1919. NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY:

RANGITAIKI LAND DRAINAGE.

REPORT FOR THE YEAR ENDED 31st MARCH, 1919, TOGETHER WITH STATEMENT OF ACCOUNTS.

Presented to both Houses of the General Assembly pursuant to Section 10 of the Rangitaiki Land Drainage Act, 1910.

SIR.--Department of Lands and Survey, Wellington, 14th July, 1919. I have the honour to submit herewith the report upon drainage operations in the Rangitaiki Plains for the year ended 31st March, 1919, pursuant to the provisions of the Rangitaiki

Land Drainage Act, 1910. The report of the Chief Drainage Engineer, Mr. J. B. Thompson, is attached hereto, from

which it will be seen that steady progress has been maintained during the year in spite of the

difficulty experienced in securing new machinery owing to war conditions. The accompanying statement of accounts and balance-sheet show the financial transactions

for the year and the position of the account as at the 31st March last.

I have, &c.,

T. N. BRODRICK, Under-Secretary.

The Hon. D. H. Guthrie, 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 my report on the drainage operations for the year ended 31st March, 1919.

The year ending March, 1919, has seen considerable improvement in drainage matters, and the dry season has helped the works very much. One great drawback to the general appearance of the unwatered country is the large holdings, several settlers having a considerable acreage on which not even temporary drains have been constructed, thus spoiling the general appearance of the whole block. However, now that several properties are being cut up smaller and changing hands at high figures, more work will of necessity be done on the land to give return for the outlay, hence in the future the appearance of the country should be very much improved under active cultivation. A great deal of fall has been taken up in many drains, and the improvement in the drainage is increasingly apparent; land that a short time ago was in raupo, flax, &c., is now carrying good maize and grass. A considerable amount of timber has been met with in nearly all the drains that have been deepened, entailing a free use of explosives in order to make

A deviation from the original Kopeopeo cut was made to give an outlet to the Rangitaiki River, through Sections 49, 50, and 51, Rangitaiki Parish, and it has been very successful, giving considerably more freeboard than formerly, and eventually the greater portion of the eastern end of the district will discharge into this cut. Adjacent land which for years has been badly water-logged is now comparatively dry, and two large lagoons have almost entirely disappeared. The road on the cast bank of Rangitaiki River which was formerly under water for the greater portion of the year is now dry, and the water has fallen fully 5 ft. A new drain was cut from the eastern end of the lagoon in Sections 49 and 50 to the junction of the western drain and Kopeopeo outfall. Owing to extra fall taken up this drain became dry, but when the dredge enlarges it—very shortly now—a direct outfall for the western drain will be given. Fall has been taken up in both the eastern and western drains, which should be of considerable help to the country southwards from the Kopeopeo cut. Practically every drain has been cleaned out, and in some cases deepened.

EASTERN DISTRICT.

Drainage in this district has been chiefly effected by the Kopeopeo outfall deviation (previously referred to) through Sections 49, 50, and 51 to the Rangitaiki outlet. The effect of this outfall is felt over a wide expanse of country, and eventually Reid's central drain, western drain, and the eastern drain will all discharge into this cut. More especially was the land affected in Sections 48, 49, and 50, Rangitaiki Parish, which for years had been badly water-logged, but