1943. NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

DRAINAGE OPERATIONS IN HAURAKI PLAINS.

REPORT FOR THE YEAR ENDED 31st MARCH, 1943.

Presented to both Houses of the General Assembly pursuant to Section 20 of the Hauraki Plains Act, 1926.

Department of Lands and Survey, Wellington, 1st May, 1943.

SIR,---

I have the honour to present herewith the report of the Chief Drainage Engineer on operations carried out during the past year on the Hauraki Plains in accordance with the provisions of the Hauraki Plains Act, 1926.

I have, &c.,

R. G. Macmorran, Under-Secretary for Lands.

The Hon. the Minister of Lands.

REPORT OF THE CHIEF DRAINAGE ENGINEER.

Sir.—

I have the honour to submit the thirty-fifth annual report of the drainage and land-development works carried out on the Hauraki Plains. The report covers the year ended 31st March, 1943.

The season has been a satisfactory one for the settlers on the reclaimed swamp farms, and the volume of farm production is expected to be about normal, although exceptionally dry weather has had the effect of reducing the late summer returns from the dairy herds. Drainage conditions have been good as the only heavy rainfalls occurred in August and September, and these did not overtax the drainage system.

The rainfall at Kerepechi in 1942 was 36.15 in., which is considerably below the average rainfall of 44.10 in. over a period of twenty-seven years. The wettest month was August,

with a fall of 613 in., and the driest March, 1942, with a fall of 107 in.

Sixty-two men employed on the Hauraki Plains drainage-works and land-development schemes have joined the armed forces or been taken for defence work or other essential undertakings. The Department's works' force, which would normally number about one hundred men, has been reduced to twenty-eight men. This reduced staff has been fully employed on maintenance of existing works and improvements, and practically no new construction or land-development work has been possible this year. Most of the 135 miles of main drains serving occupied farms and maintained by the Department have been cleaned during the year, but labour has not been available for reconditioning drains which periodically have to be enlarged because of subsidence of the peat-banks. Maintenance work on river-channels and large canals has also been deferred. It is particularly unfortunate that labour has not been available to control the regrowth of willows along the banks of the rivers and canals. The Department recently ring-barked and removed the willows for many miles along the banks of the Piako and Waitoa Rivers. By patrolling the cleared banks and cutting any regrowth annually the willows could now be controlled at reasonable cost. This annual cutting is specially important during the years immediately following removal of the willows. Growth is so rapid that in about two years young willows reach the stage when ringbarking is impracticable and then the only method of exterminating them appears to be to allow the trees to grow until the trunks can be ringbarked and the whole costly process of killing and removing the willows must be repeated.