

Some miles of levee-construction work has been done to protect the country known as the Bayswater Estate, on the left bank above Otautau. The last work done on these banks has been carried out only recently, and witnesses admit that it is still incomplete. The total expenditure has been £1,200, £600 of which was raised by the settlers, and this sum was augmented by the County Council with a grant of £300, and the Government provided the balance.

An isolated levee has been built a short distance above Wrey's Bush to prevent the overflow of the river into a tributary in similar manner to that in which it overflowed into the Opio Creek. The area and quality of the land is not comparable with that which would be affected by the Otautau.

A levee was constructed on the Beaumont Settlement for a similar purpose to that just mentioned; it, however, has been breached, and at present is practically of no use.

In addition to the main levees referred to above, smaller banks have been thrown up by individual farmers in an attempt—which has proved more or less successful—to stay the erosion of their lands. The Wallace County Council has also erected isolated works to prevent damage to their bridge-ends and roads which border on the river.

The works at the town of Otautau were built by the Otautau River Board over thirty years ago, and were strengthened and enlarged during the years 1910–12. Though there was no direct evidence of this, it is probable that the resuscitation of the operations of the Board after it had been for many years in a moribund condition was brought about by a flood. The flood of 1913 damaged the works to a certain extent, and a very considerable amount of damage was done to property within the town. Since that flood the breaches in the levees which then occurred have been made good, and efforts have also been made by the River Board to cope with the erosions, more or less successfully. In the case of the property of Mr. George Seatter, Sections 29, 30, 31, and 32, Block II, Aparima Hundred, the erosion amounted to about 140 acres out of a total of 254 acres.

LAND SETTLEMENT AND TENURE.

The approximate area of land within the Aparima drainage area is 440 square miles, and of this amount some 30 square miles has been in the past, and is still to a greater or less extent, subject to damage by high floods.

Almost the whole of the land is freehold property, the only notable exception being the Beaumont Estate, which borders the river in its upper reaches.

While the land in the upper reaches is poor sheep-country, it increases in value up to £40 and over per acre in the lower reaches of the river.

REFERENCE NO. 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, and erosion of its banks and the damage to the surrounding country.

As previously stated, the only silting-up of the river-channel of which there is any evidence is that due to the erosion of the banks. When a portion of the bank is eroded, the harder and heavier materials composing the bank are deposited a short distance below, in the first slack water. Where the river has widened considerably this has given the settlers the impression that great accumulations of shingle are moving down the river. Your Commissioners' observations do not corroborate this belief. In the absence of any marked denudation in the upper portion of the river, there is no source from which any supply of heavy detritus or shingle could come.

It is admitted that some of the bridges are inadequate to pass floods, and as a consequence they cause a certain amount of ponding and deposition of material in the channel above the bridges. Apart from this, your Commissioners are of opinion that no appreciable silting-up of the river-channel has taken place.

The growth of gorse and broom in the river-bed in places has no doubt caused the deposition of shingle, and has tended to the formation of shingle-banks in certain parts of the river.