## 1941. NEW ZEALAND.

## DEPARTMENT OF LANDS AND SURVEY.

## SWAMP DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1941, TOGETHER WITH STATEMENTS OF ACCOUNTS.

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

Department of Lands and Survey, Wellington, 1st July, 1941.

SIR.

In pursuance of section 13 of the Swamp Drainage Act, 1915, I have the honour to forward the report of the Chief Drainage Engineer covering operations on lands proclaimed under the Swamp Drainage Act and amendments.

I have, &c.,

R. G. MACMORRAN,

The Hon. Frank Langstone, Minister of Lands.

Under-Secretary for Lands.

## REPORT OF THE CHIEF DRAINAGE ENGINEER.

I have the honour to submit my annual report on the areas proclaimed under the Swamp Drainage Act, 1915, and its amendments for the year ending 31st March, 1941.

KAITAIA DRAINAGE AREA (61,430 ACRES), MANGONUI COUNTY.

The completion of the Waipapakauri outlet this year has resulted in improved drainage to the Kaitaia Small-farms Area, also to the farm land along the route.

The Monighan Drag-line No. 18 employed on this operation is now laid up.

Rainfall for the year amounted to 48·49 in., a decrease of 15 in. for the previous year. January was the wettest month, when a total of 8·41 in. fell on fourteen days. Records for the year, including river-gauge readings, are shown hereunder:—

Rainfall and River-gauge Readings for Year ending 31st March, 1941.

	Month. 1940.			Rainfall (Inches).	Wet Days in Month.	Highest Rainfall for Twenty-four Hours (Inches).	Kaitaia River-gauge, Wai kuriki Bridge.	
							Highest.	Lowest.
April				$5 \cdot 57$	14	$2 \cdot 65$	$54 \cdot 1$	$52 \cdot 3$
May				$6 \cdot 17$	19	1.07	$58 \cdot 6$	$52 \cdot 2$
June				3.09	16	0.83	$58 \cdot 5$	$53 \cdot 2$
July				$2\cdot 47$	9	0.62	$57 \cdot 7$	$53 \cdot 2$
August				$3 \cdot 54$	18	0.65	$57 \cdot 8$	$53 \cdot 1$
α S 1				$3 \cdot 12$	15	0.86	$57 \cdot 9$	$52 \cdot 6$
October				$3 \cdot 16$	11	. 0.65	$57 \cdot 5$	$52 \cdot 5$
November				3.70	14	0.99	$59 \cdot 5$	$52 \cdot 7$
December				$1 \cdot 38$	4	0.65	53.8	$52 \cdot 3$
	1941	i.						
January			:	$8 \cdot 41$	14	$2 \cdot 16$	$57 \cdot 3$	$52 \cdot 5$
February				1.99	6	$1 \cdot 02$	$55 \cdot 8$	$52 \cdot 2$
March				$5 \cdot 89$	9	3.30	$62 \cdot 4$	$52 \cdot 3$
Totals			48.49	149				

Drains.—Yates and Mathews drains were widened and deepened for 21 and 45 chains respectively, which enabled improvements to be effected to internal drains connected to same, and in addition the usual 60 miles of main drains were cleaned.