

1937.
NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

RANGITAIKI LAND DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1937, TOGETHER WITH STATEMENTS OF ACCOUNTS.

Presented to both Houses of the General Assembly in pursuance of Section 10 of the Rangitaiki Land Drainage Act, 1910.

SIR,—

Department of Lands and Survey, Wellington, 1st August, 1937.

I have the honour to submit herewith the report of the Chief Drainage Engineer on drainage operations in the Rangitaiki Plains for the year ended 31st March, 1937, pursuant to the provisions of the Rangitaiki Land Drainage Act, 1910.

I have, &c.,

W. ROBERTSON,

The Hon. Frank Langstone, Minister of Lands.

Under-Secretary for Lands.

REPORT OF CHIEF DRAINAGE ENGINEER.

SIR,—

In accordance with the provisions of the Rangitaiki Land Drainage Act, 1910, I have the honour to submit the report on the works for the year ending 31st March, 1937:—

A generally favourable season was experienced on this area, the rainfall being very well distributed, and being unattended by serious flooding. In spite of this, however, certain areas were affected by abnormally high water-levels, and the inability of the canals to function to their full capacity in carrying away the local rainfall. As indicated in previous reports, the necessity for the adequate maintenance of the vital outlets by machine dredging is becoming urgent. Following the provision of increased funds for this purpose, a commencement was made with the overhaul of a Monighan dredge previously employed on this area, and this plant will be put into commission on the main arterial canal in the eastern area early in the coming year. It is anticipated this plant will be able to work progressively maintaining the main canals in the area.

There was no serious flooding from any of the three rivers in the area. The Tarawera River stop-banks were in serious danger on several occasions through the winter, and continued attention was necessary, several blowouts in the banks being repaired as they appeared. A new Diesel caterpillar drag-line was purchased during the year, and commenced work widening and raising the stop-bank south from the railway. It is anticipated that the removal of pumice from the bed of the river for stop-banking will tend to effect a return to the previous low levels recorded in the middle portion of this river.

A commencement was made late in the year to procure stone from the hills adjoining Matata to strengthen groynes near the mouth of the Tarawera River, with a view to arresting the tendency of the channel to widen and shoal. This stone will be placed early in the coming year.

The Tarawera River is the most dangerous river on the Plains, as its bed is generally above the level of the land immediately adjacent to the stop-banks. As the formation is all pumice, and the banks formed of pumice and Tarawera ash, there is always a possibility of a break in the banks, and if not checked the river would form a new channel with the possibility of large areas being permanently ruined. The banks on the eastern side of the river are now being strengthened, but the main problem is the silt brought down by the river. There seems to be no other solution to this problem than regular dredging.

The work of removing willows from the Rangitaiki River banks was carried forward during the year, and this work is effecting a pronounced improvement to the channel. The mouth of this river has a tendency to wander eastwards along the coast inside the sandspit, and periodical straightening through the sandspit is necessary to prevent damage from the backing-up of the river waters.