The Forest Problems of the Pacific Northwest
and Industrial Self-Regulation
as Their Solution
by
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PREFACE

It has been said that it is impossible to get two lumbermen to agree about anything. This is true to the extent that men in the lumber industry have always held to their religion of strict individuality and independence. They have had to do this simply because every stand of timber is different and every operation calls for individual ingenuity. It has only been a comparatively short time that any successful organizations or agreements have been reached among them; these in the form of trade organizations such as the West Coast Lumbermen's Association. An agreement which they have carried out is the NRA Lumber Code, which they have observed voluntarily for the past several years.

Within the last year, however, the lumbermen are finding it quite evident that the government has turned against them in many of their ideas. Many of the leading men and companies in the industry have been fined for violation of the Sherman Anti-Trust laws and it is quite apparent that the government does mean to step into the picture and increase as far as possible their regulatory powers.

It is true that something should be done towards regulation and wise use of the nation's remaining great forest reservoir. Any regulation can be better carried out with much better results if it is done cooperatively by the persons concerned.
This paper was written with the purpose of pointing out to the lumbermen the "handwriting on the wall", and suggesting a possible solution to the problem of self-regulation.
INTRODUCTION

Recognition of the Problems

The fact that there exists an almost overwhelming problem in the lumber industry in the Pacific Northwest cannot be forgotten for an instant by the people depending upon lumber and forest products for their livelihood. Recognition is not hard to find. The timber owners, the lumbermen, the mill owners, the state and federal foresters, and the common laborers in the woods or mills will all declare that there exists a problem but each will give a different answer as to what it is and the reasons for it.

The timber owners will usually say that it is entirely a question of unbalanced taxation; the loggers and millmen will say that the log and lumber markets are too unstable and that labor is too unsettled. The laborers, on the other hand, will declare that wages are too low and jobs too scarce. The county and state representatives would see it as a problem of the instability of land ownership and consequently of the tax base. Public opinion, however, is divided, but in the main tends toward a viewpoint of abhorance of present logging practices and an upholding of strict conservation.

The problem, in fact, is of such a scope, that no one person could give a true picture from his own small, individual standpoint. It is not entirely an economic problem but exists as one of the conservation and of the social and economic utilization of the resources included in the
country's greatest remaining timber reservoir. As stated in a National Resources committee report in 1938, the problem is not only that of avoiding direct losses of existing and potential timber and in capitalized value of continuously productive land, but also one of avoiding the auxiliary effects of depletion—dislocation of economic and social life, including great losses in direct and indirect employment, and in industrial, commercial, service, and recreational activities.¹

**History of the Problem**

As an aid in determining the many phases of the trouble and for a background of the study and solution of the problem, it would be well to consider briefly the history involved in bringing about the existing difficulties.

Starting in Europe, we find that at the time of the French Revolution even those little-observed forest regulatory laws that were on the statute books at that time passed from the picture, and it was not until after 1900 that any more steps were taken to preserve what was left of the forests. From that time until the post-war period, the regulatory laws were passed mainly to assure a permanent forest cover on the watersheds of navigable streams, although the field was somewhat broader in Sweden, Norway, and Finland. After the first world war, the tendency was towards furthering the permanence of a forest cover from the economic aspects of unfavorable trade balances and utilization of the land for employment of as many persons as possible.²
Thus it can be seen that the first settlers coming to America had no background for a regulation or conservation policy. They cut and burned as much of the timber as they could and cleared as much of the land as they could for agricultural crops. This, at first, was a sound economic policy based on the fact that there were immense timber resources and the need for grain and food crops was immediate. This practice continued for some time, and it was out of this policy that grew the legend of inexhaustibility which gave the pattern of growth and development of the country.

From the time the first few sawmills were started in the east, there was a great demand for the lumber products. Railroads were pushing west into new territory, ships were being rapidly built, and towns and cities were springing up in the east. In 1900, private forest ownership ran more heavily to large holdings than it does today. There were still large sawmills in the east, and the southern pineries were getting into production. The Lake states had been heavily cut and were nearing the end of their supply, and the lumbermen were looking toward other fields. These last timber stores were the gulf states and the west and northwest. It was at this same time that steam power was being developed and new and efficient machinery was being made.

Of the hundreds of important companies engaged in manufacturing lumber and other forest products, most of them had definite operating and financial policies. All
of these policies regarded timber as a raw material in storage rather than a crop to be taken from the land and restored afterwards.  

The first awakening of forest owners to a possibility of growing timber at a profit came as a result of the General Forest Industries Questionnaire in 1919. It was along at this same time that the timber famine movement reached its peak. The newspapers and public opinion waxed strong for a policy of "look up our resources".

This movement in time died down as the famine failed to come, but is still not completely dead. The crest of the wave has passed, however, and at the present time people, particularly the lumbermen, are wondering what will happen next. This brings us up to date and to the problems now before us.

**Present Timber Supply**

Our present situation finds the great timber stands gone from most of the country. The Pacific Northwest is the only remaining stand of virgin timber which still approaches the proportions of a timber reservoir.

From the National Resources Committee report we find the states of Washington, Oregon, Idaho, and Montana have about 93 million acres of forest land, containing about 900 billion board feet of standing saw timber, or about one-half of that remaining in the United States. Forest land comprises over one-third of the area of the four states
with two-thirds of the region's timber west of the summit of the Cascade Mountains where about five-sixths of the area is forest land.

Thus it can be seen that Oregon and Washington, in particular are devoted mostly to timber growing. With this great concentration of such an indispensable resource, it naturally follows that there will be numerous problems in proportion to the concentration of this resource. This is true enough so let us look into the problems in more detail.

Problems of Private Timber Owners

From the standpoint of the private timber owner the problems are mostly of an economic nature. The one which is most apparent and which receives the greatest publicity concerns taxation.

Taxation

In 1935 the results of an exhaustive study of the tax problem were published as United States Department of Agriculture Circular 218, commonly known as the Fairchild Report. This report states that the existing tax obstacle to the practice of forestry on private lands arises in the main from three causes; (1) The high cost of local government, since, if government expenditures are high, the tax burden must necessarily be heavy; (2) The faulty administration of the property tax, whereby forestry may be bearing more than its fair share of the cost of government; and (3)
the inherent disadvantage of the property tax in respect to deferred-yield forests.

As for the high cost of local government, Mr. DeVrees of the Pacific Northwest Forest Experiment Station states that of the county tax levies, the greater portion or about four-fifths of the income goes toward public school maintenance. There is a more or less fixed county government cost which is not very easily reduced as there is a population in that county which must have the right of public education and of public roads. There is a possibility that through land zoning, some of the isolated farms could be moved closer to the centers of the school district, thus consolidating the education costs. It is unlikely, however, that the timberman can do anything to directly influence the county government costs.

The second main cause as given above was the faulty administration of the property tax so that forest land may be bearing more than its fair share of the tax burden. However, it was stated in the National Resources Committee report¹ that five-sixths of the land area west of the Cascades was in forest land. From this it is apparent, then, that the forest lands should bear the greatest portion of the burden of governmental costs.

Lastly, in regard to taxes, is the disadvantage of the property tax with respect to the deferred-yield forests.
To grow a stand of saw timber from seedling to the proper size requires in this region at least from 80 to 100 years. This means that the annual tax expense for each year will have to be carried for that many years before there is any appreciable income with which to meet these expenses. The private timber owner finds it impossible to continue to keep the ownership in the property unless his holdings are large enough and the timber valuable enough so that he would have enough from each year's cutting budget to pay for the tax on his entire growing stock each year until he can get around to it again. Such cases are very few in the Douglas Fir region. Therefore the case has usually been to return the cut-over lands to the counties by tax delinquency, particularly in the Douglas Fir areas.

Following is a table giving the area and percent of all county forest lands in Western Oregon acquired by tax foreclosure, private lands delinquent for 1930 taxes, and for prior taxes.\(^5\)

<table>
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<th>County lands acquired by foreclosure</th>
<th>Acres</th>
<th>%</th>
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<tr>
<td>1927 &amp; prior taxes delinquent</td>
<td>333,377</td>
<td>5.8</td>
</tr>
<tr>
<td>1928 taxes delinquent</td>
<td>277,818</td>
<td>4.8</td>
</tr>
<tr>
<td>1929 taxes delinquent</td>
<td>214,896</td>
<td>3.8</td>
</tr>
<tr>
<td>1930 taxes delinquent</td>
<td>354,120</td>
<td>6.2</td>
</tr>
<tr>
<td>Total County &amp; Private delinquent for 1930 and prior taxes</td>
<td>1,421,616</td>
<td>24.8</td>
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<tr>
<th>Total private not delinquent for 1930 and prior taxes</th>
<th>Acres</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Total County and Private</td>
<td>5,730,063</td>
<td>100.0</td>
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This table shows very clearly what is happening to the cut-over lands in Western Oregon. It is shown that 45.4%, or almost half, of the forest lands are either already acquired by the county or are tax delinquent for years previous to 1930, and in all probability much of the taxes after 1930 have not been paid so that a large percentage has or will be acquired by the counties.

**Length of Rotation**

In conjunction with the deferred-yield and tax problem there is the viewpoint by some timber owners that the time required to grow another crop is so long that they themselves would never see the income from the future cut, in which case they would rather put their money into the purchase of more old growth than into reproducing and protecting a second crop. This is particularly true of the smaller timber owner who has a relatively small area and a large investment in logging equipment.

**High Risks**

At the present time there is a great deal of risk of loss from unstable markets, fire, disease, and insects that lends so much instability to the assurance of a future crop that the average timberman hesitates to make the gamble of holding his lands. The current annual growth in Oregon and Washington is estimated to be only 2.6 billion feet a year, while the depletion from fire alone has been estimated to be 1.9 billion feet in the two states.1 This,
of course, is only an estimate and is probably inaccurate to some degree, but it shows that a very great loss is sustained each year from fire and the other destructive agents.

There is always the chance of another major holocaust such as the Tillamook burn which destroyed 11 billion feet in a few days. With these great risks staring the timberman in the face, there is no great incentive to plan for the future.

**Large Areas Required**

In order that a timber owner can be assured of enough future timber to supply his operation or his mill indefinitely he must have a large tract of land. The small holdings make for a complete cut-over in one or a few years. With this small area the owner must wait many years for another income or let it go for taxes. A few of the larger companies have adopted the policy of what is called "sustained yield". This means that each year a certain volume is taken off in mature timber equal to the estimated capacity of growth over the whole area. This, as stated above, requires a large and solid area of land which in turn means a large fixed investment for the operating company or owner.

Any good businessman, before placing a large amount of money into land or fixed investment, must be assured that his fixed investment will remain intact. This, however, is never certain with forest land. It is generally true that the land in western Oregon is very productive in the growing of trees, and with proper care it will remain productive.
However, there are always exceptions to the rule, and one of them is the large fire. When a fire which kills all the timber exceeds more than a hundred acres or thereabouts it is usually an extremely hot fire. This means that all of the vegetation is killed, the organic matter is burned out of the topsoil, and the land is left bare. Unless something is put on the land the first year to hold it, there will be erosion taking place which is generally very accelerated due to the mountainous character of most forest land. Thus the soil itself soon becomes incapable of supporting anything but weeds and brush. It is too poor to expect any plantings made to succeed until natural processes have, after many years, restored the fertility to the soil.

**Large Working Capital Required**

Another problem confronting the operator is the large working capital required to log his timber. Assuming that he already has the land and is ready to cut his timber, he finds that he must raise a large sum of money for logging equipment. The modern methods of logging require expensive machines and equipment such as donkeys and cable systems or tractors and arches. The expense in itself can prevent the owners of small and inaccessible areas from doing their own logging, in which case they sell it or contract the logging.

Many owners do succeed in getting the logging equipment or already have it. When the area is cut over, he
finds that the equipment is still on his hands even though it has depreciated to some extent. It is then a question of buying more timber or selling the equipment.

There is usually a way that the timber owner can log his timber. He can borrow the money for the equipment, or he can contract the logging, and in any case he can sell his land. He can also usually make some small profit whichever method he chooses, but all of this borrowing and contracting and selling is not the stable and solid foundation that good forestry needs. Sound forestry practices come only with established and stable land ownership and logging methods.

The discussion above has largely been concerned with the smaller forest land owner. With the large forest ownerships, the picture is a little different. The logging practices are established and the ownership stabilized. There is, however, large annual expense for taxes and protection of all the large holdings. This expense tends to cut down on the profits of the operation so the owner speeds up the logging to meet the added expense, or cuts down on the protection expenditures for the area. If he speeds up on production, the "sustained yield" plan is thrown out of balance, and if he cuts down any on protection there is a greater risk of fires.

As a summary of the problems confronting the private forest owner, it can be seen that the long time required
to grow the crop, the many risks of loss of timber, the burden of taxes, the large fixed investment and working capital required, and the large area required all stand in the way of any long-time plan towards a stable and continuous income from the forest. There is one more fact that has not been mentioned. It is the fact that there is no fool-proof method of securing reproduction so that there will always be a necessity for some planting. The margin of profit is so low for most operators at the present time that they hesitate to add the expense of planting to all the other expenses.

These are not all of the problems from the private forest owner's standpoint but are the major considerations that have influenced the picture of forestry in the Northwest.

Social Problems

Under the democratic system of government, there must be considered not only the individual side of the picture but also the socio-economic or public benefits to be derived from the private practices. Sociologists and economists state that the correct economic policy is one which does the greatest good for the greatest number of people. Until the past few years the system of individual property rights has been the keynote of most economic policies in this country. This means that the owner of land has the right to do with the land as he pleases, regardless of the end result or the condition in which the land is left
after he has taken from it what he wants. As long as there was plenty of good land to be obtained simply by moving farther west, this policy brought no objections. However, now that almost no land remains to which the people may move there has arisen a problem of national scope.

It is more and more generally being recognized today that the land owner has more than just an obligation to himself to take what he can from the land. He has an obligation to leave the land in the same state of productivity in which he found it, or in other words, he has merely the use of the land granted to him by the democratic government and must not misuse it. The occurrence of the dust bowl in the middle-west and severe soil erosion in the South has brought this point forward into national significance. The government is spending millions of dollars in building dams and in helping farmers in the affected areas. Must the people continue to spend money in trying to save other sections of the country, or will they realize that it is their own practices which have brought this on? They are beginning to realize it.

But how does all of this affect the people of the Northwest? There are problems of the same nature in this region which have not reached the acute stage that they have reached in some other sections of the country, especially the Lake states.
Mining of Timber

Until recently, the timber in the Douglas Fir region was looked upon as a natural resource much like coal or gold. It was there for the taking and had merely to be mined in the same manner. The Lake states had the ill fortune to reach their lumbering peak before the public began to awake to their own responsibility with the result that these states were cut almost clean and now have entire counties which are on relief and supported by the government. The Northwest has a very good chance of locking the door before the horse is stolen, but the question is now who will do it—the government through public regulation of private enterprise or the people themselves through self-regulation.

The problems to be solved on this side of the picture are complicated and numerous and will warrant discussion of this point.

The mining of timber without regard for future crops has been discussed to some extent above. The extent of the damage done is shown by figures obtained from the National Resources Committee report 1 as shown in the following table:

| Types of Forest Land in Oregon and Washington (Areas In thousands of Acres) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                  | Saw Timber      | Second Growth   | Non-stock Cut-over and Burn | Hard wood | Non-commercial | Total           |
| Oregon Eastern Area              | 8,414           | 2,241           | 214                         | ---       | 1,626          | 12,495          |
| Percent                          | 67.4            | 17.9            | 1.7                         | ---       | 13.0           | 100.0           |
| Western Area                     | 8,701           | 3,560           | 2,028                       | 400       | 888            | 15,577          |
| Percent                          | 55.8            | 22.9            | 13.0                        | 2.6       | 5.7            | 100.0           |

(Continued on next page)
From these figures it can be seen that there is still a great preponderance of old growth timber in Oregon and Washington. The significant figures, however, are those in second growth and non-stock lands, particularly in the western part of the states. In Oregon the percent of total area in second growth is 22.9 and the percent of area of non-stocked cut-over and burned lands is 13.0, and in Washington the second growth is 26.0 and the non-stocked area is 17.4 percent. In these states only a little over one third of the area has been cut over or burned. But of this cutover area, half as much in both cases is non-stocked. This means that of the area cut over or burned, one third has not been restocked. No figures were available to show how much of this land is in burns and how much is in cut over lands, but from observation here in Oregon, there appears to be the major portion in the cut-over classification.

There has been no great damage done as yet that cannot be remedied by planting, but the fact remains that
the Northwest has over half (55%) of the volume of saw timber left in the United States and only 15% of the total forest area. It is entirely possible, then, that the Northwest can be permanently damaged unless something is done.

**Decrease of Tax Base**

Another ill effect of the timber mining practice is the resultant decrease of the tax base for the states and counties. In the table on page 9, it is apparent that the tax base is decreasing rapidly in the western Oregon counties as the lands revert to the counties or are tax delinquent. In 1930 only 5.8% had already been acquired by the counties, but a total of 39.6% were delinquent for 1930 or prior taxes. All this of course means that the counties have less money with which to carry on their functions, and therefore the taxes on the remaining timber are increased.

**Assessment Problems**

In connection with taxes there is a problem peculiar to timberlands. It is the difficulty and variations in assessing timber land. In order to accurately set a value on the land the value and quality of timber must first be determined. This requires much experience and skill which is often lacking in the elective assessors due to the fact that they may or may not have had any previous experience and are subject to change each election. This situation has been bettered a great deal by the recent forest survey of the region by the forest service.
Cutting of Second Growth

With the advent of the recent preparedness program there has been a great increase in the lumber cut in the Northwest. Much of the timber now being cut is cut from second growth stands. This may be a good practice from the standpoint of the logger because some of the second growth is large enough to make good saw timber. But from the public standpoint, it is not so good to cut young, fast-growing trees while there are great areas of over-mature trees in which the decay equals or exceeds the growth. It would be much better for the region as a whole to leave the younger stands and get the over-mature trees off the land to make way for young stands that will make good growth. The estimated current net annual growth is about 4 billion feet at the present time, but the growth capacity with good forest management would probably be at least 16 billion feet. The average annual cut for the period 1925-1933 was over 10 billion feet.¹ The cutting of second growth decreases the annual growth of the region which is much smaller than the annual cut.

Waste

There is a great deal of waste in the logging of the west coast stands. Much of it cannot be reduced to any great degree under the present market conditions and the methods of transportation and logging. Some operators,
however, take out the highest values such as peeler logs and the highest value species and leave the rest of the stand. In this way the value of the stand is reduced, often to such a degree that it is worthless to another operator attempting to take his equipment in and log the area. This is a method which in reality is waste because the higher values are taken which should help pay the way of much of the lower value timber. The timber left may not be below marginal value but it is not sufficiently high to allow another person to come back in and take it out.

From the above discussion it can be seen that there are numerous problems from the standpoint of the public as a whole--problems which are in just as urgent need of solution as are the problems of the lumber industry itself.
PROPOSED SOLUTIONS TO THE PROBLEMS

There have been a great many attempts toward solving these problems and a greater number of proposed solutions. A few of these should be mentioned here, such as yield taxes, cooperative control, cooperative marketing and cooperative timber cropping, adjusted property taxes, deferred timber taxes, differential timber taxes, government regulation, government financing, and community forests. Some of these have already been put into effect with varying results and will be discussed first.

Yield Taxes

The existing forest tax laws, omitting a number of minor laws relating only to planted stands, include fourteen which provide for a yield tax and six which provide for the exemption of timber without any yield tax. The number of states involved is nineteen, since Connecticut has both a yield tax and an exemption law. Most of the forest tax laws are optional with the exceptions of the Oregon and Washington yield tax laws and the California constitutional amendment. The optional laws generally have little effect on the situation because they apply to a relatively small area of the vast privately-owned timberland. The taxes of Oregon and Washington are limited to cut-over lands and are subject to the descriminations and dangers of the specific land tax in Oregon and of the uniform fixed assessment in Washington.
In a report recently published by the Oregon State Board of Forestry it is shown that the total amount that has been collected under this law is only $12,300. The amount collected annually is increasing rapidly as shown in that report. It is very optimistic in regard to the future of the tax law and may rightly be so. However, both the Oregon and Washington yield-tax laws fail to set up any method of adjusting the yield tax rate to meet future public requirements, and they have not been in effect long enough to permit any observations on the efficiency and workability of these laws. In all probability the 12\(\frac{1}{3}\) percent yield tax as now set up will have to be varied or changed in the future, making for hard feelings and differentiation between owners.

A proposal made by Thornton T. Munger and Walter H. Meyer of the Pacific Northwest Forest Experiment Station in 1932 embodies the same principles as the present Oregon Forest Tax Law but allows for a gradual displacement of the property tax by yield taxes for the entire timber lands. The proposal recommends the conversion from the present ad valorem system to the yield tax system in a period of 12\(\frac{1}{3}\) years by gradual diminution of the ad valorem tax and a gradual increase in the yield tax, beginning at \(\frac{1}{3}\) percent and reaching 12\(\frac{1}{3}\) percent in the 13th year. The lands would also carry a tax of 5 cents per acre per year. The only advantage of this
would be the gradual conversion of all the lands, while the disadvantages of the existing law would also apply.

**Deferred Timber Tax**

Another plan which is equivalent to the yield or income tax is the deferred timber tax. This tax operates in such a way that the taxes are deferred so far as the owner is concerned until an income is received on the forest products. The tax may be deferred progressively by a set percent per year or the timber value and land value may be separated and the taxes on timber be deferred. In this way the county would receive an income from land taxes each year. A proposal has also been made that the state reimburse the counties for the timber tax loss from a fund set up and to be replenished when the tax is paid. An example of this type of tax now in operation is the new Washington law enacted in the last legislature. Senate Bill 268 authorizes the deferrment of taxes progressively for ten years by 7½ percent per annum, the deferred tax carrying the 3 percent simple interest.

**Adjusted Property Tax**

The adjusted property tax is another plan for relief of timber owners from the tax burden. It is based on the fact that a deferred-yield property such as forest land is relieved from that part of the property tax which is levied upon the increase in value that is expected to
come with the payment of taxes and the accumulation of interest in advance of receipt of income, it will bear a tax burden equal to that which it would bear under an income or yield-tax. The actual computation of the tax can be found in U. S. D. A. circular 358.8

**Differential Timber Tax**

The fourth plan for adjusting the tax base on timber lands is the differential timber tax. This plan would separate the land value and timber value so that the land would be subject to the ordinary property tax while the timber would have differential assessment. This tax would work in somewhat the same way as the adjusted property tax except that instead of reducing the tax base the amount of interest and taxes accumulated to the end of the preceding year, it would be reduced by a specific rate or "reducing factor".8 This is much simpler in computation than the adjusted tax.

In summation of the proposed tax solutions, there are three ways that the property tax may be modified. The first is to reduce the current property tax on the deferred-yield forest property by an amount proportional to the extent of income deferment in each case. The adjusted property tax follows this plan. The second plan is to defer the payment of property taxes until income is received. Yield taxes are of this type. The third plan is to apply a flat
rate reduction to the property tax based on the degree of income deferment which may be typical or average for the state. The differential timber tax comes under this third plan. The various tax plans in force and proposed can only relieve the tax burden problem and can not take care of all the other problems as previously outlined.

**Cooperative Control**

Another solution that is entirely apart from tax reform is called "cooperative control". It was proposed by Ward Shepard, senior member of Society of American Foresters, in 1930. The plan is based on active cooperative control, coupled with direct public control where cooperation fails to protect the public interest. It would set up two classes of instrumentalities to enforce the plan; first, federal, regional, and county cooperative forestry boards which in cooperation with regional and local associations of forest owners and producers would work out better forest practices and with congressional sanction would control production. The boards would coordinate federal, regional, interstate, and state forestry programs and legislation and would strengthen nation-wide leadership.

The second instrumentality would be a Federal Forest Loan Board and Federal Forest Banks to furnish long-term loans at reasonable rates, to assist in carrying stumpage reserves, to finance constructive forestry, and to help finance the purchase and development of public forests.
The plan as proposed is based on full, democratic, and localized participation by forest industries. The power to regulate the industry as to practices and money still lies with the government, and the situation would probably dissolve into what we are rapidly coming to anyway—the federal regulation of industry without participation by the industry. As has already been stated previously, the industry is willing to regulate itself as far as possible economically as shown by the forest practice rules adopted by the West Coast Lumberman's Association.

An attempt towards local cooperative control has recently been made in Oregon and Washington. Senate Bills 261 in Oregon and 268 in Washington authorize the state boards to set up sustained yield units in cooperation with private or public lands where the lands are intermingled or adjacent. This method of control will probably succeed as the entire situation is local and rests with the state boards.

**Cooperative Marketing**

Cooperative marketing of timber products is another means that has been considered by many to be the solution to many of the problems of the public and private side of the picture.

In 1936 the 10,500 active farmers' cooperative marketing associations in the United States had 3,550,000 members. Roughly 3/4 were members of cooperative selling
associations, and 1/4 were members of cooperative purchasing associations. Approximately 30% of the American farmers sold products through one or more cooperatives. Moreover, many of the manufacturers, wholesalers, and retailers belong to trade associations which are a type of cooperative organized to distribute market information and trade news. The West Coast Lumberman's Association is an example of one of these trade cooperatives.

A cooperative association possesses a number of disadvantages as well as a number of theoretical advantages. Efficient and trained managers are hard to find as is adequate financial support. In many regions there is not sufficient value of forest products for sale to carry the overhead of a cooperative although this is not true of the Northwest.

The five important advantages of cooperative marketing associations as stated below all mean a saving in time and money to the members; they are:

(a) The establishment of permanent market conditions and business good will.

(b) The establishment of a permanent, skillful, and contented labor force which does not have to be periodically increased or reduced.

(c) The development of permanent financial connections which permit financing of the necessary business transactions at low interest rates.
(d). A reduction of physical equipment to the minimum in relation to total output of products over a period of years.

(e). Management to get a sustained yield and hence a reduction to the minimum of the growing stock.

The possibilities of cooperative forestry associations are not altogether theoretical. Organizations of forest land owners have existed for a long time in some countries of Europe, particularly Sweden and Finland. There are also cooperatives of a somewhat similar nature in the United States, for example, the Otsego Forest Products Cooperative Association, Coopertown, N. Y.; The Farmers' Federation, Inc., Asheville, N. C., and Forest Products Association, Inc., Grovetown, N. H.

The government is not entirely overlooking the possibilities of cooperative organization. Various governmental agencies have attempted to improve the marketing of a number of products. The Bureau of Agricultural Economics, the old Federal Farm Board, the Extension Service, and the Farm Credit Administration have recommended plans of organization for cooperatives and have given active support in the form of loans.  

At the present time there is no indication of lack of legal aid available to forest cooperatives. The Clayton Act of 1914 exempted non-stock cooperative associations from anti-trust laws. The Cooper-Volstead Act of 1922 gave the
same privilege to capital stock cooperatives. In 1926 cooperatives were exempted from the income tax. The Agricultural Marketing Act of 1929 established a $500,000,000 loan fund, administered through the Federal Farm Board, from which cooperatives could borrow. The Farm Credit Administration and Agricultural Adjustment Administration have continued the policy of providing credit to such associations.

A number of states have special laws usually granting certain privileges to cooperatives handling agricultural commodities, and in most such acts forest products are specifically designated as agricultural commodities. The Oregon Code, Section 5, states that any number of persons not less than five may organize into a cooperative and that forest products are considered as agricultural commodities. As a general policy, the Code states, "It is the public policy of the State of Oregon to encourage the production of agricultural products and to stabilize marketing conditions through elimination of speculation and to bring about a lower cost of living through the establishment of more efficient systems of distribution."

The Oregon Code also defines cooperative associations as "non-profit organizations designed to make money only for their producers." Also, any two or more of these associations may organize pursuant to this act a federated cooperative association authorized to do and perform any and all lawful business which may be deemed necessary or
beneficial to its member organizations. No association organized under the Act and complying with the terms and purposes of the Act will be deemed as a combination in unlawful restraint of trade or an unlawful monopoly.

Thus it may be seen, cooperative marketing of forest products is encouraged by the State and Federal Government by special laws and by subsidies or loans. Cooperative organizations would seem to be the best method of marketing forest products under certain circumstances wherein the ownership of the timber is diversified and the actual individual volume produced would be small.

**Cooperative Timber Cropping**

Nothing has been said as yet about cooperative timber cropping. This is conjunctive with cooperative marketing, but differs in that the actual harvesting of the timber is accomplished cooperatively. The marketing cooperatives at Cooperstown, N. Y. and at Grovetown, N. H., are also forest land owners cooperatives.

In the Northwest, the outstanding example of timber cropping is the Washington Forest Products Cooperative Association in Snohomish County, Washington. It is composed of 45 members who are primarily farmers but who own 100 acres or less of second growth. The organization produces only poles and piling and appears to the lumber industry as a whole to be rather small. However, it is a
marked success for the members. Most of the cooperative cropping in the United States is done in poles, piling, or pulp wood and some small saw logs. This, however, does not mean that it would not be feasible for larger products.

**Government Regulation**

One more proposed solution should be considered. It is the regulation of private forestry by governmental agencies and has been suggested and favored by some government foresters in many forms from simple prohibitions against forest destruction to full-dress sustained-yield plans or complete government control.

Governments may exercise control, by direct or indirect means, over the management of forests. It may be by ownership, use of police powers, by taxation, subsidies and loans, and by price fixing.

At the present time there exists a federal price-fixing board necessitated by defense preparations and headed by Mr. Leon Henderson. There has been a great deal of strife and dispute over the powers and legality of price-fixing by the government. Most of the larger west coast lumber companies and many of the leaders of these companies, as well as officials of the West Coast Lumberman's Association, have been fined sums of from $500 to $5000 under the Sherman Anti-Trust laws. This was a direct attempt to lower the lumber prices that were raised by the increased defense demand and perhaps artificially by the industry itself through higher production costs.
Regulation through ownership is not feasible to any great lengths due to the fact that the tax base is reduced. This would mean that the government agency would have to secure an income from the sale of the timber or else set up in business for itself. It would also be directly opposed to the ideals of this democracy as set up, that is, the people run the government and not the government runs the people.

However, the Forest Service is continuing the National Forest acquisition at the present rate to be accelerated when possible. Particular emphasis is placed on blocking up the scattered areas of National Forest land.

Regulation by taxation would take the form of extensions or reductions given to the owners of sustained-yield, managed forests. This is already in effect in Oregon and Washington and several other states as was shown under the discussion of taxation.

The use of police powers of the government have also been used to some extent, particularly by the states as reflected in their forest fire laws and by the recent Oregon legislation, Senate Bill 262, giving the board of forestry authority to require leaving of sufficient seed trees to assure restocking of forest land following logging. Lyle F. Watts, Regional Forester, Region 6, has voiced the viewpoint of the Forest Service in the proposed federal requirements as follows:13
1. Insure the leaving of seed trees and prevent destruction of reproduction and immature trees.
2. Insure the safeguarded use and control of fire.
3. Prevent clear cutting and deforestation unless positive assurance is forthcoming of natural re-stocking or planting.
4. Prevent the use of destructive logging methods and machinery.
5. Prevent excess grazing.
6. And such other requirements that will insure application of silvicultural practices necessary to keep the lands productive.

It can be seen that these requirements would leave little to the discretion and to the decision of private forest land owners. The sixteen recommendations made by the joint congressional investigating committee in June of 1938 are not nearly as aggressive as the above, but still propose federal regulation to some extent.

Federal loans and subsidies may or may not be a means of direct regulation. A system of Forest Credit Banks is favored by the Forest Service and was suggested by the joint congressional committee. The Forest Credit Bank loans might be merely designed to help the timber owners in the same way that the farmers are helped by the Farm Credit Administration, or it could be a means of direct regulation depending upon the administrating agency.
As a summary of the proposed solutions to the problems as outlined in the preceding part of this paper, too much stress cannot be laid upon two of the items. They are the two extremes of the picture—cooperative timber cropping and marketing, and government regulation. The first mentioned is regulation by the private owners themselves, while the second is, of course, the exact opposite.

The tendency has been in the past few years, particularly within the last seven months, when the industry has felt the direct pressure of federal intervention, towards government regulation. The present situation of the defense preparedness program and the great peace-time army draft has necessarily led to the same regulations and restrictions on industry as were put into force in 1917. The tendency has been so great towards federal regulation, even before the defense program, that it is probable that much of it will remain after the situation again becomes normal. It is against this regulation that the industry is voicing its opposition at the present time, as indicated by the statements made by many speakers at the recent meeting of the Western Forestry and Conservation Association.15

It is the purpose of this paper to propose an active role in opposing federal regulation for the lumbermen of this region. The role would be a hard one, inasmuch as it involves the cooperation of the majority of the men in the industry. It is not to be a case of direct and de-
structive opposition to government actions but is a con-
structive suggestion to make unnecessary the federal
regulations that have been suggested. From the stand-
point of the general welfare of the people of this country,
also, it is sound. The proposal is for industrial self-
regulation for the lumber industry of the Northwest.
INDUSTRIAL SELF-REGULATION

The recent court actions by the Federal Price Fixing board against a number of the lumber companies, their leading men, and the West Coast Lumberman's Association, have been an indication of the government's disapproval of alleged price-fixing practices. Whether or not they were guilty has never been proven because the men indicted gave a plea of nolo contendere to the charges and took the fines.

The contention was that the indicted members of the industry, and the West Coast Lumberman's Association, were guilty of price fixing through the regulation of production. It is entirely questionable that any direct and premeditated attempt was made to fix prices, but rather it is probable that the Association was carrying out only the functions of a trade association such as it is. It is the purpose of an association to distribute market information, including competitive prices, manufacturing data and suggestions, and any other useful information to its members. Lumber prices were bound to rise a great deal due to the increased demand for lumber, the demands of the labor unions for higher wages, and the general upswing of the business cycle. These high prices are the result of the instability of the industry and are no worse than the low prices of two years ago. The government is simply making an
attempt to stabilize the industry by price fixing now, just as it endeavored to raise the prices a few years ago by the NRA code.

It is improbable that any amount of price fixing or production control by the government will ever succeed in eliminating the ups and downs of what is called the business cycle. There are too many outside influences entering into the picture of our national economy to expect that it will ever become greatly stabilized. However, there exists a very great opportunity for the lumber industry, particularly of the Northwest, to decrease the effect or soften the blows coming from the instability of that industry. This opportunity exists as self-regulation.

It should be pointed out that this proposal is not intended to be a cure-all. There is no basis for assuming that self-regulation would eliminate entirely the problems stated in the introduction or that it would be one hundred percent effective in influencing all of the operations in the industry. It has been stated that a National program such as this, even if 100 percent effective, would only affect one-half of the timber cut in the nation. The timber that is cut by the land owner and used on his own land, including fence posts, fuel wood, and miscellaneous items, amounts to 25 percent of the total cut. This is part of the drain that could not be regulated by any means.
In the Northwest, however, the timber is very highly concentrated and the individual users are few as compared with the commercial volume produced. Regulation, in this case, would influence a much higher percentage of the commodity drain than over the country as a whole. Industrial self-regulation could never be 100 percent effective within the group selected to be regulated, even in the Pacific Northwest. The industry could regulate only those members who wish to be regulated as there could be no disciplinary measures for violators. The numerous small mills moving from one small stand to another could never be regulated. However, the effect of the industrial group effort would be bound to have some effect upon most of the operations. This, together with the fact that there are other ways to influence the non-cooperators, would almost unquestionably bring a large enough portion of the industry under regulation to make the program effective. Methods of securing cooperation among the members and for obtaining the necessary membership will be discussed later.

Attempts toward Self-Regulation

There have been only two attempts made towards self-regulation of the lumber industry. The first was a result of Article X of the Code of Fair Competition under the National Recovery Act. The basic objective of this act was forest conservation through fire protection, forest regenera-
tion, and logging practices. After several years under the Code the lumber industry found, when the N.R.A. was abandoned, that the conservation ideas were sound and practical, and as a result continued to observe the rules of the game through their own self-regulation.

A recent attempt towards this type of regulation was started by the southern pulpwood industry in 1939. Not content with the adoption of good management on its several million acres of fee land, the industry formed the Southern Pulpwood Conservation Association, designed to encourage good forestry on "the other fellow's property." Their program has become, instead of regulation, one of education by means of the most persuasive force known—the profit motive. Mr. Heyward states that "The Association tells the landowners, 'We want to buy your timber. Allow us to show you how to grow it,' a far more effective approach than that possible under public regulation, under which the government would say, 'According to the law you must grow timber. We hope you can sell it.'" Thus, the Southern Pulpwood Association is endeavoring to promote good forestry, and is accomplishing a great deal through a group effort even though the pulpwood industry itself accounts for only 6 percent of the total forest drain in the South.

There has been a recent development, however, that threatens the Association. It is an action by the government to accuse Association of unlawful restraint of trade.
The attitude and policy of the Federal government in the past few months towards industrial group efforts has been one of coldness and distrust.

There must be some way to gain the confidence of the government and consequently remove the sword from over the head of the industry before any group effort can be undertaken in the Northwest. This way would be to institute a set of rules of such nature that public opinion and any common sense of good forestry could not be ignored by the government. The rules would have to relate entirely to conservation and wise use at first to gain the public support. They should be publicized and called to the attention of everyone in the Northwest. This would not be as difficult as it sounds, because there are so many people directly connected with the industry in Oregon and Washington and because the lumber industry is the one great industry of the Northwest. The general public is becoming more and more aware of the problems of forestry so that given a little publicity the words "sustained-yield" would become the watchword for the people of this region.

This would have to be the first step in any group effort—to remove the antipathy of the government. Next would come the actual organization by the men in the industry with the purpose of getting the fullest possible cooperation throughout the industry. Following is a brief plan for a possible approach to this organization.
Timber Owners' Pool

A pool is generally accepted as meaning an unlawful combination for controlling trade or competition. In this case it is construed to mean only a joint effort of several owners toward raising their timber on a sustained-yield basis. A timber owners' cooperative would possibly be a better title although it does not conform to timber cropping as previously used, because in this case the owners would not necessarily do their own marketing.

The basis of the timber pool would be to secure, by joint effort, an area of sufficient size and of the correct topographical and legal unity to make possible a sustained-yield unit. This would mean that the owners in the area would have to come to an agreement to form the pool. Each owner would then have a beneficiary certificate according to the appraised value of his property in the pool and the lands would be owned by the pool or cooperative forest. The individual owners would receive each year a part of the total income received from the forest, apportioned according to his interest in the cooperative. In appraising the timberlands for the beneficiary certificates, it would be necessary to set a separate value upon the land and upon the timber so that what is now on the land would not be evaluated indefinitely and so that the growth capabilities of the land would be the final basis for comparison.
The most obvious advantage of this plan is the outgrowth of sustained-yield areas. With the proper publicity this factor could make the timber pools entirely acceptable by the general public and consequently by the government.

Another advantage is the stability that it would lend to forestry in the Northwest. Timber owning would thus become an investment instead of a speculation. The owners would receive an income each year from their holdings with which to meet the annual expenses such as taxes, fire protection, and administration.

Functions such as fire protection, administration, and logging could be very efficiently carried on by the organization. This would mean a reduction in physical equipment and hence in cost to the owners. The supervision would be indirectly by the owners much as in a corporation and thus would be critical, while at the same time technical experts could be employed to carry out the actual supervision over logging and forestry practices. This efficiency becomes one of the advantages also.

This plan, of course, also has its disadvantages. The main disadvantage would be the difficulty in securing the cooperation of every owner within the selected tract. The individual tracts would have to be built up one by one until enough are in existence as demonstration to other timber owners. Once these sustained-yield units have proven their worth, other units will be more easily started.
The timber owners' pool is not suggested with the idea that it will be a blanket plan to include all of the private timber lands in a short while. Rather it is presented as a gradual approach towards the wise use of forest areas. The fact remains that there is a certain area of private land in the Northwest, and there is no reason why, in time, all of the owners cannot get together under a plan of this kind. If the industry continues to feel the pressure of public regulation, perhaps the development would be quite rapid.

It can be readily seen that the plan so far as it goes, would relieve some of the problems stated in the introduction, such as the instability of ownership, the burden of annual costs and taxes, the waste and poor use of the land, and the uncertainty of forest investments. There remain, however, many problems for the mill owners and loggers. While many of the timber owners carry on their own logging and milling, there are still many contract loggers and mills that buy logs on the open market. These men are also a part of the industry and should be included in any plan for self-regulation.

Sustained-yield, being stabilized as it is, offers the opportunity for the logging and milling to also be stabilized. As the sustained-yield units under the timber owners' pools are developed, the logging and milling could be fitted to the units. Each unit would have a continuous
and almost equal annual cut. Under this condition a permanent and efficient logging operation could be developed to fit the units. The same thing would apply to the sawmills. The small mills that spring up with a rise in prices and disappear with low prices would have no place here. Permanent sawmills would in time be established to take care of the steady annual cuts while at present the existing mills, instead of buying logs on the open market, could contract for the cut of one or more sustained-yield unit.

The large companies, such as Weyerhauser, would not be affected by this plan. They have their own mills and logging operations, and most of them are now attempting to practice wise use.

The long-time goal of this plan would be to put most of the private timber lands into production. This would not necessarily mean that the production of lumber would exceed any market demand. The annual cut under sustained-yield management is much less than it is under the present practice of exploitation, so that in all probability the output would be somewhat less than it has been for the past several years. This would be a desirable condition inasmuch as the annual cut has exceeded the growth. However, as the lands are put under production, the annual growth would increase and consequently the annual cut would also increase until it would probably be at a higher point than at present.

There is no indication that cooperative forestry on
a large scale will not work in this country. It has been very successful in Sweden, Norway, and Finland to the extent that almost their entire forests are managed in this manner. The small farmers woodlands in this country are as a general rule fairly well managed and present no great problem. It is the large timber areas, particularly in the Northwest that make up what is considered the timber resources of the country. Until recently these areas have not been given any extensive treatment to conserve them or to use them wisely. The Forest Service has mainly served only to preserve part of the timber area, the wise use extending only to those areas on which timber sales are made. The major portion of our annual cut still comes from unmanaged private forests. The following figures show what portion of our forest area is still subject to destructive exploitation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes private forests</td>
<td>370,000,000</td>
</tr>
<tr>
<td>Excludes public forests</td>
<td>100,000,000</td>
</tr>
<tr>
<td>Subject to destructive exploitation)</td>
<td>-- 350,000,000</td>
</tr>
<tr>
<td>Subject to destructive exploitation) (except for partial fire protection)</td>
<td></td>
</tr>
<tr>
<td>Federal Purchase program</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Private forests well managed (Estimate)</td>
<td>10,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>370,000,000</strong></td>
</tr>
</tbody>
</table>

From the above figures it can be seen that of the 380 million acres of forest lands, 350 million acres are still subject to destructive exploitation. This situation has led
to the present problems for which there must be found a solution.

Industrial self-regulation is offered as an approach to this solution. No complete and organized plan can be presented without a careful survey of the situation. The idea of sustained-yield is a sound one and is the eventual answer to forest management. The timber owners' pool is suggested as a means to secure this, but should first be given a great deal of consideration by lawyers and by the West Coast Lumbermen's Association before any attempt is made to organize and put it into effect. This paper will make no attempt to prepare the plan but will endorse industrial self-regulation to secure sustained-yield on every acre possible as the best solution to the question of regulation of our forests.

As stated in the preface, it has been hard to get lumbermen to cooperate and agree on their policies. Thus the question arises, how can any such plan hope to succeed unless the lumbermen do get together? The answer is found in the present situation in the industry. The lumbermen are finding that the government means to step in and enforce public regulation unless the lumbermen themselves do something towards relieving the situation. The public sentiment is growing against them, being fed by the increase of the problems from the public standpoint as outlined in the introduction. The labor unions are finding that their existence
depends upon the well-being of the industry as a whole and that the government will not approve of any extreme move that will interfere with national defense.

Therefore, with the tension growing greater in the industry, a proposal of self-regulation is not hopeless. The timber owners and mill owners are willing to get together, and with the help of the labor unions it would be possible to put this idea into effect. All that is required is a starting point and a group with the initiative to start it. This paper suggests a possible starting point, and the West Coast Lumbermen's Association is the logical promoting group.
SUMMARY

This study has brought out several facts that are not entirely recognized by the people as a whole in the Northwest.

1. The first is that while there is no danger of an immediate shortage of timber in the Northwest, it is inevitable that under present practices and rates of cutting, a shortage will come. It is hard to predict very far into the future, but the fact remains that present and past management practices are undesirable. The problems that have arisen from these practices, as they affect the private timber owner and the general public are discussed in the introduction.

2. From all present indications the government definitely intends to extend its powers of regulation to the maximum. There is no means of telling how far or how completely public regulation of the private forests can be extended, but it is apparent that it will be enforced as far as possible.

3. Industrial self-regulation is a much more efficient and democratic method of obtaining good forest practices than is public regulation.

4. It is up to the lumber industry to take the initiative and organize themselves before public regulation is
forced upon them. Self-regulation by means of the Timber Pool or cooperative forestry is a suggested method.

Recommendations

1. The industry should organize, and it is suggested that the trade unions be the ones to take the initiative.

2. Legal advice should be obtained to look into the possibilities of cooperative forestry as a means of industrial self-regulation.

2. Sweinning, Karl A. From a panel discussion of the 63rd meeting of the American Forestry Association on "Is Public Regulation of Private Forest Operations Needed?". May 1938.


5. U.S. Dept. of Agriculture, Forest Service. Pacific Northwest Experiment Station. Facts Bearing upon the Instability of Forest Land in Western Oregon. 1934.

6. American Forestry Association. Panel discussion and other papers at the Sixty-Third annual meeting. Is Public Regulation of Private Forests Needed?


