

Taking all circumstances into consideration, your Commissioners recommend that in the meantime notice be given of intention to proclaim the Awamoko Creek a watercourse into which tailings, *débris*, and waste water from mining claims may be discharged, but in making this recommendation your Commissioners desire to place on record their opinion that in view of the fact that, owing to insufficiency of water, the goldfields in the watershed of the Awamoko could not support more than a very limited population; the colony would be warranted in paying a small amount only by way of compensation should the proclamation be proceeded with.

TAIERI RIVER.

The Taieri River flows through auriferous country from its source to near the point where it enters the Taieri Plain. The upper portion of the river has been a receptacle for silt from mining operations for the last thirty-eight years. Tailings and silt from the gold-workings at Kyeburn, Naseby, Hamilton's, and other places adjoining the upper reaches of the river have been brought down by the river and its different tributaries and deposited in the Taieri Lake, until the lake is now almost filled up. A certain quantity of silt and fine tailings has also been brought into the river by its tributaries from the gold-workings in the vicinity of Hyde, Hindon, and the Deep Stream. In time of flood the fine silt is carried with the water, and a certain quantity of it is deposited in the bed of the river, where the tide-water of the ocean meets the down-flowing stream.

A large area of the Taieri Plain was subject to being covered with water in heavy floods before there were any gold-workings. In the early days of the settlement a portion of the now cultivated plain was a swamp, and banks have been constructed around properties, not only to protect the land from being flooded, but also to allow it to be drained by the use of pulsion wheels, with wide floats to lift the water over the banks. These wheels are driven by steam-power, and have to be kept working during ordinary wet weather.

A bank has been constructed on the west side of the Taieri River, by the West Taieri and Henley River Boards, from the mouth of the gorge where the river enters the plain to its confluence with the water from the Waipori and Waihola Lakes, and thence along the Waipori River and Lake to near the Township of Berwick. This bank keeps back the water of the river from the plain, except in very exceptional floods. Its construction, your Commissioners were informed, cost over £30,000, the money for which was borrowed, and rates levied by these River Boards on the land affected by floods to repay capital and interest. The Chairman of these River Boards informed your Commissioners that there is now only one small instalment of the borrowed money to be repaid. They added, however, that the banks have been found to be too low in places, and will require to be raised.

An exceptionally heavy flood took place about the middle of November last, and was one of the highest ever known. The water broke over the bank in places, but did comparatively little damage. On the east side of the Taieri River, where there is no embankment, the flood-water covered on that occasion a considerable area, and has left in places a thin deposit of silt on the land; but even where this deposit has been made it has, speaking generally, not damaged the crops to any material extent. Some of the settlers state that the silt acts as a fertiliser, and though it damages the crops to a certain degree it does the land good. These heavy floods, it may be mentioned, have hitherto occurred only once in about nine or ten years.

During inspection of the lower reaches of the river your Commissioners did not observe any material damage caused by either silting up or water cutting away the banks. It is well known that the beds of rivers which descend from mountainous country through alluvial plains are raised by silt and *débris* coming down with the water, and in many instances to such an extent that the water flows in a fen, and in time of flood breaks over the low banks and forms new channels. The Taieri River, being very rapid in its course through the gorge, would naturally bring down a certain quantity of silt and *débris* from slips from the mountain sides, even if there were no gold-workings, and deposit it in the bed in those reaches where there is very little river-fall. The gold-workings during the past thirty-eight years have contributed to some extent to the quantity of silt in the river-bed, but the land in the plain has not sustained any permanent damage.

Your Commissioners have examined the land in the Taieri Plain affected, or liable to be affected, by floods, and have prepared a schedule showing the area of land held by the different owners and lessees, with the rateable value of same, and are of opinion that a consolidated River Board should be formed by those interested to deal with the question of protection of the land from damage by floods. As there are about 164 settlers, each holding an average area of 116½ acres of land, whose properties are affected by flood-water from the river, it would be desirable to allow such a consolidated River Board, as suggested, to formulate a scheme of protection to cope with the difficulty, for the reason that there would be a greater probability of their agreeing amongst themselves as to what is required to be done than to any scheme submitted by a Government official.

Taking all the surrounding circumstances into consideration, and having in view the feasibility of a scheme which would conserve both the agricultural and the mining interests, your Commissioners do not recommend that the Taieri River be proclaimed a watercourse into which tailings, *débris*, and waste water from mining claims may be discharged.

KYEBURN.

A great deal of work has been done in connection with gold-workings in the valley of the Upper Kyeburn, and tailings have been sluiced into this stream for the last thirty-eight years without doing any damage to land along its course. A dredge is now in course of construction to work ground in the valley on what is known as Church Flat, and it is likely that more dredges will be constructed there if the one now nearly completed prove successful.