

to prevent the aggregation of shingle in the bed of the Wairau this river should be allowed to carry all the flood-water possible, and that consequently the proposal, if carried out, would be likely eventually to do more good than harm. A further matter to be considered in this connection is the fact that the present improved valuation of Blenheim Township amounts to nearly £1,000,000, and that on this account alone every effort should be made for its protection from floods.

Your Commissioners now beg to submit their findings on the various heads in the order of reference, as follows:—

REFERENCE No. 1.

To inquire into the cause or causes of the silting-up of the channel and flooding of the adjacent lands by the said river, the erosion of its banks, and the damage to the surrounding country.

Although the evidence submitted is in the direction of proving an accumulation of shingle in the river-bed at places, yet your Commissioners are not inclined to regard such as being of a permanent character, but as representing phases in periodic shoaling and scouring of the river-bed, which has been going on for many years past. Had mining operations been in progress in this river the case might have been different, but seeing that any additional siltation derived from farming operations, tussock-burning, or rabbits is of such a fine character as to be readily transported to sea, whereas the river-beds are formed of fairly large and not easily moved shingle, your Commissioners think that, taken as a whole and on an average, there has been very little real alteration in the river-bed level within recent years. Any slight accretion of shingle in the bed of the Wairau within the last few years may be attributable either to the absence of a succession of big floods or to the abstraction of a certain portion of the flood-waters by diversion down the Opawa channel, or possibly to both causes combined. The presence of vegetable growth in the bed and shoal-banks undoubtedly assists in the gradual local accumulation and piling-up of the shingle in these rivers.

REFERENCE No. 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.

The damage is of a manifold nature, and may be referred to under the following headings:—

- (a.) Actual erosion of banks;
- (b.) Damage to crops and permanent pastures, and loss of stock by drowning; also damage to house property and furniture;
- (c.) Damage to roads and railway, including monetary loss due to interruption of traffic; and
- (d.) Indirect loss to the district as a whole, owing to the ever-present threat of flood-damage preventing farmers from cropping or in other ways improving their land.

The approximate area flooded from the Wairau, the combined Fairhall and Taylor Rivers, and the Tuamarina and Pukaka Streams amounts in the aggregate to 28 square miles, made up as follows:—

	Square Miles.
Tuamarina Valley	1½
Pukaka lands and Native Reserve	8
Spring Creek district and down to Rose's Overflow ..	7½
Between Fairhall and Taylor Rivers	5½
East of Blenheim and south of Rose's Overflow ..	5½
Total	28

Speaking generally, so far as loss of land by erosion is concerned, your Commissioners do not consider that this, viewed from an economic standpoint, is