

berthage at the Whakatane Wharf, reopened the White Pine Drain, where it had been filled by soil scoured from the road embankment, and repaired 4 chains of stop-bank on the Whakatane River. Between October and February this machine deepened the Te Rahu Drain for a distance of 138½ chains, and has since been employed repairing flood damage on the Kopcopeo and Te Rahu Canals. The total quantity of material handled was approximately 39,500 cubic yards.

To repair flood damage, two additional light excavators have been temporarily transferred to the Rangitaiki District.

RANGITAIKI RIVER

In the Rangitaiki Drainage Scheme no attempt has been made to control major floods in the Rangitaiki River. Where the natural banks of the river are low, stop-banks have been constructed to confine floods not exceeding the maximum capacity of the river-channel at bank full stage, which is about 20,000 cubic feet per second. Considerably greater flood discharges may be expected to occur with frequencies of fifteen to twenty years. The peak flow during the flood of last March was about 27,000 cubic feet per second. The previous comparable flood occurred in 1925. With floods of this magnitude overflow is severe, with loss to the farming community and damage to drainage and protection works. Works to provide complete protection from floods would be very costly, and, owing to the nature of the country, it is considered stop-banking to eliminate overflow is, at the present stage at least, out of the question.

It is considered that the intermittent work previously carried out to improve and enlarge the flood channel of the river could now be safely speeded up. This work would, of course, require to go hand in hand with a regrading of the present stop-banks.

During the year a considerable amount of work has been necessary to control the regrowth of willows on the river-banks, and an unusual amount of revetment has been required to prevent bank-caving. The large volume of water passing down the river has had the effect of retarding the easterly movement of the river mouth.

TARAWERA RIVER

The recent raised stop-banks on the right bank of the Tarawera River prevented flood overflow along the eastern bank, but the low stop-bank above the railway on the left bank was topped, and overflow occurred along the unprotected portion of the left bank between the railway and sea. Scour and wave action caused some damage to the recently reconstructed stone groyne at the mouth of this river.

SUMMARY

The principal works carried out during the period of thirteen months from 1st March, 1943, to 31st March, 1944, are summarized as follows:—

	Miles.	Ch.	Excavation. Cubic Yd.
Drains cleaned by manual labour	121	32	..
Drains cleaned by weed-cutting launch ..	15	4	..
Drains widened and deepened by manual labour	1	59	1,943
Drains constructed by manual labour ..	1	1	1,087
Drains and canals improved with excavators	3	49	61,970
Stop-banks, rivers, streams improved with excavators	..	71	16,501
Cutting and clearing willows from banks of rivers and canals	8	32	..
Installation of flood-gates and culverts: One 3-ft.-diameter flood-gate and 5 culverts.			

EXPENDITURE AND RATES

Net maintenance expenditure, £10,684.

Rates struck: Special, £10,623; general, £6,093.

Rates collected, including arrears: Special, £10,932; general, £6,386.

NATIVE RATING

The total Native rates paid, including arrears, during the year under review was £1,705, which is the equivalent of one year's rates levied on Native lands in this area.

I have, &c.,

R. L. INNIS,

Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington.

STATEMENT OF ACCOUNTS

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