though the Oregon state laws required operators on private lands to properly dispose of their slash. In 1928, however, the Chamberlain-Ferris Act was amended to authorize the Secretary of Interior to make such rules, regulations and conditions for the cutting and removal of the timber as he may deem necessary. The only ruling the Secretary has made under this authority is the requirement that the purchaser shall file a bond to assure disposal of slash resulting from cutting.

This sale policy is one of outright liquidation with no provision for cutting policy which conforms to desirable forest practice or sustained yield management. Sales are made on competitive bids. The policy governing the disposal of this O & C timber is directly parallel with that which private timber owners are being forced to follow by reason of the economic pressure from an overload of stumpage held in private ownership. The federal government has thus adopted directly contradictory policies to govern timber sales from the O & C lands and those from the National Forests.
Now as to just what timber lands are included on these acres that the Secretary of Interior is to make into homesteadlands by allowing the timber to be cut off. The bulk of the O & C timber is Douglas fir, though in Jackson and Josephine counties there is considerable pine and in Coos Bay district there is estimated to be around 160 million board feet of Port Orford cedar.

The O & C revested lands originally embraced 2,467,130 acres. By homesteading, something less than 300,000 acres have been patented or are subject to patent. In National Forests there is embraced around 580,000 acres, while 1,800,000 acres are intermingled with state and privately owned timber. (15).

Put in another way, within the boundaries of the O & C lands it is estimated that there is controlled around 82 per cent of the publicly owned Douglas fir.

It is estimated that the production in the Douglas fir region of Oregon will be around 2 billion feet in 1936; the cut from the O & C lands, because this happens to be a year of heavy cutting from this source, it is estimated will be around 350 million board feet. Roughly speaking, it may be said that in recent years around 1/8 of the cut in the Douglas fir region of western Oregon has come from the O & C lands (15).

That a bulk of these lands are obviously not agricultural lands, is apparent on inspection of the above figures. It is also apparent that these lands are some of our most valuable forest lands, and should be administered as such. For the present these lands are closed to homestead entry by an Executive Order of November 26, 1934. In order to bring the O & C lands management policy into line with the recent marginal land purchase policy which governs the activity of the Resettlement Adminis-
tration, this closure should be made permanent except for those lands which can definitely be classified as suitable for agricultural use.

As brought out before there are large amounts of land moving into county ownership through the process of foreclosure for delinquent taxes. Most of the counties have neither the finances or desire to give these lands any protection or administrative attention. Their efforts are limited to trying to make sales of and restore to the tax rolls what little of the county lands as can be sold for agriculture, range, or lumbering.

The future of tax delinquent lands in one of the important problems of land management in the state. It is important that this type of ownership, which is ever increasing in acreage, be given such status that it will be properly handled. Permanent ownership by the counties does not seem to be practicable, and it is probable that the best ultimate solution will be through transfer either to the states or the federal government.
RECOMMENDED POLICIES AND LEGISLATION

The problems that have to be solved before our forest industry is operating upon a sustained yield basis are multitudinous and have many ramifications. Attainment of the major objectives may require years. The transition from a liquidating industry to a sustained yield industry is no simple matter. It will require greater stability of private ownership than that which now exists, and it is not yet possible to see all of the changes which will be needed. There are, however, concrete steps which may be taken in the immediate future.

The Pacific Northwest Regional Planning Commission has presented a comprehensive program for the Northwest.(16) This plan has been adapted in part to fit the needs of the state of Oregon. The following recommendations state briefly the action which should be taken by the federal government, the state of Oregon, and by the industry.

Recommended Federal Action

1. Authorize establishment of "Cooperative Sustained Yield Units" consisting of National Forest, other federal, state, and/or private forest lands (5).

2. Establishment of a new branch of Farm Credits Administration to organize "Forest Credits" so that funds may be available at a minimum practicable interest rate for private forest owners engaging in sustained yield
forest management. Also extend forest insurance, under its direction, to other forest lands where satisfactory protection systems are in force.

3. Amend Clark-McNary Act (which provides federal funds to be used in cooperation with state and private funds in protecting state and private forest land from fire) by:

(a) extending scope to include insect and disease protection, erosion control and flood protection, and
(b) increasing annual fire protection authorization from $2.5 million to 5 million dollars, and providing a new authorization of $1,000,000 for forest insect and disease protection.

4. Authorize for a period of 10 years annual appropriation of 30 million dollars, to be available until expended, for the acquisition of forest land for National Forests, in such purchases giving due consideration to the encouragement of management of private lands for sustained production, and to the development of "Cooperative Sustained Yield Units" through the acquisition of lands of such a character and location as will contribute to the establishment of such units.

5. Amend present law (under which 25 per cent of all National Forest receipts are paid to the counties for their school and road fund) so that, in view of (a) relatively delayed utilization of most National Forest timber, and (b) proposed substantial increases in National Forest area, more suitable methods may be devised, if practicable, for paying counties in lieu of tax income not obtainable because of land in federal ownership.

6. Amend the McNary-McSweeney Act by increasing total authorization for the Forest Survey from 5 to 6 million dollars, authorizing annual appropriations of sums necessary to complete this survey at an early date, and providing for an additional $250,000 annually for its main-
7. Amend Clark-McNary Act (as it relates to United States' acceptance of donations of forest lands) by permitting the United States to pay taxes due on such lands. Also amend National Forest Land Exchange Act (which permits exchange of National Forest forest land and/or timber for other land within National Forest boundaries) by extending area within which such other land may be located to include all lands within six miles of the Boundaries of the National Forests as they now exist.

8. Amend existing Revested Land Grant legislation to provide (6):
   (a) for sustained yield forest management (including authorization to participate in "Cooperative Sustained Yield Units"), and
   (b) for homestead settlement only upon lands applied for and found to be desirable primarily for agricultural use.

9. Authorize presidential proclamation of suitable unreserved public domain lands as National Forests.

10. Legislation to provide adequate fire protection for all forest lands in federal ownership.

11. Amend existing law to provide larger funds for
    (a) research in forest products, silviculture, stream flow, range management, and especially in economic fields, including community stabilization, and for
    (b) extension work in connection with utilization of farm woodlots and small timber ownerships.

12. Legislation similar to no. 1 above authorizing participation of Indian forest lands in "Cooperative Sustained Yield Units".
13. The Soil Conservation Act should be extended to apply to all lands chiefly valuable for forest production actually managed for that purpose.

14. Legislation authorizing the Secretary of Agriculture to develop and make available for public use and enjoyment the recreational, educational, and related values of the National Forests compatible with the purpose for which they were originally created and with the proper management and conservation of their scenic and wildlife resources.

15. Legislation for all National Forest lands separating subsurface mineral rights in order to protect public recreation and other forest uses.

16. Legislation which will authorize the Secretary of Agriculture to prohibit entry, and regulate occupancy and use of National Forest lands located in watersheds used as a source of municipal water supply.

**Federal Administrative Policy**

1. It is recommended that the federal government promptly, so far as practicable under existing legislation, extend the sustained yield management of the forest lands under its control to participation in "Cooperative Sustained Yield Units".

2. Make full use of existing National Forest exchange legislation, without limiting to 10 per cent of the National Forest receipts the application to be considered, to encourage private owners, whose cut-over lands are likely to be acquired, to leave such lands in suitable condition for forest management, and to encourage leaving residual stands.

3. In making plans for forest acquisition and for forest manage-
ment especially of sustained yield units it is urged that in each state all agencies managing public lands cooperate with each other and with private owners in order that they may be suitable coordination of effort.

4. In the administration of federal lands of all categories it should be the policy to safeguard the aesthetic and recreational values of the natural forest on areas of outstanding or predominant value for these purposes such as the immediate borders of principal highways, lake-shores, recreational centers, etc.

5. Continuation of program for classification of land as to its best long-time use to indicate (a) submarginal agricultural lands in predominately forest areas which should be retired from agricultural use, with relocation of the settlers now on such lands, and to indicate (b) areas in which further agricultural settlement should or should not be encouraged.

Recommended State Legislation

1. Amendment of taxation system to extent necessary to remove unreasonable obstacles to sound management of private forests, including action designed to encourage sustained yield forest management (12).

2. Adequate appropriations for protection of state, county and private forest lands from fire, insects, and disease.

3. Legislation authorizing management of state and county forest land as part of "Cooperative Sustained Yield Units."

4. Substantial appropriations for the purchase of forest land (a) which will facilitate the establishment of "Cooperative Sustained Yield Units," or (b) which in private ownership will not receive suitable management.
5. Legislation enabling the state of Oregon, under the terms of the federal "Fulmer Act", to enter into agreement with the United States for the purchase, management, and development of state forests.

6. Legislation providing for the transfer of county foreclosed tax delinquent non-agricultural forest lands to the state to be managed as state forests. (Similar to Washington Act).

7. Legislation authorizing the zoning of rural lands, whereby lands primarily valuable for forest purposes may be designated and non-conforming uses therein restricted and regulated in a manner designed to promote sound forest practice, public health, safety and general welfare.

8. Legislation authorizing the state, counties or other minor political subdivisions to exchange lands with other owners with the purpose of consolidating their forest holdings.

9. Legislation authorizing the state (a) to administer forest areas primarily or preeminently valuable for aesthetic or recreational use, such as the borders of principal highways, rivers and lake shores, and recreational centers, so as to safeguard these values, and (b) to acquire such lands by exchange, purchase, donation or otherwise.

10. Legislation directing that all state-owned lands chiefly valuable for the production of forest crops be protected and managed for continuous forest productivity.

**Recommended Private Action**

Forest industries should accept the responsibility and obligation to cut and protect their forest lands so as to provide for regrowth. Continuous production should be their ultimate objective. The industries should continue to participate in the joint conservation
program of public and industry action formulated by the National Forestry Conference of 1934 (14).
LIST OF REFERENCES


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