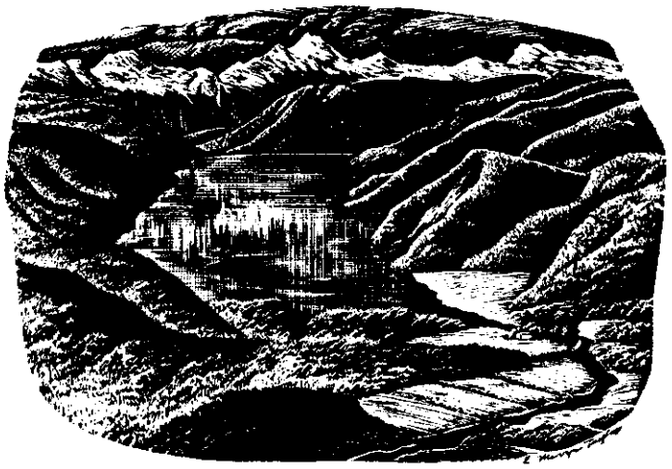
Fire Destroys



our water resources . . .

Lake Rotoroa, Nelson, depicted above, is to play an important part in the huge Braeburn hydro-electric scheme. Water is to be diverted from the upper reaches of the Wairau River to Lake Rotoiti, from this lake to Lake Rotoroa, and thence to the Mangles River, a tributary of the Buller River. Success in this scheme will depend upon protecting the forests—fire could within a few hours undo the work of centuries in building up a balance of soil and vegetation on the mountain sides.

Conservation of water resources is one of the principal concerns of forest administration. The value of water resources for hydro-electric power, and for town and industrial water supplies, depends on the total volume, regularity and purity of the water. Forests spread the flow of water; streams and rivers flowing through them are much clearer and fluctuate much less than streams flowing through country similar in topography but cleared of forest. The water flowing from our protection forests is therefore one of our great national assets.

Forests are, then, natural reservoirs of water. Where lakes and dams provide storage of water, as Lake Taupo and the dams for the Waikato schemes, the forests in the headwaters of the rivers feeding them come first in the series of reservoirs through which the water passes on its way down to the sea. Where there are no lakes the forests are all important. Most of our larger rivers carry far too much shingle to be harnessed for electricity, but many of their smaller tributaries rising in the forested ranges are or will be sources of hydro-electric power. In the Mangahao and Cobb River schemes the forests of the catchments are vital.

The same is true with town water supplies. Forested catchments yield a well-regulated flow of clear water for Wellington City; the water is so pure no treatment is needed, and in the Hutt River no dam, only a collecting weir, is required.

The Waipaoa River flowing into Poverty Bay is an example of what sometimes happens when forests are destroyed. Almost completely deforested, the catchments yield up very large quantities of silt during heavy rain, and in dry periods there is no stored water to feed the river. The lowest flow recorded for this river is 26 cu. secs. and the maximum 145,500 cu. secs. To prevent such a loss of water resources, we must protect the forests.

Prevent Forest and Country Fires

Keep New Zealand Green

NEW ZEALAND FOREST SERVICE • SOIL CONSERVATION COUNCIL

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