

1920.
NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY:
SWAMP DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1920, TOGETHER WITH STATEMENT
OF ACCOUNTS.

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

SIR,— Department of Lands and Survey, Wellington, 14th July, 1920.
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 cash transactions and balance-sheet.

The Hon. D. H. Guthrie, Minister of Lands.

I have, &c.,

T. N. BRODRICK, Under-Secretary.

REPORT BY CHIEF DRAINAGE ENGINEER.

SIR,—

I have the honour to submit annual reports on the areas proclaimed under the Swamp Drainage Act, 1915.

During the year a new area was proclaimed—viz., Hikurangi Drainage Area.

KAITAIA DRAINAGE AREA (39,665 acres).

General.—Progress has been exceptionally marked during the year, advantage having been taken of the plentiful supply of labour offering in the district. Climatic conditions generally have also assisted, as there was a good summer and a mild winter. The rainfall recorded by the departmental gauge for the year was 31.71 in., the greatest fall for any month being during July, when the fall was 7.37 in. Although several very heavy falls have been experienced, and the carrying-powers of the river-channel greatly taxed, it is noteworthy to record that at no period have the Kaitaia flats been under water, though previously a smaller fall would have caused considerable inundation. Freshes which ordinarily took three days to reach Awanui now only take a few hours. We have kept in touch with rainfall records over other portions of the watershed, and taken note of the flooding from various portions of the river-source. The lake has been very high during the greater part of the year, and has carried a large amount of flood-water.

River-diversions and Spillway Cuttings.—The three cuttings on the main river remaining at 31st March, 1919, have been taken down to an average depth of 5½ ft., thus completing all river-diversion work between Awanui and Kaitaia, and all cuttings on Whangatane spillway are now constructed between Kaitaia and California Swamp. The work has been done by wheel scoops, and, with the exception of two cuts done by contract, all work has been done by day labour. The work has been economically performed, clay work averaging 1s. 5d. per yard. Total yardage removed during the year was 47,700 cubic yards.

Roads and Drains.—A great stride has been made during the year with party drains and main outfalls, and with the exception of a few minor drains the entire stretch from Ahipara to Waipapakauri is now completed.

Ahipara and Pukepoto.—All outfalls are now constructed and all main streams tapped. A few drains remain to be done in the Native subdivisions, and the main road has yet to be constructed from Kaitaia through Lake Tongongoe. Outfalls for this road are already constructed, and the road will be taken in hand during the coming winter.