

will be liable in the streams entering the lake if the forest is removed. The contour of the streams will be entirely altered. I might mention that the slope in New Zealand will probably vary very greatly between the old rocks such as we have in Wellington and the newer ones—mostly Tertiary—which form a considerable portion of the North Island and the South. Probably the angles of slope will be found to be very different, a matter that would require full and careful investigation in every district. I might say that the New Zealand maps are not of course made with the object of showing the topography, without which it would be very difficult to delimitate the slopes that are too steep to be cleared.

WILLIAM HENRY FIELD sworn and examined. (No. 86.)

1. *The Chairman.*] You are a barrister and solicitor residing at Wellington?—Yes.

2. Do you wish to tender some evidence with regard to the matters we have to inquire into?—Yes. Though possibly unable to add materially to the information already in the possession of the Commission, I feel that as one deeply interested in the subject of the preservation of our national forest and in afforestation, I should like to express my views on several of the subjects which the Commission is set up to consider. Respecting the preservation of existing native forest, I feel that a strenuous endeavour should be made to save more of the remnant of our bush than appears at present to be proposed. Though it is naturally held, speaking generally, that bush land which is fit for farming purposes should be felled, there are many cases where it would be wise to preserve our forest even though growing on land which might be successfully grazed. I refer particularly to bush growing within the watersheds of rivers, the flooding of which is likely to wash away rich alluvial land lower down. The reply to the outcry that this land is required for settlement is that large areas of open land even in the vicinity of our great centres of population are to-day not fully farmed, but are capable of much increased productiveness and of carrying a largely increased population. I have in my mind particularly the Waikanae and Otaki Rivers. At Waikanae in particular at the present time every flood is destroying land worth £40 to £50 per acre, as the result of the destruction of bush on land much of which when grassed and fenced cannot be worth more than £5 per acre, and which will in course of time decrease in value. In one case a rich section of about 25 acres has become reduced in recent years by 12 to 15 acres by the flooding of the Waikanae River, and, though a considerable sum has already been spent in river-protection, unless further effective protection works, at a cost to the settlers, the local bodies, and the Government of at least £1,000, are at once constructed, the river is likely to make a new outlet to the sea, and wash away not only more valuable land, but roads, houses, and other improvements, entailing loss to the settlers, local bodies, and the country of many thousands of pounds. Before the bush was felled the larger floods were rare occurrences, owing to the fact that the rains were to a large extent absorbed by the trees and floor of the forest, much of the water escaping by evaporation. The water now comes down as from an iron roof, bringing down larger volumes of flood-water than formerly, and with great suddenness and violence, and enormous accumulations of shingle, which raise the river-beds, causing serious erosions, and forcing the flood-waters over the surrounding level country. Where the hills felled are of a steep character every heavy rain takes with it a portion of the soil, thus rendering the land less fit to carry a sward of grass, and eventually we shall have the same desert conditions as are found in China, Cyprus, and other parts of the world, where the hills have been finally reduced to barrenness by the denudation of the forest. Already hills in the Wellington District felled in the early days of settlement are found to be of appreciably less carrying-capacity than formerly, and some are even already approaching desert conditions. And this is what was some years ago one of the beauty-spots of New Zealand, within my recollection. In my opinion the larger portion of the remaining bush in the watersheds of such rivers as the Waikanae and Otaki, on the lower slopes of the Tararua Mountains, should be preserved from destruction. I am informed that the slopes of the Ruahines, too, are fast becoming stripped of bush, chiefly by fire, and this on land which can never be farmed. As a member of Parliament I used my utmost endeavours years ago to induce the Government of the day to purchase from the Manawatu Railway Company all unfelled bush land in the Otaki Gorge, and so keep the magnificent scenery there in its natural loveliness, save the flats towards the sea from destruction, and preserve the climatic conditions. This once beautiful locality is now hopelessly marred by forest-destruction, whereas in the interests of the district and the country generally not a tree should have been felled. There are thousands of acres of native forest still remaining behind Otaki and Manakau and elsewhere which should be preserved. The land has now, however, for the most part fallen into the hands of syndicates, and the price which would be asked for it would be considerably in excess of the amount for which it could have been purchased a few years ago. There are cases, too, where settlers are led to take up and fell bush land which is quite unfit for farming, and which after a few years is taken possession of by fern and other vegetation. Such enterprises must result in serious loss if not in financial disaster. I know of whole hillsides which have been cleared of the bush, and upon which settlers have fruitlessly spent large sums in clearing the second growth of vegetation, but which have since been abandoned, and are now clothed with shrubs, tree-ferns, and the smaller forest-trees. The clearing of all the bush on the lower levels has the effect of robbing our native birds of their natural feeding-grounds, and finally compassing their extinction. The boundaries of the forest reserve of the Tararuas should be extended, and much of the bush land in the hands of Natives and Europeans on the lower slopes of the range, particularly bush adjoining existing forest reserves, should be acquired and preserved, otherwise existing forest reserves will suffer from the felling and firing of adjacent forest. A beautiful bush hillside immediately behind the Waikanae Township especially should be saved. The trustees of the deceased Native owner