

1934.
NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

RANGITAIKI LAND DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1934, 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, 1934.

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, 1934, pursuant to the provisions of the Rangitaiki Land Drainage Act, 1910.

I have, &c.,

W. ROBERTSON,

Under-Secretary for Lands.

The Hon. E. A. Ransom, Minister of Lands.

REPORT OF CHIEF DRAINAGE ENGINEER.

SIR,—

I have the honour to submit report on the Rangitaiki drainage works for the year ending 31st March, 1934, in accordance with the provisions of the Rangitaiki Land Drainage Act, 1910.

The work carried out in this area was confined to the maintenance of existing works. Expenditure under this heading has been kept as low as has been safely possible. The dry seasons experienced over the past few years have been an assisting factor. In many cases machine-constructed canals have been maintained in a reasonable state of efficiency by hand labour or with the Sanderson weed-cutting launch. This, however, does not deal with the silt deposit, which, when it reaches a certain point, rapidly impairs the efficiency of the water-way. A small walking plant has been employed on the smaller canals, but at an early date it will be necessary to employ larger plant on certain of the canals.

Exceptionally heavy rains experienced prior to the commencement of the period for annual drain maintenance clearly demonstrated the necessity for regular maintenance of the drainage outlets. Severe flooding was experienced over many low-lying areas from local water, and in some cases this was followed by serious pasture loss. During the period both the Rangitaiki and Whakatane Rivers reached high levels, the former overflowing for a short period into the eastern basin, and the latter flooding an area adjoining the White Pine Bush Road. The work done in clearing the bed of obstructions and the destruction of willows on the banks of the Rangitaiki had a beneficial effect on the flood gradient of this stream. A proportion of the willows have survived the ring-barking, and the

destruction of these, together with the removal of dead willows, would further improve the flood capacity of the river. Unfortunately, the mouth of the river continues to move eastwards, and an attempt will be made during the high winter stages to bring it back to a straight channel.

The Tarawera River outlet has remained stable during the year, and extensions of the stone groyne controlling the outlet have not been necessary. Daily readings taken on this river over the past nine years indicate that the tendency is for a gradual lowering of the water-level in the upper reaches, and a stable water-level in the lower reaches.

Although a steady improvement continues to be made with the partly improved areas on the Plains, lack of capital for large-scale development was more noticeable than in past years.

Another substantial increase in butterfat production from the area is recorded. The Rangitaiki Plains Dairy Co. manufactured for the year 3,703 tons of butter, an increase of 337 tons over last year's production. The Arawa Dairy Co., which draws part of its supplies from the Rangitaiki Plains, manufactured 618 tons of butter.

Development on the areas held for flax cultivation has been practically at a standstill, work being concentrated on maintaining the areas planted in previous years.

Rainfall.—The rainfall, totalling 47·03 in., was not evenly distributed, and two periods of almost drought conditions were experienced. These conditions, although favourable to the low-lying areas, affected the production from the higher and lighter areas. The wettest month was February, with the exceptional fall of 18·03 in., and the driest March, with a fall of 0·55 in. Rain fell on fifty-one days during the year. The average fall for the past sixteen years has been 51·48 in.

Maintenance.—The major portion of the annual hand-drain maintenance on the area was done by competitive contract with a small gang maintained throughout the year for general maintenance work. The Sanderson weed-cutting launch was in commission for a short period only. This plant is rapidly reaching a stage when it will require replacement.

Dredges.—The light Bay City walking dredge was the only plant in commission. This plant completed work on the Eastern Drain, the deepening of a length of the Government Drain, and also completed maintenance work on a section of the Kopeopeo Canal, together with the raising of a stop-bank on this canal. The total distance dredged was 354 chains, 28,537 cubic yards of spoil being removed. This plant was laid up for a very necessary general overhaul prior to the close of the period.

Drains in Operation.—The total length of drains in operation remains the same as last year, being as follows: Dredge canals, 68 miles 28 chains; main outfall drains, 112 miles 22 chains; road drains, 30 miles 46 chains. Of these, 102½ miles of hand drains are maintained annually by the Department. The growth was removed by hand or by the Sanderson weed-cutting launch from a length of 21½ 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 three small boats and punts.

Summary of work done :—

	Miles ch.	Cubic yd.
Drains deepened	2 55	3,225
Drains cleaned	92 17	..
Canals cleaned by hand	15 26	..
Canals cleaned by weed-cutter	8 12	..
Spoil dredged	4 34	28,537

Drainage Rates.—Rates struck for 1933–34 totalled £13,189 15s. 9d., and £6,937 15s. 5d. was collected.

I have, &c.,

R. G. MACMORRAN,

Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington.

RANGITAIKI LAND DRAINAGE SCHEME.

RATE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 1934.

<i>Dr.</i>	Capital.		Maintenance.		<i>Cr.</i>	Capital.		Maintenance.	
	£	s. d.	£	s. d.		£	s. d.	£	s. d.
To Interest on—					By Balance	1,635	14 8	3,992	3 8
Capital cost	12,963	13 10			Rates levied	7,465	3 0	4,945	13 6
Less capitalized	5,963	13 10			Penalty	479	1 8	301	17 7
	7,000	0 0							
Cost of maintenance			4,938	8 6					
Remissions		76 18 9		50 10 5					
Balance	2,503	0 7	4,250	15 10					
	£9,579	19 4	£9,239	14 9		£9,579	19 4	£9,239	14 9

REVENUE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 1934.

<i>Dr.</i>	£		s. d.		<i>Cr.</i>	£		s. d.	
To Interest on Public Works Fund capital	22,009	16 5			By Accrued rent			146	15 3
Loss of plant		16 8 6			Hire of plant, &c.			35	11 11
Irrecoverable law-costs		1 14 0			Thirds			1	16 9
					Capitalized interest under section 12, Finance Act, 1927 (No. 2)			5,963	13 10
					Interest recoverable by rates			7,000	0 0
					Balance, transferred to Drainage Works Account			8,880	1 2
	£22,027	18 11						£22,027	18 11

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 1934.

<i>Receipts.</i>				<i>Payments.</i>			
		Public Works Fund.	Consolidated Fund.			Public Works Fund.	Consolidated Fund.
		£ s. d.	£ s. d.			£ s. d.	£ s. d.
To Rents			108 13 11	By Maintenance of completed works			3,485 16 2
Rates			6,937 15 5	Refund of rates			69 9 8
Thirds			1 16 9	Transfer receipts to Treasury Adjustment Account			7,128 8 0
Sundries			140 17 8	Transfer of balance to Public Works Fund		93 16 10	
Rates paid in advance			8 13 11				
Plant	93 16 10						
Transfer expenditure to Treasury Adjustment Account			3,485 16 2				
	£93 16 10	£10,683 13 10			£93 16 10	£10,683 13 10	

BALANCE-SHEET AS AT 31ST MARCH, 1934.

<i>Liabilities.</i>				<i>Assets.</i>			
		£	s. d.			£	s. d.
Public Works Fund		489,107	3 11	Drainage works—			
Treasury Adjustment Account		200,387	8 4	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)	60,237	10 0	
Departmental	427 14 5				265,237	10 0	
Miscellaneous	245 4 10			Not recoverable: Capital expenditure and capitalized interest	401,125	7 9	
		672 19 3					
Rate Account—				Plant and machinery			8,976 17 1
Capital	2,503 0 7			Buildings			951 3 7
Maintenance	4,250 15 10			Loose tools			184 9 6
		6,753 16 5		Sundry goods			467 9 5
Suspense Account		587 4 2		Live-stock			1 0 0
Writings-off in suspense		21 3 6		Fuel			45 5 4
Payments in advance—				Sundry debtors—			
Rates, &c.	9 10 5			Rates	20,428	9 10	
Rent	4 10 0			Law-costs	260	8 10	
		14 0 5		Rents	17 12 4		
				Miscellaneous	36 19 11		
					20,743	10 11	
				Losses in suspense		21 3 6	
		£697,753 17 1				£697,753 17 1	

W. ROBERTSON, Under-Secretary for Lands.

WM. E. SHAW, 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, subject to the comment: that the accounts of the Chief Drainage Engineer, Auckland, the audit of which has not yet been completed by the local Audit Inspector, are in agreement with Head Office books.—G. F. C. CAMPBELL, Controller and Auditor-General.

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