STATE OF NEW JERSEY

REPORT OF LEGISLATIVE COMMISSION TO STUDY METHODS OF PREVENTING AND FIGHTING FOREST FIRES

Established Under Assembly

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seem desirable.

It would appear that the restoration of certain positions eliminated in a previous reorganization - an Assistant Division Firewarden in Division "A" and Staff Section Firewardens in Divisions "B" and "C" would increase overall efficiency.

Equipment

The State Firewarden has made out a convincing case for acquiring certain new equipment to replace and augment existing trucks, tractors, tank trailers, hose and similar items. This Commission is not prepared to pass on the merits of each item whose acquisition is proposed. It would seem wise, however, to maintain an adequate pool of effective equipment at all times. This equipment should be manned with personnel that would be immediately available to answer call and not by persons employed many miles from the garage where equipment is kept. The failure of one truck or shortage of hose on one occasion may result in substantial forest fire losses with a cost far in excess of the cost of adequate equipment. It also appears that the present policy of the Purchasing Department with respect to fire truck replacement is not realistic in view of the rougher use to which firefighting equipment is necessarily subjected. The Commission has also received evidence that on certain occasions the lack of flexible financial arrangements has caused trucks and other equipment to be tied up for a substantial period for minor causes, because local mechanics cannot be utilized or a simple part cannot be purchased from a nearby source. Also gasoline purchases should not be limited

to a brand available only through the purchasing department. On occasion this brand has not been available in an emergency.

Fire Prevention

One obvious technique of forest fire prevention is to publicize the costs and consequences of fires. As established by the 1950 Area and Cost Study, the objective for basic protection is to limit forest fires to .5% of protected land burned annually. In the 1949-53 period the average annual burn in this state was .57% and in 1954 was 1.66% which indicates that the objective has not yet been reached. Translated into acres, these figures mean that in the seven year period 1938-1944 an average of 30,205 acres were burned annually. In 1945-53 the annual burned acreage dropped to 14,793 acres, but in 1954 rose to 37,982 acres. In determining the cause of forest fires for the period 1945-1954 it has been found that smokers accounted for 57%, debris burners 14%, railroads 14%, incendiarists 9%, miscellaneous 9% and campers 1%. Any increase in the already substantial publicity given forest fire prevention would seem time and money well spent. The one serious deficiency in the present publicity program is the failure to make extensive use of the roadside sign method of warning, aimed principally at motorists and picnicers. A substantial number of warning signs should be placed on all New Jersey highways as soon as possible. Further, it would appear that the existing law prohibiting the throwing of cigarettes and other articles from moving or standing automobiles should be more rigidly enforced.

One method of forest fire prevention that has not received

full acceptance by the Forest Fire Service is that of "prescribed burning," which essentially is a system of planned and supervised burning throughout the winter months of strips in wooded areas in order to thwart the spread of fires that might originate in these areas in the future. Any plan envisaging a regular policy of prescribed burning for the future must recognize that the great majority of fire fighters have agreed to fight actual fires as they occur. Prescribed burning might become the principal function of special crews working under professional foresters.

The Commission recommends that whenever possible the forms used by the Forest Fire Service such as in issuing burning permits, summons to violators of the fire laws, and reports to higher headquarters be simplified.

Detection and Firefighting

The recommendations made under the heading "Organization," and those under "Personnel" and "Equipment" are also relevant here. The Commission wishes to praise the way in which the fire towers are manned throughout the State. A subject worthy of investigation by the Service is the extent to which rented or leased small aircraft might provide spotting assistance during certain seasons, both for detecting new fires, and evaluating existing fires. On the whole it would appear that the techniques used by the Forest Fire Service are modern in conception and are used with skill and energy. Some deficiencies have been brought to the attention of the Commission and deserve brief comment. In some cases geographic and district boundaries

have at least initially thwarted the prompt marshaling of all available manpower. In certain instances there has been some confusion concerning the power of the district warden to take necessary action without first consulting his superiors. Since time is frequently a critical factor, it would seem that some clarification of powers is needed. Occasionally there has been some difficulty in recruiting a sufficient number of volunteers. Increased compensation as recommended above would be of some help here, but would not provide a full answer. Further study is needed of the causes of small fires that grow into large fires. Only .15% of the fires are over 1000 acres in size. Yet these fires account for 40% of the total acreage burned. Only 1.4% of the fires are over 100 acres in size, yet account for 63% of the acreage burned. Studies that would lead to improved techniques in gauging the seriousness of fires and facilitating the rapid dispatch of the requisite equipment and personnel would ovviously amply repay the time and money employed in making them.

These suggestions, along with those pertaining to equipment and personnel, stated above, are proposed in a helpful rather than critical spirit. The Forest Fire Service provides an excellent service at a moderate cost to the State's taxpayers. The leaders and members of this organization fully recognize that certain improvements can be made. The report of this Commission is intended to highlight certain budgetary needs and administrative changes that will help this fine organization perform its function of preventing and fighting forest fires with even greater effectiveness.

Respectfully submitted,

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