

even a moderate rainfall; but it is doubtful whether the rainfall recorded in Kaitaia is a true indication of the amount of fall in other parts of the watershed, particularly in the high country, and accurate information on this point could be obtained only by the reading of gauges in other localities.

Graphs are attached showing rainfall and gauge readings throughout the year.

The following schedule shows details of rainfall for the past seven years:—

Year.	Rainfall for Year.	Wettest Month and Rainfall.		Driest Month and Rainfall.	
	Inches.		Inches.		Inches.
1918-19 ..	47·30	Oct., 1918 ..	9·06	Aug., 1918 ..	1·39
1919-20 ..	31·71	July, 1919 ..	7·37	Dec., 1919 ..	0·62
1920-21 ..	53·11	May and Aug., 1920 ..	8·02 (each)	Mar., 1921 ..	1·13
1921-22 ..	49·42	Mar., 1922 ..	5·84	Jan., 1922 ..	2·24
1922-23 ..	44·81	Oct., 1922 ..	7·46	Jan., 1923 ..	2·02
1923-24 ..	49·23	Oct., 1923 ..	7·92	Dec., 1923 ..	1·38
1924-25 ..	48·89	May, 1924 ..	10·34	Mar., 1925 ..	0·51

The average for the past seven years was 46·35 in.

Waihoe Channel.—Dredge No. 10 (Priestman) completed this channel early in the year, and was then taken out and floated during a flood some miles down-stream to commence work in the Awanui River. This channel, extended by hand drains, has carried off all water previously held in the Tangonge basin, which is now dry at normal water-level in the river, and provides storage for flood-waters during heavy rain. The only work done in this channel by dredge was the removal of a small quantity of silt, and the throwing-out of a dam erected at the lower end to impound enough water for working higher up.

Awanui River.—Dredges No. 7 and 10 (Priestman) were engaged in widening, deepening, and straightening this channel. A distance of 138·6 chains was dredged, including five diversions to cut off bends in the original channel, and approximately 103,489 cubic yards of spoil was removed by the dredges. An extra diversion was laid off and excavated to facilitate the refloating of Dredge No. 7, which had sunk in the bend of the river, and to improve the channel by cutting off this bend. Owing to the sinking of No. 7 dredge, and the breaking of main casting on No. 10 dredge, operations were delayed for about two months. Spoil to the amount of 3,550 cubic yards was removed from high banks with scoops so that dredge chutes could operate, and 3,000 cubic yards of spoil was removed by scooping from cut No. 3A to enable dredges to work through this cutting. The forward dredge is now engaged in cut No. 3, at a point 91 chains from the Awanui Bridge, where the work in hand finishes. Other work in this channel consisted of the ring-barking of willows, which had commenced to grow in places previously cleared by snagging. The willows were treated with a chemical which has given satisfactory results and apparently killed the young growth. A breastwork was erected at the Kaitaia Hotel, to prevent erosion at this point, and some timber in the river-bed was loosened with explosives and hauled out.

Whangatane Spillway.—Dredge No. 22 (Bay City plant) was engaged in excavating this channel. A distance of 99 chains was dredged, and approximately 46,300 cubic yards of spoil removed. Bridges required over the channel were erected as the excavation proceeded, and bullock-teams were employed in scooping back spoil in the high country to enable spoil dredged to be disposed of. Spoil to the amount of 1,400 cubic yards was removed by scoop. Flood-waters having broken into this channel at the intake to the Kaitaia River, a substantial dam was erected at the point of danger, and this has prevented any further overflow. Raupo and other growth in the lower end of the channel was cleared, as this portion is now overtaxed during heavy rain owing to the flood-waters being rapidly carried down over the dredged part. This causes congestion in the low country where the channel is incomplete.

Dredges.—The three dredges Nos. 7, 10, and 22, employed on works as above, have removed a total of 149,789 cubic yards, the average cost for the year being 10·55d. per yard.

The following figures show comparison of output and cost per cubic yard for the past four years:—

	Spoil removed:	Cost per
	Cubic Yards.	Cubic Yard.
1921-22	61,309	10·20d.
1922-23	138,900	10·47d.
1923-24	162,081	10·72d.
1924-25	149,789	10·55d.

Drains.—The following new drains were constructed: Church Gully drain, extension, 42·5 chains; Pukepoto main outfall, extension to connect with Waihoe Channel, 60 chains; Tarawahakaroa Stream, extension to connect with Waihoe Channel, 151 chains.

The following drains were deepened and improved: Bell's Road drain, 160 chains; Wairoa Stream, 53 chains; Pukepoto main outfall, 110 chains; Waipapakauri outfall, 130 chains.

In addition to the above, contracts were let early in March for the clearing and deepening of 215 chains of drain, and the clearing only of 815 chains of drain. These works had been approximately half completed by the end of the period under review, and the contract time for the completion of this year's clearing of drains is 30th April.