# 1917. NEW ZEALAND.

## DEPARTMENT OF LANDS AND SURVEY:

# SWAMP DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1917, TOGETHER WITH STATEMENT OF ACCOUNTS.

Presented to both Houses of the General Assembly pursuant to Section 13 of the Swamp Drainage Act, 1915.

Str.—

Department of Lands and Survey, Wellington, 1st June, 1917.

In pursuance of section 13 of the Swamp Drainage Act, 1915, I forward herewith the report of the Chief Drainage Engineer upon the operations carried out under the above Act for the past year, together with a statement of accounts.

I have, &c.,

T. N. Brodrick, Under-Secretary.

The Right Hon. W. F. Massey, P.C., Minister of Lands.

### REPORT BY CHIEF DRAINAGE ENGINEER.

Str,—
There are now three drainage areas gazetted under the Act, and I give a short report on each.

It is almost unnecessary to state that development-work has been seriously hampered in many ways. War conditions have prevented delivery of two Priestman dredgers from England, not to mention the difficulty of obtaining labour and generally staffing the various works. When the above difficulties are got over our programme of development will be actively prosecuted and many important works set in motion, as they are all in train to this end.

#### WAIHI DRAINAGE AREA (22,720 ACRES).

Work on the Waihi Swamp is progressing satisfactorily. The Priestman dredger during the year completed 195 chains of dredging, an average width of 27 ft. being maintained throughout. The amount of spoil removed was 120,713 cubic yards, at a cost of 2.54d, per cubic yard.

The season has been an exceptionally wet one, retarding progress considerably. Difficulty in obtaining suitable labour was experienced, and settlers in the vicinity were employed in widening and deepening the Kaikokopu and Mangatoetoe Streams for a distance of 45 chains, and also widening only for a distance of 24 chains. The effect of this will be to give the settlers towards the south ample fall, and the beds of the streams have been lowered considerably.

The expenditure on works during the year amounted to £1,182 14s. 7d.

#### Poukawa Lake Drainage Area (13,567 Acres).

Work in this locality has been held up on account of the impossibility of obtaining the Priestman dredger (on order) from England owing to war difficulties. Good progress, however, has been made with the preliminary work. Plans of the engineering surveys have been completed, as have also plans of the proposed schemes.

Regarding the survey work, forty-one miles of connecting levels have been completed, and twelve miles of engineering surveys and levels. The lake has been traversed, showing an area of 635 acres; the "wet area" of the lake comprises 3,252 acres.

During the year 33 chains of road have been formed and crowned, two small bridges have been constructed, and also one pontoon (61 ft. 5 in. by 24 ft. by 5 ft. 6 in.) has been built on the works and floated and is ready to receive dredger. The buildings constructed include an office, workmen's quarters, and a tool-house.

Progress work is at present at a standstill, due to the non-arrival of the necessary dredge machinery for carrying on same, and also pending the acquisition of certain Native lands. Meanwhile a responsible overseer is in charge of works.

The expenditure on works during the year was £1,538 4s. 6d.

### KAITAIA DRAINAGE AREA (39,665 ACRES).

Good progress has been made on the above works despite the very wet weather experienced and difficulties caused through scarcity of suitable labour due to war conditions. During the latter part of the year several floods followed in quick succession, the holding-capacity of the Tongonge Lake being heavily taxed, and flood-waters spread everywhere over the low-lying areas.

Bullock teams have been engaged during the year in clearing the Kaitaia River of snags, willows, and other obstructions, the total distance cleared being seven miles, including clearing of numerous projected diversions. These diversions (of which there are about thirty between Kaitaia and Awanui) will shorten the river-course by about five miles. Since the willows and snags have been removed the floods have not overflowed the banks nearly so much as previously, and adjoining landowners are very pleased with the result of the work so far attained. It is unfortunate that the Priestman dredger on order from England cannot be delivered early on account of war exigencies, as much greater progress could then be made. A pontoon to carry the machinery is now in course of construction, and land-plan surveys are also under way.

The expenditure on works during the year was £3,843 7s. 3d.

I have, &c., J. B. Thompson,

The Under-Secretary for Lands, Wellington.

Chief Drainage Engineer.

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STATEMENT OF ACCOUNTS FOR Y				YE	AR ENDED 31ST MARCH	, 1917					
Receipts.					Expenditure.						
New Zealand Loans A Swamp Drainage Ac Debentures issued	et, 1915,—		£ £	s. d		Expenditure under Section 4 1915, and Section 95 of Disposal and Public Bodi	the Res	erves a	nd other	Lar	
					Ì	1917, 31	h				
				1	Kaitaia:—						
						Drainage works and other	£	s. d.	£	s.	d.
					i	expenses incidental thereto	3,255	11 10			
					i	Equipment and mainten-	., 2000				
					-	ance of dredges, wages					
					1	of dredgemasters, &c. Travelling-expenses, &c.		$\begin{array}{ccc} 6 & 0 \\ 14 & 9 \end{array}$			
						Material		4 0			
			ring water a constitution	*****		Office upkeep		18 10			
						Bank overdraft, Kaitaia	40.4	11 10			
						Drainage Board	404	11 10	3,843	7	3
						Poukawa :			0,010	٠.	. "
						Drainage-works and ex-					
					ĺ	penses incidental there-	1 000	o 1			
					1	to Equipment and mainten-	1,093	0 1			
						ance of dredges, wages					
						of dredgemasters, &c.		0 11			
						Travelling-expenses		17 5 18 1			
					i	Materials		10 1	1,538	4	6
					-   .	Waihi :			•		
						Drainage-works and ex-					
						penses incidental there-	854	15 11			
						Equipment and mainten-					
						ance of dredges, wages					
						of dredgemasters, &c. Travelling-expenses	327	$\begin{array}{ccc} 8 & 8 \\ 10 & 0 \end{array}$			
						Travelling-expenses			1,182	14	7
					İ				6,564	6	4
•						New Zealand Loans Act, 190	)8 :				
						Swamp Drainage Act, 191	5,—				
		•				Charges and expenses	• •	• •	0	7	0
						Balance at end of year:— Cash in Public Account			4,435	6	8
					- 1						
			£11,000	0	0				£11,000	0	0
				Loan	- · Acc	COUNT.				-	
1	917, 31st Ma	rch.	a <b>-</b>		,		st April		_		
To Balance			・ 11,000 11,000	s. c		Debentures issued under the Loans Act, 1908 :—	New Z	ealand	£	s.	d.
	•••		11,000	U	"	Swamp Drainage Act, 191	5		11,000	0	0
						1	-	•			
			£11,000	0	0				£11,000	0	0

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