

The year was one of exceptionally heavy rainfall and frequent flooding, but in spite of abnormal rainfalls the flood-levels recorded in the flat portion of the drainage area did not approach the levels reached in previous years. On numerous occasions a large volume of water was passed by the Whangatane Spillway, and this reduced flood-levels generally by approximately 3 ft. Overflow from the Kaitaia River at Johnson's corner occurred on two occasions, but elsewhere on the Kaitaia Flats the river was confined to its channel at these times and throughout the year.

Whangatane Spillway.—This channel was running to capacity on several occasions, and some damage was caused to the concrete floor at the intake. Temporary repairs were effected between floods, but some more extensive work will eventually have to be carried out to arrest scour above and below the intake.

Drains.—40 m. 57 ch. of drains were cleared within the period, mostly during the autumn of 1934, and contracts are now under way for clearing approximately 50 m. of drain, which will be completed in April. No new drains or improvement to drains were undertaken, and clearing of weeds and slips is the only work being carried out.

Kaitaia River.—A small amount of work was carried out above Kaitaia in clearing the river of fallen trees. Many poplars and other trees are growing on the banks, and these fall into the channel as they become top-heavy and where scour takes place. It is essential that they be removed to prevent blockage of the channel, and this work is carried out as required.

Plant.—Dredge No. 7 was dismantled, and machinery stored on the river-bank. The pontoon is in a state of decay, but has been beached and securely moored. Any other plant and tools which could be used on small-farms work have been transferred as required.

Proposals for Ensuing Year.—Maintenance of drains is the only work proposed to be carried out next year, but the position at Whangatane Spillway intake requires watching and may necessitate some further work at any time, depending on the frequency and volume of flooding.

Works Expenditure.—The total expenditure for the year was £1,279 1s. 4d.

Drainage Rates.—Rates struck amounted to £3,969 10s. 7d., and £1,929 4s. 3d. was collected.

HIKURANGI DRAINAGE AREA (50,000 ACRES), WHANGAREI COUNTY.

Rainfall.—The rainfall throughout the year was in excess of that usually experienced. The year's total recorded at the Apotu Camp gauge was 83.67 in., and on seven separate days rain in excess of 2 in. was recorded.

Floods.—On five occasions the Jordan Bridge stage reached an elevation of 31 ft., and early in March a maximum stage of 32 ft. was experienced, being the highest for five years. These floods have been simultaneous generally with the severe flooding that has occurred in the Northern Peninsula during the past twelve months.

Data.—Data of precipitation at various stations of water, stages, &c., have been collected continuously and have been plotted in graph form.

Construction Work.—Construction work through the year has been on the Wairua River near Lewis's Bridge, and also in improvement to the Lower Okarika diversion. This work ceased towards the middle of November.

Excavator Work.—Wairua River.

Main Diversions.—No work has been carried out on these.

Main Diversion and Spillways.—No work has been carried out on same.

Up-river Diversions.—Nos. 12 and 14 drag-lines have carried out improvement by deepening and by widening to No. 5 diversion.

River-improvement.—(a) Purua to Lewis's Bridge. No. 12 Bucyrus has carried out improvements to the river-channel from 5 m. 77 ch. to 6 m. 51 ch. to Lewis's Bridge.

(b) Lewis's Bridge to Jordan Bridge. No. 14 Bucyrus has carried out improvements to the river-channel from 6 m. 30 ch. to 8 m., and No. 12 Bucyrus has eased back the right bank at 7 m. 26 ch. near the entrance to No. 6 diversion.

Canal-improvement.—No. 14 Bucyrus has improved, by widening and deepening, the first 20 ch. of the Okarika diversion.

Hand Work.

Okarika Diversion.—Hand work has been done from 20 ch. to 38 ch. to carry the effect of the drag-line work up to the outlet through Sections 7, 12, and 11.

Ngararatunua Canal.—Hand work was done in removal of poaquatica grass, and minor improvements where required.

Maintenance.—Contracts for drain-maintenance have been advertised, and work will commence early in April, 1935.

Plant and Machinery.

Bucyrus Plant.—Nos. 12 and 14 excavators have been working as drag-lines on river-improvement, &c. Wear-and-tear has been excessive only in respect of buckets and wire rope in grappling with timber and rock under water.

No. 13 Bucyrus.—This excavator is parked at Apotu Camp.

No. 26 Dipper.—This excavator is stored at Apotu.

No. 3 Priestman.—The machinery, &c., of this excavator is stored at Apotu. The pontoon is used on the river for transport of the drag-lines.

Drilling and Compressor Plant.—This plant remains stored at Apotu.

Trucking Plant.—No use of this plant has been made.