

Financing Fire Protection for Timber Lands Under Oregon Laws

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SUMMARY

1. The Oregon law requires that all owners of timber lands in the state shall provide adequate protection against fire for these lands during the season when there is danger of forest fires.

2. Owners of timber lands may provide such protection either independently through their individual efforts or co-operatively through membership in a private forest protective association.

3. Where the owners fail to provide protection for their timber lands, the State Forester arranges either to protect these lands directly through his own department or contracts for their protection with a private forest patrol association or the National Forest Service. The costs of such protection, including a 2-mills-per-acre administrative fee for the state forestry office plus a 10-per-cent tithing tax or penalty, are assessed against the land and constitute a lien against it the same as taxes.

4. The private forest protective associations consist of timber owners organized for the mutual protection of their lands. They raise funds for the protection of their holdings by assessing their members on an acreage basis. These associations are not subject to the payment of the administrative fee or the tithing tax.

5. Both the State Board of Forestry and the private protective associations may contract to protect O. & C. lands, public-domain acreage, state- and county-owned lands, and isolated tracts of National Forest areas not protected by the U. S. Forest Service. The U. S. Forest Service in turn may contract to protect both privately and publicly owned timber lands in the state that may be near to or intermingled with National Forest areas. These contracts are in part negotiated through the office of the State Forester and in part through the office of the Oregon Forest Fire Association, an organization representing the private forest-fire protective associations.

6. Biennial appropriations are made by the state legislature to aid in the maintenance of the activities of the State Board of Forestry.

7. The federal government provides substantial additional aid to the states for the protection of timber lands through continuing appropriations under Section 2 of the Clarke-McNary Act of June 7, 1924, and through direct services rendered by the Civilian Conservation Corps.

8. Fire protection in Oregon is therefore financed by payments made by timber owners to the protective associations or as patrol tax to the State Forester's office; by state appropriations to the State Board of Forestry; by federal Clarke-McNary funds; and by contributions from the counties for the protection of county-owned lands. For the year 1938 funds collected from these various sources were as follows:

Collections from "tax-roll" lands.....	\$143,750.77
Collections from members of protective associations	90,329.82
State appropriations	91,000.00
Federal Clarke-McNary funds.....	126,040.00
County contributions	19,129.34
Total	<u>\$470,249.93</u>

The above summary of collections and grants does not include outlays made in the protection of privately and resident-patrolled timber lands, of which there were 901,810 acres in 1938.

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INTRODUCTION

THE purpose of this report is to present in outline the principal features of forest-fire-protection financing in the State of Oregon.* The methods of financing at the outset appear somewhat complex due to the diversified and intermingled ownerships of timber lands in the state and the likewise diversified sources of funds expended in the protection of these timber lands.

In order to present a picture of the methods of financing forest-fire protection in its clearest and simplest outlines, the main body of the report has been confined to the treatment of the broader aspect of the subject, reserving as nearly as possible for footnotes and the appendix those materials that are of a supplementary and qualifying nature.

Due to the meagerness of published information in this field, the author has been obliged again and again to seek assistance in personal conferences with those actively engaged in the administration of the forest-fire-protection laws in the state in order to obtain a better perspective of the problem. Generous use has also been made of the annual reports of the State Forester.†

THE STATE TIMBER LAND FIRE-PROTECTION LAW‡

Oregon laws provide that "Every owner of timber land in the State of Oregon shall furnish or provide therefor, during the season of the year when there is danger of forest fires, adequate protection against the *starting* or *spread* of fire *thereon* or *therefrom* which shall meet with the approval of the state board of forestry."§

The cost of such protection falls on the owners of the timber lands|| to the extent that state appropriated funds, county contributions, and federal aid do not defray or reduce such costs.

The State Forester is charged with the enforcement of the forest-fire protection laws and "In case any owner or owners shall fail or neglect to provide such protection against the starting or spreading of fire, then the State For-

* This report is concerned with the National Forests only to the extent that certain small areas because of "isolation and topographic features" are protected by agencies under the jurisdiction of the State of Oregon. For a description of ownership areas see pp. 6 ff.

† The information contained in this report was obtained from conferences with state foresters, members of the State Board of Forestry, secretaries of fire-patrol associations, officers of the Oregon Forest Fire Association, representatives of the United States Forest Service, and employees of the State Forester's office as well as from the annual reports of the State Forester and Oregon laws.

‡ The term fire protection is the broader term and is used to include in its meaning both presuppression or fire prevention and suppression of fires.

§ Oregon Code, 1930, sec. 42-601.

|| "For the purposes of this act any land shall be considered timber land which has enough timber, standing or down, living or dead, either mature timber or young growth, with enough inflammable forest debris or growth to constitute, in the judgment of the state board of forestry, a fire menace to itself or adjoining lands." Oregon Laws, 1933, Chapter 100, Sec. 1—Amending Section 42-603, Oregon Code, 1930.

ester, under direction from the State Board of Forestry,* shall provide the same. . . . "† The State Forester may directly protect these timber lands or contract for their protection with some other agency. The expenses incurred by the State Forester in providing such protection are placed on the tax roll in the form of an acreage levy and constitute a lien against the land the same as general property taxes. The lands so protected under the direction of the State Forester are designated "tax-roll lands."

The Oregon laws made the further provision that "any legal subdivision of not more than 160 acres of timber land, to be designated by the owner, shall be deemed to be adequately protected if more than one-half thereof is within the radius of one mile of the owner's permanent residence, or if the owner shall furnish patrol and protection therefor equal in standard, efficiency and seasonal duration to that of those who are in good faith maintaining organized patrol and protection of their lands against fire with the approval of the state board of forestry."‡

Any owner of timber land may directly or through his representative request a hearing before the State Board of Forestry on any subject pertaining to the activities of the board affecting his properties. Hearings pertaining to costs charged against the timber land for the protection thereof must be requested in advance of the regular meeting of the board held on the last Saturday of November at the State House, Salem, Oregon.§

TIMBER OWNERSHIP IN OREGON

The total forest area of the state has been estimated at 28,313,267 acres with about 17,500,000 acres in public ownership, federal, state, county, and municipal, and about 10,700,000 acres in private ownership.||

Table 1 presents in detail the distribution of ownership of timber lands in Oregon as of the year 1938.

The volume of the remaining stand of timber in the state has been estimated at 397 billion feet board measure, an amount equal to one-fourth of the national volume of standing timber.¶

Ownership areas. The following description of ownership areas aids in clarifying the diversified and intermingled ownership of timber lands in the state and contributes to a clearer understanding of the financial organization of forest-fire protection.**

* A State Board of Forestry consisting of the Governor, Secretary of State, State Forester, Fish and Game Warden, the member of the Oregon Agricultural College who had charge of the forest work, and three electors of the State of Oregon to be appointed by the Governor, was first created in 1907. The limited scope of this board's activities is evident from the first biennial appropriation of \$500. This appropriation was raised to \$60,000 in 1911, when the present state board was provided for. At present the membership of the board consists of two ex-officio members, the Governor of the State and the dean of the School of Forestry of Oregon State College, and seven members appointed by the Governor upon the recommendation of the following organizations: United States Forest Service, Oregon Forest Fire Association, Oregon Wool Growers' Association, Oregon State Grange, West Coast Lumbermen's Association, Western Pine Association, Western Oregon Livestock Association, and Oregon Cattle and Horse Raisers' Association. The State Board of Forestry appoints the State Forester.

† Oregon Code of 1930, sec. 42-602.

‡ Oregon Code of 1930, sec. 42-604.

§ Oregon Code of 1930, sec. 42-605.

¶ Twenty-Seventh Annual Report of the State Forester of Oregon, p. 21.

|| Oregon Blue Book, 1939-1940, pp. 153 ff.

** The description of ownership areas presented here is taken with minor changes from the Twenty-Eighth Annual Report of the State Forester of the State of Oregon, pp. 25 ff.

Table 1. DISTRIBUTION OF OWNERSHIP OF TIMBER LANDS IN OREGON, 1938*

Ownership	Acres	Percentage
		<i>Per cent</i>
<i>Federal</i>		
National forests	12,364,538†	43.66
O. & C.	2,212,503	7.81
National parks	134,135	.47
Indian lands	1,179,913	4.17
Public domain	660,167	2.33
Total federal	16,551,256	58.44
State	149,783	.53
County	874,744	3.11
Municipal	25,128	.09
Total	1,049,655	3.73
Private	10,712,356	37.83
Grand total	28,313,267	100.00

* Twenty-Seventh Annual Report of the State Forester, p. 21.

† Deductions made for juniper areas, lake surfaces, open lands, etc.

"Private Forest Protective Association acreage:* Timberlands under this classification include only those owned by the individual members of the association. Contributions toward the cost of protection are made voluntarily by the owners on the basis of acreage owned and are paid directly into the association treasury. These are private organizations with full authority to carry out all protective activities within the boundaries of the respective units.†

"Tax-roll acreage: Included in this classification are the privately owned timberlands for which the owners fail or neglect to provide protection, either through association membership or private patrol, and the work is performed by some other agency. The costs are extended on the tax rolls from ownership lists prepared by the state forester, and are collected at the same time and in the same manner as taxes are collected.

"Private patrol areas: These consist of lands, invariably in a single ownership, where the owner elects to carry on the work and bear all of the costs. Such areas may be within or adjacent to regularly organized protection districts. Authority of the state over such areas is limited to a determination of the adequacy of the patrol and efficiency of fire suppression.

"State forests, state school lands and state parks: These constitute only a limited area of the forest land in the state and cannot be considered as a material factor in protection. General jurisdiction rests with three state organizations; viz., state forestry department, state land board and the parks department of the state highway commission, respectively. Protection has been delegated to the state forester either through statute or by agreement with the other state agencies.

* The Private Forest Protective Associations, incorporated under the laws of the state, consist of timber owners, occupying rather well delimited areas called units, organized into associations for the purpose of mutually protecting their holdings against loss by fire. Each association has a board of directors and employs a secretary either independently or jointly with one or more other associations. The district warden for the unit is hired by its board of directors with the approval of the State Forester.

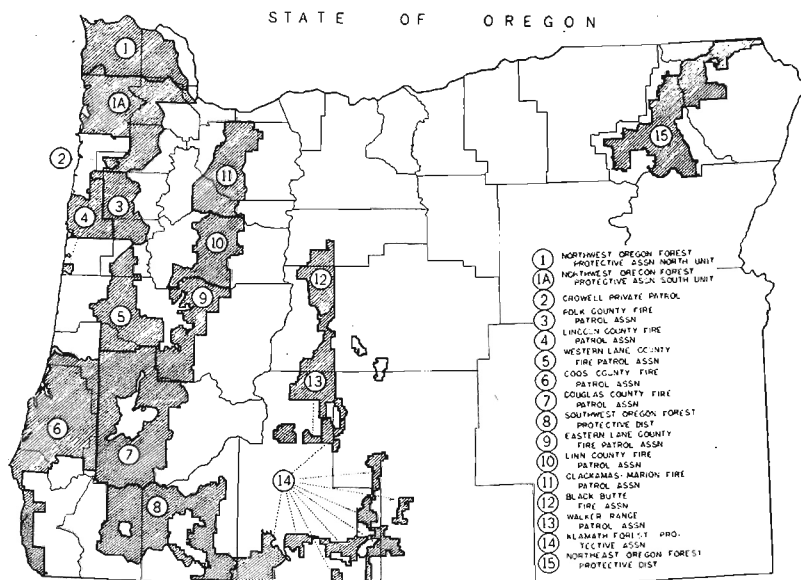
† For a map of the boundaries of the private forest-protective associations and state units see p. 8.

"O. & C. lands: These include both Oregon and California Railroad Grant Lands and Coos Bay Wagon Road Grant Lands. They were originally in private ownership but title reverted in the federal government in 1916. Out of a total of two and a quarter million acres, approximately a million and a half are within the protective boundaries of state and association units. Protection is carried on under contract by the organization in charge of the units wherein the lands are located and reimbursement for costs is made by the federal government. Prior to 1938 the Forest Service was the federal agency having authority to sign contracts, but since the passage of the so-called O. & C. sustained yield act, this has been transferred to the General Land Office.

"Public domain: Public domain land includes about 750,000 acres consisting for the most part of remote and inaccessible potential forest land scattered throughout the forested regions outside of the National Forests.* It is a part of the federally owned vacant public land which is under the jurisdiction of the General Land Office, but protection has been delegated by Congressional action to the Forest Service and that organization signs all contracts.†

"County owned lands: These consist almost entirely of lands which have been acquired by the counties through tax foreclosure. The total area approaches a million acres, the major portion being widely scattered throughout the forested regions of western Oregon.

"National Forest areas: These areas are usually small parts of the National Forests which, because of isolation or topographic features, can be better pro-



* Although it would involve considerable effort to obtain the exact figure on public-domain acreage scattered throughout the forested regions in Oregon outside of the National Forest, 750,000 acres is probably too high an estimate.

† Public-domain land intermingled with O. & C. land is covered by O. & C. protection contracts at present. Public-domain lands outside of O. & C. zones are covered by United States Forest Service contracts.

ected by some other organization than the U. S. Forest Service. This is usually arranged through an exchange of areas with the state forester or private patrol associations rather than through the direct payment of patrol costs."

BY WHOM TIMBER LANDS IN THE STATE OF OREGON ARE PROTECTED

Individual owners. The earliest fire patrol for timber lands in the State of Oregon was provided by individual owners, and a small percentage of timber land in the state is still so protected.

"During the period between 1907 and 1911, there came the first definite attempts on the part of private individuals to protect their holdings from fire. These first efforts were in the form of private patrols, the individual himself confining his efforts to his own holdings. Due principally to intermingled ownerships, the owners finally consolidated units for the purpose of mutual protection and then was born the first timber protective association in the state."*

Private Forest-Protective Associations.† Local protective timber associations were formed during the early years of the present century for the purpose of mutually providing protection against the origin and spread of fire on the lands of their members. The lands so protected are known as "association lands." During the year 1937, 15 such associations were active in the state. This number was reduced, mainly through consolidation, to 12 during the following year. These associations, in addition to providing protection for their own lands, early provided fire protection for the timber lands of others, within the state, sometimes under direct contract with the owners of such lands but more often under contract with the State Forester's office. Contracts are entered into directly or indirectly with the counties and the state for the protection of their lands.

Contracts for the protection of O. & C. lands are made between the Department of the Interior and the Oregon Forest Fire Association. This organization in turn holds the contracts with the various protective associations who provide fire protection for these lands within their respective boundaries.‡

The State Forester. The State Forester directly patrols timber lands, both privately owned and county- and state-owned, and under contract with the Department of the Interior and the U. S. Forest Service patrols both public domain and O. & C. acreage. The privately owned land protected by the State Forester consists mainly of the two units known as the Northeast and Southwest units.§

* For brief account of the development of fire protection for timber lands in the State of Oregon, refer to Twenty-Fifth Annual Report of the State Forester of the State of Oregon, pp. 8 ff.

† For a description of the private forest-protective association, see *infra* p. 5, footnote 1.
‡ All contracts between federal, state, and private agencies relative to fire protection for timber lands are written contracts.

§ These units or areas are administrative units similar to the private forest-protective-association units. There are, of course, no association memberships. The district wardens are the administrative heads. They administer the units under the jurisdiction of the State Forester. The state office keeps the books. As in the case of the other units, the state pays the wardens during the fire season from May 1 to October 31, and the units pay their salaries during the remaining 6 months of the year. These two units share pro rata with the other association units in the receipt of Clarke-McNary funds. In one essential the financing of these 2 units differs from that of the other 12 protective units. The members of the private forest-protective associations are subject to assessments paid directly and without the incidence of the titling tax, whereas the private timber holders in the two state units are subject to an acreage levy for the partial defraying of the protection costs plus the titling tax and a small administrative fee. For a map of these areas see page 8.

The United States Forest Service. The United States Forest Service, in addition to protecting the National Forest not otherwise protected, under contract with the State Forester's office, patrols tax-roll timber land, county- and state-owned timber land, and public-domain and O. & C. acreage.

Table 2 shows the acreage of timber lands in Oregon, other than the national forests, patrolled by the various units and agencies during the years 1937 and 1938.

Table 2. AGENCIES PATROLLING TIMBER LANDS IN OREGON OTHER THAN NATIONAL FORESTS AND ACREAGE PATROLLED BY EACH AGENCY FOR THE YEARS 1937 AND 1938*

Agency	1937	1938
	<i>Acres</i>	<i>Acres</i>
Resident or privately patrolled lands	811,490	901,970†
<i>Private forest-protective-association patrolled lands</i>		
Association lands	3,107,315	3,026,262
Tax-roll lands (private)	3,359,839	2,774,280‡
County lands	781,669	678,812
O. & C. lands	1,533,993	1,202,803
Public-domain acreage	384,293	321,681
Elliott State Forest	71,105	.....
State lands .....	.....	47,826
Total association-patrolled lands	9,238,214	8,051,664
<i>State Forester-patrolled lands</i>		
Tax-roll lands (private)	654,224	1,348,690
County lands	14,921	107,228
O. & C. lands .....	.....	364,372
Public-domain lands	81,340	180,621
State lands .....	.....	17,482
Elliott State Forest .....	.....	71,105
Total State Forester-patrolled lands	750,485	2,089,998
<i>United States Forest Service-patrolled lands</i>		
Tax-roll lands (private)	1,574,518	1,786,867
County lands	78,154	85,825
O. & C. lands .....	.....	600
Public-domain lands .....	.....	184,809
State lands .....	.....	28,903
Total U.S.F.S.-patrolled lands	1,652,672	2,087,004
Total acreage patrolled	12,452,861	13,130,636

* The data in this table are based on the Annual Reports of the State Forester for the 1937 and 1938 fire seasons.

† Fifty-six per cent, or 507,125 acres, were privately patrolled and 44 per cent, or 394,845 acres, were resident patrolled in 1938.

‡ 210,000 less than in the 1939 report. In the annual report of the State Forester for the year 1938, pp. 54-55, "Tax Roll" lands for Douglas County under Douglas County Fire Association are given as 328,236 acres; as per totals this should be 438,236 acres. "Tax Roll" lands for western Lane County Fire Patrol Association are given as 211,501 acres; as per totals this should be 311,501 acres.

THE FINANCING OF FIRE PATROL FOR TIMBER LANDS IN OREGON

Private forest-protective associations. The private protective associations in the spring of the year make up budgets for the coming fire season based on the estimated costs of fire prevention and suppression for the timber lands within their districts, including both membership lands and lands patrolled for others. Assessments to cover the associations' percentages of these budgets are

made on the associations' membership and are paid by the members directly to the respective protective associations. These payments are not subject to the so-called state tithing, or 10-per-cent penalty tax.*

Due to the greatly fluctuating costs of fire suppression from year to year, the local protective associations of western Oregon and the Southwest State Unit have set up a central control fund or pot, as it is vernacularly called, upon which they may draw in times of extraordinarily high suppression costs.† The associations aim to have enough money in their fund to keep them from going broke rather than to have a specific amount. This fund is in the custody of the Oregon Forest Fire Association, an organization maintained by the private forest-protective associations and known as the "State Association."‡

The "member associations" of western Oregon enter into a contract with the "State Association," agreeing to maintain certain standards of efficiency relative to protection against fire, fire detection and suppression, to submit reports, and to make contributions to the central fund as determined by the Board of Trustees of the State Associations.§

The State Association in turn contracts to reimburse the member association in any one calendar year for its actual suppression costs (emergency labor, supplies, services, transportation, reconditioning or rental of equipment used in fire fighting) incurred in fighting fire on any lands for the protection of which it is responsible, less a deductible amount as follows:

"Twice the annual average fire suppression costs of the Member Association for the five years immediately preceding, provided, however, that said deductible amount shall in no case be less than an amount equal to $\frac{3}{4}$ of one cent per acre or more than an amount equal to $1\frac{1}{2}$ cents per acre on the area for the protection of which the Member Association is responsible."||

This central control fund is itself protected by insurance involving an annual premium of \$5,000.¶ The insurance policy or contract provides in general that in case of above-average fire-suppression costs, an initial \$25,000 is to be used from this central control fund. Costs beyond this amount are to be borne 10 per cent by the fund and 90 per cent by the insurance company. The maximum contribution by the insurance company for any one fire season is not to exceed \$200,000.**

Total receipts from assessments on association membership lands were \$90,329.82 for the 1938 fire season and \$104,960.72 for the 1939 season.

* For type of financial statements rendered by the Oregon Forest Fire Association and private protective associations see appendix.

† The State unit has contributed to the central control fund as follows: 1933-1935, \$4,500; 1936, \$900; 1937, \$630; 1938, \$950; and 1939, \$1,900.

‡ The Oregon Forest Fire Association, an agency of the private forest-protective associations in the state and certain other organizations with direct and indirect interests in timber such as the Freemont Land Company and the Shevlin-Hixon Company, cooperates with its member associations in correlating their forest-fire-protection activities. The association was established April 8, 1910. It has a president and two vice presidents, a board of managers of eleven members, and a secretary-manager.

§ The private forest-protective associations of eastern Oregon do not participate in the central control fund or pot.

¶ The deductible minimum and maximum as indicated above apply to the 1940 season. For a period of years preceding the 1940 season the deductible minimum and maximum were $\frac{3}{8}$ of 1 cent per acre and 1 cent per acre respectively. This recent change in maxima and minima deductions tends to decrease materially the drain on the "Fund."

|| Due to increased hazards during recent years the premium was raised to \$7,500 for the 1939 fire season.

** The maximum aggregate contribution guaranteed by the insurance companies for the 1939 season was \$178,125.

Privately owned tax-roll timber lands. Timber lands not protected against fire by their owners directly or through private forest-protective-association membership are provided protection against fire by the State Forester under direction from the State Board of Forestry. The State Forester in 1937 patrolled directly 654,224 acres of privately owned tax-roll timber lands and contracted for the patrol of 3,359,839 acres of privately owned timber lands with the local fire associations and for the patrol of 1,574,518 acres of such timber land with the United States Forest Service. In 1938 the State Forester patrolled directly 1,348,690 acres of privately owned tax-roll timber land and contracted for the patrol of 2,774,280 acres of privately owned timber lands with the local fire associations and for the patrol of 1,786,867 acres of such lands with the United States Forest Service.

The state law provides that the cost of such protection is not to exceed 5 cents per acre per annum except "that when in time and localities of unusual hazard adequate protection of timbered areas demands expenditures in excess of 5 cents per acre, the State Forester, with the approval of the State Board of Forestry, may, after thorough investigation of need thereof, authorize and approve expense sufficient properly to safeguard timber resources, but amounts so approved shall not exceed actual cost of work performed."*

The levies imposed on the privately owned timber lands for fire protection are collected in the same manner as are taxes and are paid to the State Forester by the county treasurer. The State Forester in turn pays these monies to the State Treasurer to be credited to the State Forester's account. Ten per cent of these monies is retained by the State Treasurer under the state tithing tax.†

The State Forester's office, previous to paying over to protective associations and to the United States Forest Service the monies credited to its account by the State Treasurer from the levies collected on the tax-roll lands patrolled by the association and the U. S. Forest Service, makes a deduction for administrative costs, equal to 2 mills per acre on levies paid in currently, and a deduction of 7 per cent of the delinquently paid-in levies.

Table 3 gives the levies in mills on tax-roll timber lands for the years 1934 to 1939. The voluntary assessments on the "Private Forest Protection Association" lands are equal to those on the "Tax-roll" lands in the corresponding areas less the tithing tax and the administration fee for the State Forester. This administration fee was 2 mills per acre per year for the years 1938 and 1939 and 4 mills per acre per year preceding 1938.

* Levies or assessments on land for the cost of fire protection are not imposed under the taxing powers of the state but under the state's police powers. These assessments therefore need not conform to the tax laws of the state and may bear no relation to the value of the property protected. Some of the most valuable forest types are the least dangerous from a protection standpoint. See *First State Bank v. Kendall Lumber Co.*, 107 Ore. 1 (213, p. 142).

† " . . . Any amount so paid or contracted to be paid by the state forester, together with a penalty of ten (10) per cent thereof, shall be a lien upon the property . . ." Laws of Oregon, 1935, C. 356, paragraph 1, p. 564.

State's receipts under tithing tax law from Forest Patrol Assessments:

1937.....	\$10,237.56
1938.....	10,427.27
1939.....	9,347.56 preliminary estimate

CF. "State Levy of Taxes" issued by the State Tax Commission for years concerned.

Table 3. LEVIES IN MILLS PER ACRE ON "TAX-ROLL" LANDS FOR FOREST FIRE PROTECTION IN AREAS INDICATED FOR THE YEARS 1934 TO 1939

County	Agency	1934	1935	1936	1937	1938	1939
		<i>Mills</i>	<i>Mills</i>	<i>Mills</i>	<i>Mills</i>	<i>Mills</i>	<i>Mills</i>
Baker	Baker County Fire Assn.	19	21	19	20	19	19
Benton	Polk County Fire Patrol Assn.	34	32	37	37	35	35
	W. Lane County Fire Patrol Assn.	34	26	26	37	46	46
Clackamas	Clackamas-Marion Counties F.P.A.	44	48	48	48	46	46
Clatsop	N.W. Oregon F.P.A.	44	37	37	48	46	46
Columbia	N.W. Oregon F.P.A.	44	37	37	48	46	46
Coos	Coos County F.P.A.	34	37	37	37	35	35
Crook	State (Coos County F.P.A.)	17	21	20	20	19	35
Curry	U. S. Forest Service	34	37	37	37	35	50
	Deschutes-Jefferson Counties F.P.A.	25	37	37	37	35	...
Deschutes	Walker Range Patrol Assn.	40	37	26	15	30	29
	U. S. Forest Service	40	37	26	37	30	29
Douglas	Douglas County F.P.A. (State)	34	22	26	26	24	35
	Coos County F.P.A. (State)	34	37	37	37	35	35
	W. Lane County F.P.A.	34	26	26	37	46	46
	W. Douglas County F.P.A.	29	32	32	32	30	35
Grant	State	15	15	...	...	...	...
	U.S. Forest Service	15	15	15	15	13	19
Harney	U.S. Forest Service	15	15	15	15	13	19
Hood River	U.S. Forest Service	42	43	40	40	46	38
Jackson	State	30	25	32	37	37	37
	Klamath F.P.A.	...	...	...	...	...	...
Jefferson	Deschutes-Jefferson Counties F.P.A.	40	15	15	15	30	29
	U.S. Forest Service	40	15	15	15	30	29
Josephine	State	50	25	32	37	37	37
Klamath	Klamath F.P.A. Unit 1	34	37	37	48	35	35
	Klamath F.P.A. Unit 2	24	48	26	37	24	46
	Walker Range Patrol Assn.	24	48	26	37	24	46
Lake	U.S. Forest Service	22	21	20	20	19	24
Lane	Eastern Lane County F.P.A.	34	37	26	26	24	24
	Western Lane County F.P.A.	34	26	26	37	46	46
Lincoln	Lincoln County F.P.A.	29	32	32	48	46	34
Linn	Linn County F.P.A.	44	32	37	43	40	40
Malheur	Baker County Fire Assn.	19	21	19	20	19	19
Marion	Clackamas-Marion Counties F.P.A.	44	48	48	48	46	46
Morrow	State	15	15	...	...	...	...
	U.S. Forest Service	15	15	15	15	13	19
Multnomah	U.S. Forest Service	50	50	50	48	50	50
	N.W. Oregon F.P.A.	44	37	37	48	46	46
Polk	Polk County F.P.A.	34	32	37	37	35	35
Tillamook	N.W. Oregon F.P.A.	44	37	37	48	46	46
Umatilla	State	15	15	...	...	...	...
	U.S. Forest Service	15	15	15	15	13	19
Union	State	25	25	25	20	20	20
Wallowa	State	15	15	25	20	20	20
Wasco	U.S. Forest Service	32	26	25	25	24	28
Washington	N.W. Oregon F.P.A.	44	37	37	48	46	46
Wheeler	State	15	15	...	...	...	...
	U.S. Forest Service	15	15	15	15	13	19
Yamhill	N.W. Oregon F.P.A.	44	37	37	48	46	46

Fire-patrol assessments levied against "tax-roll" timber land in the state for the years 1937 and 1938 and collections made during those years were as follows:

Year	Assessments levied	Collections made
1937	\$168,254.27	\$134,859.38
1938	177,317.15	143,750.77

County-owned timber lands. According to Table 2, the State Forester patrolled directly during 1937, 14,921 acres of county-owned timber and cut-over lands, and the protective associations and the United States Forest Service

patrolled under contract with the State Forester 781,669 and 78,154 acres of such lands respectively. During the following year, 1938, the State Forester patrolled 107,228 acres of such lands, and the local protective associations and the U. S. Forest Service patrolled under contract with the State Forester 678,812 and 85,825 acres respectively.

Much of this area consists of tax-reverted land obtained by the counties through tax foreclosure. The status of the financial responsibility of the counties for the fire-protection costs of these lands was until recently somewhat indefinite and payments have been irregular. The State Forester reports, "The payment of patrol costs in the past has been somewhat uncertain, and where such payments have been made no universal policy has been followed."*

The 1939 legislature, however, has definitely placed the responsibility for patrol cost of county lands upon the counties. The State Forester is authorized and required to provide fire protection for both state lands and county lands not otherwise protected. Each county is required, on or before the first day of March of each year, to pay to the State Forester the actual cost, for the previous year, of protection of all timber lands owned by the county as of October 1 of the previous year, except when the county has contracted for its protection with a protective association. "The cost of protection furnished by the state forester shall be a pro-rated acreage rate for the protection of all timber lands within the protection district. . . ."

STATE AND FEDERAL AID FOR FOREST-FIRE PROTECTION

Both the state and the federal governments are providing substantial aid for forest-fire protection, the state through biennial appropriations by its legislature and the federal government through continuing appropriations under the Clarke-McNary Act of June 7, 1924.

State aid. The state appropriations for the maintenance of the state forestry department are direct evidence of the legislature's recognition of public interest in the conservation of the timber resources of the state. Appropriations for the past 8 years have been as follows:

<i>Total amount appropriated for</i>		<i>Oregon Laws</i>
Biennium ending Dec. 31, 1934.....	\$ 90,003	1933, C. 222
Biennium ending Dec. 31, 1936.....	118,468	1935, C. 373
		C. 284
Biennium ending Dec. 31, 1938.....	182,000	1937, C. 144
Biennium ending Dec. 31, 1940.....	210,000	1939, C. 423
The 6-months period ending		
June 30, 1941.....	45,000	1939, C. 423

The State Board of Forestry is authorized to expend the state appropriations for the maintenance of improvements constructed by the Civilian Conservation Corps, for salaries and wages, general operating and maintenance expenses, and for capital outlays. The State Forester, under the direction of the State

* Twenty-Eighth Annual Report of State Forester, p. 27.

† Oregon Laws 1939, Chapter 525.

Board of Forestry, has considerable latitude in the expenditure of the legislatively appropriated funds.*

All district wardens are paid in full from the state funds during the fire season continuing from May 1 to October 31. During the remaining 6 months of the year their salaries are paid from association funds and levies made upon tax-roll lands. Inspectors are paid in full from the state funds. State funds have also been used in providing equipment available for fire suppression by the private associations and others upon the payment of a maintenance fee covering the cost of replacing and reconditioning such equipment.

Federal aid. Federal grants for the purpose of promoting the protection of timbered and forest-producing land in the different states from fire are made under the authority of Section 2 of the Clarke-McNary Act of June 7, 1924. Appropriations for all timber-producing states reached \$2,200,000 in 1938 and again in 1939. The allotment of these funds is made to the different states under conditions as seem fair and equitable to the Secretary of Agriculture.†

The law provides that in no case "other than for preliminary investigations shall the amount expended by the federal government in any state during any fiscal year exceed the amount expended by the state for the same purpose during the same fiscal year, including the expenditures of forest owners or operators."

The Secretary of Agriculture distributes the funds granted under Section 2 of the Act among the states in two series of allotments, the "Regular" and the "Extra," the "regular" allotment in proportion to estimated costs of "adequate" fire protection to timbered and forest-producing lands within the different states and the "extra" allotment more nearly in proportion to actual expenditures incurred by the different states in protecting their timbered and forest-producing lands from fire.‡ In no case may the costs of fire suppression play a part in the distribution of Clarke-McNary funds.§

"The cost of adequate protection, the basis upon which the 'regular' or first allotment is made, might be termed a more or less mythical figure but based upon the best information available of what it would cost to install and maintain the ideal protective system—one that would give assurance that the area burned over annually would be of such a limited amount that permanent forestry could be assured. In Oregon this has been fixed at .2 of one per cent annually, hence in determining the cost of adequate protection for the state the question was constantly borne in mind as to what kind of an organization it

* The following items, selected at random, from the Twenty-Eighth Annual Report of the State Forester, indicate the nature of the expenditures paid in whole or in part from the state appropriations: Salaries and Wages: State Forester, \$4,196.35; Deputy State Forester, \$2,396.35; Extension Forester, \$3,312.05; Wardens and Patrolmen, \$42,114.00; Inspectors, \$29,832.95. General Operating and Maintenance: Tires, \$1,854.70; Telephone and Telegraph, \$2,699.76; Printing, \$2,523.32; Repairs and Renewal of Equipment, \$642.81. Capital Outlays: Furniture and Fixtures, \$1,061.77; Motor Vehicles, \$16,080.08; Construction Materials, \$20,382.15.

† Section 3 of the Clarke-McNary Act authorizes the Secretary of Agriculture to expend funds appropriated under the law for research in forest taxation, and timber conservation. Sections 4 and 5 authorize the Secretary of Agriculture, among other things, to cooperate with appropriate officials of the states in establishing wind breaks, shelter belts, and farm wood lots. Sections 6 to 9 deal with the procurement by the federal government of land for reforestation and other purposes.

‡ For table containing data on allotments to states, see Appendix.

§ The problem of making a segregation between outlays for protection of timbered lands against fires and for suppression of fires is by no means a simple one. As in any segregation of costs, it is soon discovered that some costs are joint costs. For example, snag falling to facilitate operation is a non-reimbursable item. Other snag falling is reimbursable. Slash disposal costs are non-reimbursable. Expense for tools and equipment for fire protection and suppression on areas outside of operating areas where hazard is normal is a reimbursable item.

would take to keep down to this .2 of one per cent this maximum annual area burned. The last general revision of these figures for the entire nation was made in 1936, first by the states individually and later, through correlation by the Forest Service, for the entire nation. These figures have remained the same since that time with only a few minor changes.*

These estimated costs of "adequate" protection usually bear but slight relation to actual expenses incurred for such protection. The aggregate of these estimated "adequates" for all states submitted for the 1938 fire season was \$18,553,100, whereas the aggregate state and private expenditures actually incurred for the protection of timbered and timber-producing lands from fire for that year were only \$4,725,145. The larger portion of the Clarke-McNary funds is allotted to the states in proportion to the estimated "adequates." For the fiscal year 1939 these allotments represented 7 per cent of the estimated "adequates." In former years, these allotments have equaled 8 per cent of "adequates."

The basis for the distribution of the balance of the funds among the states is the amounts by which the expenditures made by the different states for forest-fire protection, exclusive of suppression costs, respectively exceed the allotments received by the states under the first distribution.

In other words, the second or "extra" allotments are made on the basis of the difference between actual expenses incurred for prevention and "regular" allotments received on the basis of estimated "adequates." For the fiscal year 1939 this "extra" allotment was equal to approximately 17 per cent of the "excess" expenditures in our state for fire prevention.

There are minor deviations from the above basis of distribution. No state may receive in total federal allotments in any one year a sum in excess of the amount expended by the state and timber owners for the protection of timber lands from fire within its borders. The Secretary of Agriculture may place an arbitrary limit on the increase in total allotments a state may receive over those of the preceding year. Adjustments may be made to prevent reductions in total allotment to any state. The expenditures are submitted for calendar years or fire seasons, whereas federal allotments are made on the basis of the fiscal years, July 1 to June 30.

Federal allotments to the state of Oregon under Section 2 of the Clarke-McNary law for the past 7 years have been as follows:

1933	\$ 98,288
1934	82,655
1935	94,200
1936	92,970
1937	81,311
1938	126,040
1939	145,722

The federal allotments under Section 2 of the Clarke-McNary Act are made available to the State Forester who administers the expenditure of the

* Excerpt from a letter from the Oregon State Forester, N. S. Rogers, to the author, September 6, 1940.

The Manual of Administrative Procedure of the United States Department of Agriculture for Cooperation with the States under Sections 1, 2, and 4 of the Clarke-McNary Law, July 9, 1932, has the following statement: "Obviously adequate protection is subject to varying interpretations, and, even if complete agreement were possible as to what constitutes adequate protection, the cost of attaining it would still be uncertain. Therefore, the cost of adequate protection as estimated by the States and correlated by the Forest Service is not a final figure but will require correction as changes occur in standards, methods, and unit costs. Existing estimates will not be altered piecemeal; and except where changes are obviously required to prevent inequities, they will be made only when a general revision is deemed necessary to bring the estimates up to date."

same for the protection of timber lands from fire within the state. These Clarke-McNary funds have been used in part for central office expense and in part to reimburse the local fire associations and the state units up to 30 per cent of the expenditures incurred by them in fire prevention on lands within their respective areas.* The total federal allotments to the state of Oregon were approximately 26 per cent of the total expenditures incurred for fire prevention in the state for the 1937 season.

In addition to the above continuing financial grants to the states for forest-fire prevention, the federal government has been providing substantial aid for the past 7 years in both fire prevention and suppression through the gratuitous services of the Civilian Conservation Corps. More than 600 miles of truck trails have been constructed in Oregon forests, opening areas heretofore inaccessible to truck travel. More than a thousand miles of telephone lines have been completed, facilitating communication in case of fires. Many buildings, including headquarters, patrol cabins, and lookouts, have been constructed.

The fire-suppression activities of the CCC camps have been of the greatest importance.

The only expense to the state for these services consists in an extra food allowance to the CCC men while engaged in fire-suppression activities. This appears in the state records as the "excess rations account."

County aid for forest-fire protection. In addition to state and federal appropriations for forest-fire protection, counties have until 1939 been required to make contributions for protection costs under certain conditions. Section 42-404 of the Oregon Code provided: "... In times and localities of particular fire danger or to enforce the fire laws, or to apprehend and prosecute violators thereof, the forester shall have power to appoint and employ, either independently or jointly with other agencies, such additional wardens, and to furnish them such assistance and facilities for protecting life or property from fire as he shall deem public safety demands, and unless contributed by other sources the cost thereof shall be paid from the funds appropriated for the purpose of carrying out the provisions of this act; but each county in which such service is given shall be responsible for one-third the expense thus actually incurred and paid by the state for services within said county. . . ."† Due to a growing opposition to the law, the 1939 legislature amended the act by striking out the last clause of the section, thus relieving the counties from making contributions for fire protection costs other than for the protection of county-owned lands within their respective borders.‡

Sources and amounts of protection funds summarized. The principal sources of funds for the protection of protective associations' membership lands and "tax-roll" lands, aggregating 91 per cent of all privately owned timber lands in the state, are acreage assessments on all these lands, state appropriations, and Clarke-McNary federal funds. Previous to 1939 the counties containing timber lands also made contributions toward fire-protection costs of private lands within their borders.

For the year 1938, the funds made available from these sources were as follows:

* O. & C. lands, public-domain lands, privately patrolled acreage, and county-owned timber lands do not share in the Clarke-McNary funds. Protection for these lands is provided on a cost basis.

† Oregon Code 1930. Sec. 42-404. Receipts under this act for the 1937 fire season were \$12,942.62 and for the 1938 season were \$19,129.34.

‡ Oregon Laws, 1939, Chapter 291.

Collections from assessments on "tax-roll" timber lands	\$143,750.77
Collections from assessments on protective associations' membership lands	90,329.82
State appropriations	91,000.00
Federal Clarke-McNary funds	126,040.00
County contributions	19,129.34
Total	\$470,249.93

The funds obtained from these sources for any one year may vary considerably from the expenditures incurred for forest-fire protection for that year. During years of exceptionally high protection costs the central control fund may be drawn upon and insurance funds may become available. During years of low costs the central control fund may be built up and balances carried over.

Data on the funds expended directly by private owners in the protection of their timber lands, although of no direct interest to the state forestry department, are made a part of the Forester's report on fire protection costs in the state to the Clarke-McNary Administration.*

The expenses incurred by the state forestry department and the private forest-protective associations in protecting the O. & C. lands and public-domain areas against fire are covered by federal contracts. These expenditures play no part in the distribution of the Clarke-McNary federal funds and are of no direct interest to the Oregon timber owner or taxpayer.

MISCELLANEOUS MATTERS DIRECTLY AND INDIRECTLY RELATED TO THE FINANCING OF FOREST-FIRE PREVENTION AND SUPPRESSION

Duties of fire wardens. 42-407. "All wardens appointed under the act shall, under instructions from the forester as to their exercise of state authority, take proper steps for the prevention and extinguishment of fires within the localities in which they exercise their functions. . . ."

Salaries. 42-402. ". . . any part of the state forester's salary in excess of \$3,600 per annum and the salaries of any assistant state forester or of the deputy state forester in excess of \$2,500 per annum may only be paid from funds contributed by the U. S. Government for forest protection in the state of Oregon."

Administration expenses of local fire associations. Administrative expenses of the local fire associations are spread pro rata over all their receipts: assessments upon their members, Clarke-McNary allotments, payments from State Forester's office for fire protection provided for tax-roll lands under contract with the State Forester, and upon the receipts from the U. S. Department of Interior for protection provided O. & C. lands and public-domain acreage.

* The following data based on figures from the West Coast Lumbermen's Association and Western Pine Association appear in the Twenty-Eighth Annual Report of the State Forester:

	Private	Logging
Fire-fighting costs for the 1938 season	\$ 8,057.00	\$140,969.23
Expenditures exclusive of fire fighting for the 1938 season	77,301.14	212,911.96

State Forester's emergency fund. 42-501. "The secretary of state is hereby authorized to draw a warrant on the general fund, forest patrol account, in favor of the state forester for the sum of \$25,000, which said sum is hereby intended to be advanced to said state forester . . . and which said sum shall be used only as an emergency or revolving fund for the payment of expenses . . . in fighting or suppressing fires in times and localities of unusual hazard. . . ."

ACKNOWLEDGMENTS

Due to the dearth of assembled and organized materials on financing forest-fire patrol in Oregon, the author has of necessity relied upon the men actively engaged and experienced in the administration of forest-protection activities for information on the subject.

Both the present incumbent of the office of State Forester, N. S. Rogers, and his predecessor, J. W. Ferguson, have generously and cheerfully given time in personal conferences and in critically reading drafts of this report. R. H. Chapler, Secretary-Manager of the Oregon Forest Fire Association for many years, and C. C. Scott, secretary of four private forest-protective associations, have been equally generous with their time and helpful suggestions. The author feels also especially indebted to Messrs. George Spaur, A. H. Gillie, and H. A. Thomas, all of the department of state forestry.

Special credit is also due to E. L. Potter, In Charge, Division of Agricultural Economics and Farm Management, Oregon State College, for carefully reading the manuscript and offering constructive suggestions.

Appendix

Federal allotments to states for forest-fire prevention. Table 4 illustrates the methods of distributing the Clarke-McNary funds for fire prevention among the different timber-producing states and the territory of Hawaii. Column *one* contains the submitted "adequates" of the states and territory aggregating \$18,575,100. Column *two* contains the first series of allotments made very largely on the basis of the "estimates" in column *one* and constituting in the aggregate slightly in excess of 6 per cent of the aggregate of the amounts in column *one*. Column *three* contains the state and private expenditures actually incurred in fire prevention. Column *four* contains the excesses of state and private expenditures over the first series of allotments made on the basis of "estimates." This fourth column contains the amounts used as a basis of sharing in the second series of allotments. The aggregate of the second series of allotments or extra federal allotments, equals \$807,074.

Total allotments to all states and territories, consisting of the first series of allotments of \$1,179,716 and the second series of allotments of \$807,074, equal \$1,986,790. Oregon participated to the extent of \$56,064 under the first series of allotments and to the extent of \$89,658 under the second series of allotments, or a total of \$145,722.

It is evident from the data in the table that the Secretary of Agriculture has not made the allotments to the states strictly on the percentage basis.

Table 4. FISCAL YEAR 1940. FEDERAL ALLOTMENTS TO STATES FOR FOREST-FIRE COOPERATION UNDER SECTION 2, CLARKE-McNARY LAW, ACT OF
JUNE 7, 1924, 943 STAT. 653
40 states, 1 territory; July 17, 1939

State	Estimated cost to protect state and private forest lands (1939 correlation)	REGULAR federal allot- ments 7 per cent of cost of pro- tection	Basis for determining <i>extra</i> federal allotments			Total regular and extra federal allotments
			State and private expend- itures for <i>prevention</i> , C. Y. 1938	Excess of state and private expenditures for <i>prevention</i> over regular federal allotment	EXTRA federal allotments	
Maine	\$ 385,000	\$ 26,950	\$ 122,323	\$ 95,373	\$ 20,221	\$ 47,171
New Hampshire	110,000	7,700	46,344	38,644	8,532	16,232
Vermont	44,000	3,080	14,268	11,188	3,750	6,830
Massachusetts	209,000	14,630	109,283	94,653	17,577	32,207
Rhode Island	27,500	1,632	4,247	2,615	840	2,472
Connecticut	110,000	7,296	41,846	34,550	8,396	15,692
New York	440,000	30,800	242,478	211,678	39,307	70,107
New Jersey	145,000	10,150	137,154	127,004	27,175	37,325
Pennsylvania	427,000	29,890	142,164	112,274	20,849	50,739
Delaware	14,300	1,001	5,402	4,401	1,158	2,159
Maryland	88,000	6,160	43,686	37,526	7,542	13,702
Virginia	468,000	32,760	80,923	43,163	8,944	41,704
West Virginia	286,000	20,020	103,346	83,326	15,473	35,493
Kentucky	292,000	20,440	11,982			20,440
North Carolina	912,000	60,672	88,461	27,789	8,524	69,196
South Carolina	627,000	36,288	116,472	80,184	14,890	51,178
Georgia	1,026,000	71,820	118,011	46,191	8,577	80,397
Florida	1,241,000	81,312	196,683	115,371	21,424	102,736
Alabama	785,000	54,950	68,663	13,713	2,602	57,552
Mississippi	670,000	46,900	73,522	26,622	6,865	53,765
Louisiana	711,000	41,664	107,159	65,495	10,508	52,172
Texas	554,000	38,780	95,984	57,204	11,990	50,770
Oklahoma	398,000	15,840	21,651	5,811	2,500	18,340
Arkansas	773,000	46,464	137,746	91,282	16,951	63,415
Tennessee	516,000	23,520	65,133	41,613	8,614	32,134
Michigan	880,000	61,600	434,334	372,734	69,215	130,815
Wisconsin	680,000	37,440	330,090	292,650	54,344	91,784
Minnesota	995,000	66,912	217,754	150,842	29,714	96,626
Ohio	82,000	5,740	17,635	11,895	2,393	8,133
Indiana	93,000	6,510	17,444	10,934	3,585	10,095
Illinois	48,000	3,360	15,289	11,929	2,215	5,575
Missouri	233,000	13,000	8,766		2,500	15,500
Montana	210,000	14,700	66,691	51,991	11,379	26,079
Idaho (N)	337,000	23,590	115,835	92,245	27,260	50,850
South Dakota	4,800	336	1,899	1,563	909	1,245
New Mexico	33,000	2,310	5,565	3,255	655	2,965
Idaho (S)	74,000	5,180	21,560	16,380	3,042	8,222
California	1,699,000	93,024	693,129	600,105	111,436	204,460
Nevada	22,000	1,306	4,557	3,231	1,099	2,405
Hawaii	5,500	385	4,402	4,017	980	1,365
Washington	822,000	57,540	507,189	449,649	103,481	161,021
Oregon	1,098,000	56,064	538,890	482,826	89,658	145,722
TOTALS	\$18,575,100	\$1,179,716	\$5,195,960	\$4,028,936	\$807,074	\$1,986,790

FORMS USED IN REPORTING RECEIPTS AND EXPENDITURES

Forms used by private timber owners and operators and by private patrol associations in submitting data on receipts and expenditures to the State Forester's office.

PRIVATE TIMBER OWNER'S AND OPERATOR'S EXPENDITURES FOR FOREST-FIRE PROTECTION AND SUPPRESSION

Calendar Year

(Mail on or before January 10, 1940)

Expenditures

1. SNAG FALLING:
 - A. Snags cut to facilitate operations; i.e., around spars, landings, edges of cutting, etc. \$.....
 - B. All snags felled except those reported under preceding item. Dead trees from which merchantable material is salvaged not to be considered as snags \$.....
2. PRIVATE PATROL:
 - A. Patrol in connection with fire protection on the operating area (railroad patrol, camp wardens, donkey watchmen, etc.), including incidental patrol of area adjacent to operation \$.....
 - B. Patrol of areas outside of operating area where hazard is normal and the company assumes entire protection responsibility. If protection fees are paid to regular protection agency for this particular area, do not include costs under this heading \$.....
3. FIRE FIGHTING EQUIPMENT:
 - A. Tools and equipment purchased for fire protection and suppression on the operating area and including incidental use on areas adjacent to operation \$.....
 - B. Tools and equipment purchased specifically for fire protection and suppression on areas outside of operating area where hazard is normal and the company assumes entire protection responsibility \$.....
4. SLASH DISPOSAL:

All slash disposal costs. If snag falling to facilitate slash disposal is included under Item 1 above, do not include here \$.....
5. FIRE FIGHTING:

All fire-suppression expenditures. Do not enter salaries or wages of any regular protection men such as camp wardens, patrolmen, etc. If expenditures are outside of operating area and will be reimbursed by regular protection agency, do not include \$.....
6. ACREAGE CUT OVER DURING YEAR \$.....
7. VOLUME REMOVED \$.....

.....
Company or owner

.....
By.....

Date submitted

.....
Title

ASSOCIATION RECEIPTS AND EXPENDITURES
SEASON OF 194.....

.....Association

Receipts

Balance from 194..... season	\$.....
Assessments on acres of timber land @¢ per acre .....	.....
Assessments on acres of cut-over land @¢ per acre.....	.....
Received from State Forester for tax-roll lands patrolled under contract .....	.....
Received from State Forester from Clarke-McNary fund .....	.....
Received from federal government for patrol of O. & C. lands.....	.....
Money borrowed .....	.....
Other receipts (state source) .....	.....
.....
.....
TOTAL RECEIPTS .....	.....

Disbursements

Field expenditures:

Unpaid bills from last season	\$.....
Fire fighting:	
Labor	\$.....
Transportation and subsistence .....	.....
Total	\$.....
Patrolling (wages of regular patrolmen and look- outs)	\$.....
Expenses of regular patrolmen and lookouts .....	.....
Salary District Warden .....	.....
Field expenses District Warden .....	.....
Auto mileage expense of District Warden .....	.....
Total	\$..... \$.....

Improvement work:

Labor	\$.....
Supplies, transportation, etc. ....	.....
Material .....	.....
Total	\$..... \$.....

Equipment:

Tools, autos, pumps, etc.	\$.....
--------------------------------	---------

Miscellaneous:

Publicity material	\$.....
Dues to Oregon Forest Fire Association .....	.....
Telephone and telegraph service .....	.....
Accident insurance .....	.....
Refund of assessments .....	.....

Other disbursements (state source) :

.....

 Total \$ \$
 Total field expense \$

Office Expenditures :

Secretary's salary \$
 Clerical help
 Office supplies
 Office equipment
 General expense
 Total \$ \$
 Total disbursements \$
 Bills unpaid (approximate) \$

Recapitulation

Total receipts \$
 Total disbursements \$
 Balance \$

STATE OF OREGON,

County of)ss.

I,, being first duly sworn, depose and say, upon oath, that I am Secretary of the Association; that the foregoing statement rendered by me is correct and represents the actual expenditures for the purpose therein named and covering the period therein specified.

..... (SEAL)
 Secretary

Subscribed and sworn to before me this day of
 A. D. 194.....

.....
 Notary Public for Oregon
 My commission expires on.....

FORMS USED BY THE OREGON FOREST-FIRE ASSOCIATION IN MAKING REPORTS

OREGON FOREST FIRE ASSOCIATION TREASURER'S REPORT

..... to

STATEMENT OF RECEIPTS

Miscellaneous Assessments

Freemont Land Company \$.....
Shevlin-Hixon Company \$.....

Membership Assessments

N. W. Oregon F. P. Assn. \$.....
Clackamas-Marion Counties F. P.
Assn.
Linn County F. P. Assn.
Western Lane County F. P. Assn.....
Coos County F. P. Assn.
Eastern Lane County F. P. Assn.....
Lincoln County F. P. Assn.....
Polk County F. P. Assn..... \$.....

Miscellaneous Receipts

Central Control Fund \$..... \$.....

Bank Balance

U. S. National Bank \$..... \$.....
Total funds to account for \$..... \$.....

STATEMENT OF EXPENSE

Educational Publicity

	Budget	Actual
W. F. C. A.	\$.....	\$.....
American Forestry
Travel
Office and Clerical
Salary
Special Authorization
Legal Work on Tax Roll Agreement authorized Annual Meeting
O. & C. Lands Record
	\$.....	\$.....
Bank Balance Dec. 31		\$.....

I have audited the books and accounts of the Oregon Forest Fire Association for the period of to, and have verified the cash balance, and

I HEREBY CERTIFY, that in my opinion the accompanying statement of receipts and disbursements is correct.

.....
Certified Public Accountant

OREGON FOREST FIRE ASSOCIATION

Statement of Receipts and Disbursements O. & C. Fund
From Inception of Fund to February 1, 1939—Inc.

RECEIPTS

U. S. Forest Service July 11, 1938.....	\$.....	
Interior Department January 27, 1939.....		
Total	\$.....	\$.....
Interest Earned on Note		
Total Funds to Account For	\$.....	\$.....

DISBURSEMENTS

Expenditures for Protection

U. S. Forest Service	\$.....	
Clackamas-Marion Counties Fire Patrol Assn.		
Coos County Fire Patrol Assn.....		
Douglas Forest Protective Assn.		
Eastern Lane County Fire Patrol Assn.		
Linn County Fire Patrol Assn.		
N. W. Oregon Forest Protective Assn.		
Polk County Fire Patrol Assn.		
Klamath Forest Protective Assn.		
Western Lane Forest Protective Assn.		
S. W. Oregon Forest Protective Assn.		
	\$.....	\$.....

Administration

Oregon Forest Fire Association.....	\$.....	
Total Disbursements	\$.....	\$.....
Bank Balance February 1, 1939		\$.....

I have audited the books and accounts of the Oregon Forest Fire Association O. & C. Fund for the period July 11, 1938, to February 1, 1939, inclusive, and have verified the cash balance, and

I HEREBY CERTIFY, that in my opinion the accompanying statement of receipts and disbursements is correct.

.....
Certified Public Accountant

ORGANIZATION AND ACTIVITIES OF FOREST-FIRE PROTECTION PERSONNEL IN OREGON

The immediate administrative heads of the fire-patrol districts, of which there are 14 in the state, 12 private forest-protective association districts and 2 state units, are the district wardens. Twelve of these district wardens are appointed by the boards of directors of the private forest-fire protective associations with the consent of the State Forester, and two of the district wardens administering the two state units are appointed by the State Forester. Subject to the direction of the district wardens are the fire wardens, lookouts, and patrolmen.

The inspectors are the direct appointees of the State Forester's office and although cooperating with, are not subject to the jurisdiction of the district wardens.

The activities of the district wardens may for convenience be grouped under three headings of fire-prevention, presuppression, and suppression activities. These groups of activities although not mutually exclusive, will serve as an outline in presenting in greater detail the functions of the wardens and their aids.

Under **prevention** may be classified such activities as the making of public contacts, granting of burning permits, supervising slash disposal, and law enforcement. Public contacts are maintained because of their educational value through such functions as speaking at grange meetings, taking interest in 4-H club work, and sign posting. The responsible function of granting burning permits devolves upon the district warden and the fire wardens who are in reality subdistrict wardens. During the year of 1938, 12,610 permits were granted for the burning over of 110,620 acres. During the same year 987 logging operators' permits and 404 sawmill operators' permits were granted. The district wardens are also the law-enforcement officers as regards the state's fire-protection laws. During 1938 a total of 89 arrests were made leading to 78 convictions and the imposition of fines aggregating \$1,496.04.

Presuppression activities. The district wardens in cooperation with the boards of directors of the private forest-fire protective associations as affecting their areas and with the state forestry department as affecting the state units do the improvement planning for their respective areas. Plans for the construction of trails, roads, and telephone lines by the Civilian Conservation Corps are submitted. Maintenance work planning is important. The district wardens determine the number and places of lookout stations. During the fire season the patrolmen, who are essentially travelling lookout men, and other employees must be contacted. Training the lookout men and the patrolmen is another function of the district wardens.

Suppression activities. The district and fire wardens are responsible for the action taken in case of fires. The suppression of the more serious fires is usually directed in person by the district wardens, the fire wardens generally attending the minor fires. Food and equipment must be provided. Fire-fighting personnel must be hired and trained. During the 1938 season 1,474 fires were suppressed, 1,089 in western Oregon and 385 in eastern Oregon.

After the close of the fire season the district wardens assist in appraising the damage of areas burned. In addition to the monthly and semimonthly reports made during the fire season, seasonal reports are made to the state

forestry department after the close of the season. An accurate record of pre-suppression costs must be maintained at all times as these costs serve as a basis in the distribution of the "extra allotment" under the Clarke-McNary Act.

Other post-season activities are improvement planning and checking on land status, more particularly tax-roll acreage, O. & C. acreage, residence exemption, and public-domain acreage.

The inspectors, the direct employees of the State Forester's office, "have as their function the prevention of forest fires by reducing operating hazards to a minimum and by impartial enforcement of the forest laws." Trained inspectors, about 12 in number, ". . . make repeated trips to all operations checking fire prevention equipment, operators' permits, snag falling, and measures necessary for the protection of slash areas and for their proper preparation for burning." Slashing areas are inspected several times during the hazardous season. Inspectors are employed from 8 to 12 months during the year and are paid in full out of state appropriated funds.

Lookout men, fire wardens, and patrolmen in the state are approximately equal in number. These men are employed for the fire season only, extending from May 1 to October 31. The dispatchers are office assistants of the district wardens.

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