### Session II.

1921.

### NEW ZEALAND.

# WAIAU-UHA RIVER

(REPORT OF RIVERS COMMISSION ON).

Presented to both Houses of the General Assembly by Command of His Excellency.

## REPORT.

To His Excellency the Right Honourable John Rushworth, Viscount Jellicoe, Admiral of the Fleet, Knight Grand Cross of the Most Honourable Order of the Bath, Member of the Order of Merit, Knight Grand Cross of the Royal Victorian Order, Governor-General and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies.

MAY IT PLEASE YOUR EXCELLENCY,-

The Governor-General's Commission, dated the 8th April, 1919, directed us to inquire into certain matters in respect of the Clutha, Orari, Rangitata, Waimakariri, Ashley, and Maerewhenua Rivers, and such other rivers as might be added thereto from time to time. The Governor-General's further Warrant, dated the 22nd July, 1919, added to the Commission the Waihi, Wairau, Waiau-uha, Taieri, and Aparima Rivers. The present report deals only with the Waiau-uha River. The reports upon the Maerewhenua, Clutha, Aparima, Taieri, Rangitata, Wairau, Waimakariri, and Ashley Rivers have already been presented; the reports upon the remaining rivers will be submitted in due course.

The time within which we were required to furnish our reports was extended by the Governor-General to the 7th June, 1920, further extended to the 7th December, 1920, and still further extended by Your Excellency to the 7th March, 1921.

The Governor-General's Commission directed us, in respect of each river,—
"(1.) To inquire into the cause or causes of the silting-up of the channel, the
flooding of the adjacent lands by the said river, the erosion of its
banks, and the damage to the surrounding country:

"(2.) To ascertain the nature and extent of the damage done to the lands adjacent to the said river, and what area of land is affected by such floods or erosion, or both, and whether it is practicable at reasonable expense to prevent such flooding or erosion, or both, either wholly or partially:

"(3.) To ascertain the best method of providing for the control of the said river and its tributaries so as to safeguard the lands affected, and to provide for the effective control and improvement of the said river and its banks:

"(4.) To ascertain the nature and extent of any drainage-works that may be required, and the best method of carrying out such works:

"(5.) (a.) To furnish estimates of the cost of such remedial measures as you may recommend should be taken for the effective control and improvement of the said river and its banks:

"(b.) To report what area or areas of land should be constituted a district in respect of which a rate may be levied to secure and pay the interest on and provide a fund for the repayment of any loan that may be raised to carry out any river-improvement works which you may recommend should be undertaken:

"(c.) To report your opinion as to what matters, if any, should be adjusted by legislation: and

"(d.) Generally, to report your opinion on all matters arising out of or touching the premises, including the question as to whether or not one or more competent authorities shall be appointed to control the whole or any portion of the said river, and what statutory powers should be possessed by such authority."

The Governor-General's Commission also required us to report separately in

respect of each river.

## INVESTIGATIONS MADE.

Sittings, Evidence, and Inspections.—A sitting of the Commission was held in the Memorial Hall, Waiau, on the 25th July, 1919, when the evidence of six witnesses was taken. Immediately afterwards your Commissioners made an inspection of a portion of the river in the vicinity of Mr. Foster's farm, where erosion was taking place. On the following day your Commissioners examined the river at Spotswood, where a sitting of the Commission was held, five witnesses being examined.

After viewing the river and taking evidence, your Commissioners formed the opinion that it was not possible, at reasonable expense, to protect the banks of this river against flooding and erosion, in view of the small area and moderate value of the lands actually affected and the large size and rough character of the river to be controlled. Though undoubtedly any of the standard methods of protection could be made to control the river, and adequate levees would prevent overflowing, the cost of these works would be out of proportion to the benefits to be derived. Your Commissioners therefore do not consider it either necessary or advisable to go further into the matter.

No doubt valuable work can be done by the County Council at special points,

and by the settlers themselves in some cases.

In common with other rivers examined by us, we could not help being struck with the bad effect caused by the growth of exotic vegetation in the river-bed, which is leading to the permanence of islands which would otherwise be transitory, and consequently to the erosion of the permanent banks. Great assistance to the protection of the banks would be afforded by the clearing of this vegetation; in fact, without first clearing the river-bed any other work is more or less premature.

On the other hand, your Commissioners do not consider that any better protection can be adopted than the planting of valuable and quick-growing timber-trees along the river-bank in a fairly wide belt. These trees are in themselves valuable, and should pay the individual settlers for the land they occupy, and in addition would act as very valuable protection. No doubt they will prove inadequate in some places, but the general effect will be good. While not contradicting the general statement above re unwarranted expense, protection at points where attack is particularly vigorous might be provided by justifiable expenditure.

Your Commissioners are of the opinion that although the exigencies of the case may not warrant the setting-up of a special Board to control the whole of the river and its banks, nevertheless united action to the extent of employing first-class engineering advice at the common expense would be justified when the protection

of any salient point, as indicated above, is contemplated.

This our report, which has been unanimously adopted, we have the honour to submit for the consideration of Your Excellency, together with the transcript of the evidence taken by us in the course of our investigations.

Given under our hands and seals this 5th day of March, 1921.

F. W. Furkert, Chairman.

Ashley J. Hunter, Members of F. C. Hay,

Commission.

Approximate Cost of Paper.—Preparation, not given; printing (540 copies), £2 10s.