

1950
NEW ZEALAND

DEPARTMENT OF LANDS AND SURVEY

RANGITAIKI LAND DRAINAGE

REPORT FOR THE YEAR ENDED 31st MARCH, 1950

*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, 22nd August, 1950.

I have the honour to submit herewith the report on drainage operations on the Rangitaiki Plains for the year ended 31st March, 1950, pursuant to the provisions of the Rangitaiki Land Drainage Act, 1910.

I have, &c.,

D. M. GREIG,

Director-General of Lands.

The Hon. the Minister of Lands.

REPORT

SINCE the last report was published the Chief Drainage Engineer has retired, and by arrangement the duties carried out by him in the past are now discharged by the Ministry of Works, which has supplied the information on which this report is based.

This year has been exceptionally satisfactory for drainage, apart from some flooding at the beginning of the year from the Whakatane River. The Rangitaiki River did not overflow, although on one occasion it was considered necessary to send out warning. The rainfall for the year ended 31st March as gauged at Thornton was down to 35.75 in., the average yearly rainfall being about 52 in. Rain fell on 73 days. The wettest month was June with 6.67 in. and the driest January with 0.64 in.

Production figures for the Rangitaiki Plains district have continued to increase in spite of the phenomenally dry year. For the year ended 31st March, 1949, 5,387 tons of butter were manufactured, and for the year ended 31st March, 1950, the figure increased to 5,716 tons.

With a minimum of storm damage this year it has been possible to catch up on arrears of maintenance work. Widening and deepening has been carried out in many channels which have been badly silted as the result of subsidence causing the grades to flatten in the low country. Four drag-line excavators have been employed on this work, one of these being out of action for six months awaiting spares. The total length of drains and canals covered by these machines during the year was 21 miles 65 chains, and in this distance 90,960 cubic yards of material was removed. A fifth machine was employed continuously on the reconstruction of the Tarawera River stop-bank.

The practice of letting contracts for hand cleaning and removal of growth from the smaller drains was continued this year. The year's total for this work was 81 miles 16 chains. Each year a few more of these drains have to be cleaned by machines, as suitable labour is not available, and the necessary widening makes the drain cross-sections too large for hand work. While the past dry year has assisted in catching up on maintenance work, the continued low water-levels have increased the growth of weeds, which had to be removed from waterways.

Water hyacinth growth which had taken hold in two of the main canals was completely removed during the year. The efforts in the two preceding years when part-removal and chemicals were employed barely succeeded in preventing an increase in the following year. Success was only obtained by complete removal of all plants from the water. Drag-line machines were used to drag out the main bulk of plants. This was followed up by men working in a boat and on the banks with rakes. Even when apparent removal seemed complete, it was necessary to follow up with monthly patrols by boat in order to get any plants which had remained hidden in grasses at the waters edge. Over 8 miles of affected channel were dealt with.

Progress has been made with the RB. 19 drag-line excavator on the reconstruction of the left bank of the Tarawera River, 73 chains being completed during the year. Along the right bank of the Rangitaiki River between Edgecumbe and Thornton a number of low places in the small stop-bank were made up to regular level. This bank will not prevent a major flood from spilling over, but is a safeguard against medium rises which occur more frequently.

Some investigation was carried out prior to attempting to cut the mouth of the Rangitaiki River through the sandspit which has extended considerably in recent years, with the result that the main drainage discharge at Thornton has deteriorated. The investigation has shown that the gradual building up of the sea-bed opposite the original cut has destroyed any chances of success with a simple cut as has been done in the past. Plans are being prepared to construct a suitable training-wall to maintain the mouth at the proper point.

It has been evident for some time that to maintain production from the land in this district further capital works will be required to meet the changes resulting from subsidence in the peat land. To provide data for planning the necessary changes, automatic water-level recorders have been maintained at the various outlets and records kept of maximum and minimum levels at the main points.

The following is a summary of the drain-cleaning work carried out during the year :—

			M.	ch.
Drains cleaned by hand on wages	..	..	4	17
Drains cleaned by hand on contract	..	..	81	16
Drains cleaned by weed-cutter launch	..	..	14	13
Drains cleaned and deepened by excavator	..	..	21	65

Other work carried out included the cutting of gorse, blackberry, and other noxious weeds from the river-bank and drain reserves and the removal and re-erection of fences to allow the working of excavators. Willows used for protection of the Rangitaiki River bank have been trimmed and additional planting made to keep the growth in a useful state. The grids at the main floodgates have had constant cleaning.

Maintenance service for the excavators, tractors, and transport vehicles has been provided by the depot and workshop at Thornton. The problem of transport has continued to be difficult, as it has not been possible to make any replacements or additions.

EXPENDITURE AND RATES

Expenditure on maintenance for the year amounted to £16,001. Rates struck : Special, £10,464 ; general, £13,620. Rates collected, including arrears : Special, £10,501 ; general, £13,524. The amount shown as expenditure on maintenance may be subject to slight variation on completion of accounts.

MAORI RATING

Included in the figures for rates struck and rates collected are the following amounts for Maori rating : The total Maori rates paid, including arrears, during the year under review was £2,454. Maori rates struck for the year 1949–50 amounted to £2,629.

STATEMENT OF ACCOUNTS

A statement of accounts is published in parliamentary paper B-1 [Pt. IV].

STAFF

I wish to thank the officers of the Ministry of Works for their co-operation during the year, and also make special reference to Mr. E. Taylor, who has retired from the position of Chief Drainage Engineer. He was associated with drainage projects during the greater part of his career in the Public Service, during which time he came to be held in very high regard by members of the staff and settlers alike.

Acknowledgment is also made of the useful services rendered by the three representatives of the Rangitaiki Drainage Ratepayers' Committee who, with the local departmental Engineer, form a Works Committee. This latter Committee consider routine drainage problems and assist in arriving at decisions acceptable to the Crown and ratepayers.

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