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The Dissemination of Information Concerning the
Forests and Forest Industries of Idaho.

"Strange as it may seem, the American people, bred for many generations to forest life, drawing no small measure of their wealth from the forest, have not yet acquired the sense of timber as a crop. Those immense stretches of cut-over lands, mostly too rough or too sterile for tilling, have not awakened us to their vast potential worth as growers of wood. Fully one-fourth of our land area ought to be kept in forest - not poor, dwindling thickets of scrub, but forests of trees fit for bridges and houses and ships. Handled by the best timber-cropping methods, our present forest lands could be made to grow even more timber each year than we now use. But much of our cut-over land, lying idle or half productive, is now an immeasurable loss. It pays little or no taxes, it keeps few hands busy, it turns few wheels, it builds no roads. Idle forest land has scrapped schools, factories, railroads, and towns; it has dotted the land with abandoned farms; it has created a migratory population. Our forest problem is a land problem of the first magnitude."

President Calvin C. Coolidge.

A FOREST POLICY FOR IDAHO

WHY NEEDED?

The question raised in the title of this Bulletin finds its answer in the fact that Idaho is rapidly accumulating on the assessment rolls, a body of deforested lands sufficiently large to endanger two of her primary sources of wealth - irrigation farming and the lumber industry.

Governor Moore has aptly said: "Idaho's people are spending millions of dollars in the construction of reclamation projects and immense dams for storage, and why this expenditure if in a few years our watersheds will not hold the snow."

Nearly 2,500,000 acres or 55 per cent of the state's improved farm land is irrigated. This is practically all in south Idaho. Without water, these lands are all but worthless; with water, they have a value running into high figures. Southern Idaho has few streams, which are not already of doubtful adequacy. There is plenty more irrigable land, but water rights are scarce and difficult to get. Reservoir storage will help, but the greatest single help will be forested watersheds.

F.S. Baker of the U.S. Forest Service is authority for the statement that the watersheds draining into the whole Snake River valley are worth \$17 per acre for irrigation purposes alone. When it is considered that the forested watersheds tributary to Snake River valley in Idaho comprise 12,000,000 acres, their enormous value to agriculture is at once apparent. Mr. Baker also states that devastation of the forest and forage cover on these watersheds by fire, reckless cutting of the timber, or overgrazing, would decrease their value to the irrigation farmer by \$8 per acre.

It is reported that 28,000 acre feet of water from the Arrowrock Reservoir were used last season in

sluicing out silt which had washed into the system as a result of deforested and heavily overgrazed watersheds- this in a year of extreme water shortage for irrigation purposes.

According to the State Auditor's report, there were on the assessment rolls of the State in 1923, nearly one million acres of cut-over and burnt-over land. Owing to repeated fires only a small per cent of these lands are restocking satisfactorily, being the best of our forest lands. If fully stocked the million acres are capable of growing from one hundred and fifty million to two hundred million board feet annually or from fifteen to twenty per cent of the present lumber output.

Not only the lumber industry is at stake, but many other industries depending upon wood as well. Aside from lumber manufacture, wood using industries are still in their infancy in Idaho. Yet the lumber industry alone employs two-thirds of the industrial population of the State. The companies now drawing their raw material from Idaho for the manufacture of pulpwood, matches, boxes, sash, doors, and many other articles are indicative of what Idaho may expect in time in the development of wood using industries, provided a permanent timber supply is assured.

The keeping of cut-over lands in a state of continuous forest production is one of the most important economic problems the State has to meet. The solution lies in a greatly enlarged forest fire protection program. It is not the purpose of this paper to outline a forest policy for the State, but merely to mention three essentials such a policy must contain.

1. The first of these is the appointment of a state forester who shall be made responsible for the execution of the policy.

2. A second essential should provide for a more rational method of disposing of the slash created incident to logging than a

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method now in use under what is known as the Fallon Fire Law, enacted in 1907. This does not imply that the Fallon Fire Law does not have merit. Under its provisions, there has been built up a most efficient system for the protection of merchantable timber on state and private lands. The success of the plan has saved millions of dollars of community timber wealth, and in this far the law has safeguarded the public interests. The success of the law, however, depends more upon the effective fire fighting organization it makes possible than upon any reduction of the fire hazard its application brings about.

Under the Fallon Act, the custom has been to broadcast burn the slash, if any disposal was made at all, a method which kills all forest growth below merchantable size, and destroys all protecting ground cover in the way of underbrush and litter down to mineral soil. This results in a change of the type of vegetation from a more or less fire retardant type to one which in the fire season becomes very inflammable. Within a year or so, the dead trees begin to windthrow, and the process may continue for many years. All the while the fire hazard is increasing till the whole area becomes a veritable fire trap, resulting almost inevitably in a second burn later, and often in a third or fourth burn. The result is that any reproduction that may have started after the first burn is completely destroyed in subsequent fires, and the area becomes non-productive of tree growth. As showing the high hazard of cut-over land where the slash has been burned broadcast following logging, one large company reported that 86 per cent of its expenses for fire protection for the past 12 years were incurred in fighting fires on cut-over lands.

It is conceded that in mature or over-mature white pine stands where little or nothing in the way

of tree growth is left after the merchantable timber is cut, broadcast burning of slash may be permissible. It is also believed that in the yellow pine type the slash may in some cases be left on the ground. But on all areas of whatever type whether white pine, yellow pine or mixed stands, where after logging young growth is left, broadcast burning of the slash is wholly indefensible.

The method that most nearly meets the requirements of continuous forest production is to pile the slash before burning it. It is possible by this method to save the bulk of the forest growth left after logging to become the foundation for the new crop. Moreover, the fire hazard is in this way reduced to a minimum. This method is coming more and more into favor. It is the one in common use on state and government lands, and is now being adopted by some of the private owners.

3. A third essential of an adequate forest policy must have for its object adequate protection for all classes of forest lands whether cut-over or bearing merchantable timber, the cost to be shared equitably by all owners.

Under the Fallon Law all protection is entirely voluntary. The result is that willing owners are carrying more than their share of the load, because they are obliged to furnish protection to large areas of both merchantable timber and cut-over lands which pay nothing for the service. But the larger part of the cut-over areas lies wholly outside of the various districts which have been organized for protection purposes, hence receiving no protection whatever. To bring all cut-over lands under organized protection is the primary purpose of the Clarke-McNary Act, discussed in Bulletin Vol. I. No. 9, and the Act seeks to accomplish this purpose by the offer of federal aid in an amount not to exceed one-half of the cost.