

The 95 ft. back from the old bank to the river side of the stop-bank was stated as the least additional width allowable anywhere, whilst in certain places it was likely that greater width might be wanted. But this was stated to meet individuals who wanted the stop-banks put right at the old bank site, and we wanted them to understand that this could not be done at all.

You will get the speed of the river from Mr. Adams's evidence, page 147—see particularly top page 150. He also makes out ten times more water in the Waihou (where the tide is) than in the Ohinemuri. I do not know that there is much to help you that you can rely on.

After our Mr. Young was put on he was supposed to get the flood cross-section for the Ngararahi cut on the Waihou, and to fix his cross-section of new channel and stop-banks to suit this. It always appeared to me that he had got unduly wide, but it was a good fault there, as it serves as an expansion basin, where the tidal and fresh waters meet and adjust themselves. When you get down below Waimarie bend the great width of the tidal river should easily take the flood-water if it is banked up 4 ft. above the present highest flood level, and I do not think you will find much wrong with the 95 ft. back there. It is only higher up that it may be a little close, but as I point out it was not a final width but the least allowance anywhere.

I think you had better satisfy yourselves on the points you ask, as no survey was actually made then to determine details, and it is so long ago too. It depends a good deal, too, on the depth you can get by dredging, and whether it will maintain that depth without excessive expense.

Of course, like all New Zealand Rivers running through low land and bush, both these rivers have built up their banks higher than the back land, and so any stop-bank put up must be fit to hold the water up safely—the Ohinemuri particularly so.

There is going to be a difficulty—at least I thought so—in depositing the dredgings in the proper form of a stop-bank from the 12 in. pumping main, and this perhaps influenced us in suggesting only keeping 95 ft. back, or I think it was a chain and a half and by some means converted into 95 ft.

Of course, too, the estimate was got up on a general knowledge of the river more than on proper actual surveys and levels, and the price of things at that time was quite one-third to one-half less than at present, so you cannot expect after all these years of slow progress and consequently maintenance to finish the work for anything like the estimate.

I meant to have noted before—you seldom get a flood in both rivers at the same time. Waihi floods in easterly weather, which the main range cuts off from the Waihou, and the latter in north-westerly and westerly.

Yours faithfully,

CHAS. R. VICKERMAN.

F. W. Furkert, Esq., Chairman, Waihou Rivers Commission, 1919, Wellington.

APPENDIX C.

NOTES OF INTERVIEW WITH MR. WILLIAM FERGUSON, CHAIRMAN OF WAIHOU AND OHINEMURI RIVERS COMMISSION, 1910.

Wellington, 14th October, 1919.

The gist of Mr. Ferguson's statement was to the following effect:—

Commission, 1910, recommended that Pereniki cut be made in Ohinemuri River.

Regarding position of stop-banks, the distance back from the river-edge of 95 ft. was intended to be a minimum set-back above Ngahina.

The 1910 Commission had no data available on which to form a definite engineering scheme, and its recommendations were general in character only.

The 1910 Commission was fully alive to the value of the river for navigation purposes, but the Commission dealt principally with the question of silting as the result of mining operations.

Mr. Ferguson deems it to be unnecessary to resume large areas of the river frontage.