

1936.
NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

RANGITAIKI LAND DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1936, 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 July, 1936.

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, 1936, pursuant to the provisions of the Rangitaiki Land Drainage Act, 1910.

I have, &c.,

W. ROBERTSON,

Under-Secretary for Lands.

The Hon. Frank Langstone, Minister of 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, 1936.

The rainfall in this district for the year has been considerably above the average for the past eighteen years, and as such has provided an adequate test of the efficiency of the internal drainage system of the area. The lands with satisfactory freeboard or of a reasonable height above sea-level, and which form the greater part of the area, have generally come through the test well. However, certain lower-lying lands which have with the past dry seasons responded readily to cultivation with simultaneous consolidation have been more or less seriously affected by the abnormal height of the outlets. Where these areas have been provided with auxiliary drainage in the shape of electrically driven drainage-pumps the effects of the wet season have not been so severe, demonstrating that in this area this form of auxiliary drainage, where properly installed, is quite successful. Seven of these installations are now operating in this area.

The necessity for the provision of up-to-date machinery for the maintenance of the main outfalls is becoming more urgent. A small drag-line has been continuously employed, but this plant should at an early date be supplemented by similar plant with a wider range of usefulness.

The rivers in the area have been at a high level on a number of occasions, the Whakatane River overflowing on to portions of the White Pine Bush area in April and June, whilst during the latter month the Rangitaiki River also overflowed its banks for a short period. Work was commenced late in the year with the ring-barking and removal of willows from the Rangitaiki River, and the eventual complete removal of willows from this channel will have a very beneficial effect on the flood level of the river. The continued high level of the Tarawera River put a severe strain on the pumice stop-bank protecting the farming lands adjoining the east bank, and on several occasions temporary repairs were necessary to prevent a serious breach in the banks. The proposed strengthening of these banks, for which work a light caterpillar dragline is required, should not be long delayed. The low summer level of the river was generally above the average indicated by readings taken over the past eleven years. This can, however, be attributed to the heavier rainfall rather than a permanent raising of the steep pumice bed.

An increase was again recorded in the total production of butter-fat from the area, the Rangitaiki Plains Dairy Company manufacturing a total of 3,696 tons, an increase of three tons, and the Arawa Dairy Company 1,001 tons, an increase of 237 tons. During the early spring unsatisfactory weather conditions were experienced but the season was in the main very favourable to the production of good pasture growth. There was a steady improvement in the pastures on the settled areas during the year, but except in the areas being developed by the Crown, no extensive areas of new pasture were laid down.

Maintenance work only was carried out on the flax-plantations in the area, which aggregate approximately 5,500 acres. With the prospect of an improvement in the market value of fibre there are indications that activities will recommence on several areas where a good growth of millable flax is to be seen.

During the year a Committee consisting of Messrs. W. Stewart (Valuation Department), W. Taylor (Treasury), A. G. Harper (Internal Affairs), and R. G. Macmorran (Lands and Survey) inspected the district and held meetings with the ratepayers. The two main points contained in the order of reference were:—

- (1) To what extent, if any, concessions should be extended to the ratepayers if the Minister of Lands continues as the rating authority.
- (2) Whether it is desirable that legislation be promoted to enable or to enforce the ratepayers to form a Drainage Board to take over the administration of the works and to repay capital cost.

The report of the Committee has generally been given effect to, particularly on the following points:—

- (1) The maintenance subsidy of 10s. for £1 be reinstated.
- (2) The rates for 1935–36 and 1936–37 be levied to produce the sum of £4,500 per annum.
- (3) The formation of a Drainage Board be not proceeded with meanwhile.
- (4) The provision of £2,000 for the removal of willows on the Rangitaiki River.
- (5) The provision of £4,000 for the strengthening of the Tarawera River stop-banks (east side).

Rainfall.—The rainfall totalled 69.59 in., rain falling on 112 days. The wettest month was February with a fall of 12.02 in., and the driest January with a fall of 2.54 in. The average fall for the past eighteen years was 52.66 in.

Maintenance.—The smaller drains throughout the area were maintained in good order, and several lengths of canals were cleared by hand or with the Sanderson weed-cutting launch. Periodical attention was given to the flood-gates in the area, and several lengths of stop-bank damaged by floods were repaired and raised. Three breaks in the Tarawera River stop-banks were repaired and protected. A new 4-ft. barrel flood-gate with steel door was placed on the outlet serving an area of low-lying land south of the Awaite Stream.

Rangitaiki River.—A small relief gang was employed late in the year on the Rangitaiki River ring-barking willows and removing willows and obstructions from the channel.

Dredges.—The light Bay City walking dredge was in commission throughout the period and deepened and widened several lengths of hand drains, straightened the mouth of the Rangitaiki River through the sand spit, and maintained a section of the Omeheu Canal, and at the close of the period was engaged in widening the lower reaches of the Awaite Stream. The distance dredged during the year was 237 chains, a total of 22,683 cubic yards of spoil being moved. A Priestman dredge which was laid up in the Tarawera River sank in deep water during the year. This plant was raised and repaired.

Drains in Operation.—One length of hand drain was taken over for maintenance purposes during the year, and the total length is now as follows:—

						Miles	ch.
Dredge canals	..	..	..	..	..	68	28
Main outfall drains	..	..	..	..	..	115	4
Road drains	..	..	..	..	..	30	46

Of these, 106 miles 27 chains are maintained annually by the Department, whilst the growth is removed by hand or with Sanderson weed-cutting launch from 18 miles of machine-excavated canal.

Plant and Machinery.—This consists of two Priestman dredges, one Bay City drag-line, one Monighan, one Priestman pontoon, two coal punts, one oil launch, and two small boats.

Summary of Work Done:—

				Miles	ch.	Cubic yd.
Drains deepened by hand	..	..	..	1	7	1,640
Drains cleaned by hand	..	..	..	107		
Canals cleaned by hand	..	..	..	19	20	
Canals cleaned by weed-cutter	..	..	..	12	60	
Spoil dredged	..	..	..	2	77	22,683
Stop-banks repaired and raised by hand	..	..	..	..	28	3,400
Flood-gates erected	..	..	..	1		

Drainage Rates.—Rates struck for the year 1935–36, totalled £8,988 12s. 11d. and £4,062 1s. 8d. was collected. Expenditure for the year amounted to £6,261 6s. 3d.

I have, &c.

R. G. MACMORRAN,
Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington, C. 1.

RANGITAIKI LAND DRAINAGE SCHEME.

RATE ACCOUNT AS AT 31ST MARCH, 1936.

<i>Dr.</i>		Capital.	Maintenance.	<i>Cr.</i>		Capital.	Maintenance.
		£ s. d.	£ s. d.			£ s. d.	£ s. d.
To Interest on—				By Balance as at 1st April, 1935 ..		3,682 7 5	3,842 1 0
Capital cost		13,524 19 4		Rates levied		4,760 12 9	4,228 0 2
Less capitalized		9,024 19 4					
		4,500 0 0					
Cost of maintenance			3,604 5 9				
Remissions		60 13 8	41 18 0				
Balance as at 31st March, 1936		3,882 6 6	4,423 17 5				
		£8,443 0 2	£8,070 1 2			£8,443 0 2	£8,070 1 2

REVENUE ACCOUNT FOR YEAR ENDED 31ST MARCH, 1936.

		£ s. d.			£ s. d.
To Interest on Public Works Fund capital ..		20,792 9 2	By Accrued rent		127 8 0
			Thirds		1 16 9
			Forfeited rate receipts		581 7 2
			Sundries		2 0 0
			Capitalized interest (section 12, Finance Act, 1927 (No. 2))		9,024 19 4
			Interest recoverable by rates		4,500 0 0
			Balance, transferred to Drainage Works Account		6,554 17 11
		£20,792 9 2			£20,792 9 2

RECEIPTS AND PAYMENTS ACCOUNT FOR YEAR ENDED 31ST MARCH, 1936.

<i>Receipts.</i>		Public Works Fund.	Consolidated Fund.	<i>Payments.</i>		Public Works Fund.	Consolidated Fund.
		£ s. d.	£ s. d.			£ s. d.	£ s. d.
To Rents			90 13 0	By Maintenance completed works		6,112 1 9	
Rates			3,891 17 11	Refund rates		8 12 11	
Subsidy on maintenance costs			1,760 18 0	Transfer net receipts—			
Thirds			1 16 9	To Treasury Adjustment Account		6,394 15 5	
Sundries			658 2 8	To Public Works Fund		101 8 4	
Plant, &c., sales		101 8 4					
Transfer expenditure to Treasury Adjustment Account			6,112 1 9				
		£101 8 4	£12,515 10 1			£101 8 4	£12,515 10 1

BALANCE-SHEET AS AT 31ST MARCH, 1936.

<i>Liabilities.</i>		£ s. d.	<i>Assets.</i>		£ s. d.
		£ s. d.			£ s. d.
Public Works Fund		489,183 12 7	Drainage works—		
Treasury Adjustment Account		242,381 6 9	Recoverable—		
Unpaid purchase money for land taken		210 1 1	Capital expenditure		205,000 0 0
Sundry creditors—			Capitalized interest: Section 12, Finance Act, 1927 (No. 2)		74,524 6 10
Departmental		8 15 3			279,524 6 10
Miscellaneous		464 9 11	Not recoverable—		
		473 5 2	Capital expenditure and capitalized interest		415,746 14 0
Rate accounts—					695,271 0 10
Capital		3,882 6 6	Plant and machinery		8,264 8 1
Maintenance		4,423 17 5	Buildings		890 12 0
		8,306 3 11	Loose tools		307 7 6
Suspense Account		3 12 0	Sundry goods		304 19 1
Writings off in Suspense		551 4 7	Cash in transit		84 12 4
Payments in advance—			Sundry debtors—		
Rates		0 10 0	Rates capital		20,239 0 1
Miscellaneous		0 4 0	Rates maintenance		14,650 16 6
		0 14 0	Law-costs		452 12 9
			Rents		16 12 0
			Miscellaneous		76 3 10
			Departmental		0 10 6
					35,435 15 8
			Losses in Suspense		551 4 7
		£741,110 0 1			£741,110 0 1

W. ROBERTSON, Under-Secretary for Lands.
WM. E. SHAW, Chief Accountant.

I hereby certify that the Rate and Revenue Accounts and Balance-sheet have been duly examined and compared with the relative books and documents submitted for audit, and correctly state the position as disclosed thereby.—J. H. FOWLER, Deputy Controller and Auditor-General.

Approximate Cost of Paper.—Preparation, not given; printing (674 copies), £4.

By Authority: G. H. LONEY, Government Printer, Wellington.—1936.

Price 3d.]

