

Pearson's drain, from the Waioho Stream southwards through Sections 30 and 38, has been completed, and low-lying country in the latter section is now adequately drained.

The Eastern drain has been deepened throughout, and has also been carried farther south along boundary between Sections 83 and 85 to within a few chains of the Whakaire drain. The portion through the sandy ridge adjoining Sections 76 and 78 has been scooped out, and fascines and wattling to a height of 3 ft. have been placed along this troublesome section, so that a satisfactory channel is now kept open and danger from slips is obviated. The great amount of spoil scooped out of the drain has been carted away and spread on the adjoining roads, so that there is now no unnecessary weight on the banks. The task of keeping the Eastern drain to a sufficient depth has always been one of great difficulty, but now that it is successfully accomplished the resultant fall obtained has been taken up along the whole drain, and the country above has benefited materially.

Lawson's drain in Section 28 has been deepened, and fall has been taken up in several smaller drains in Sections 28 and 29.

Since November, 1921, two new Monigan drag-line excavators have been engaged deepening and widening Te Rahu outfall, and surprisingly good results have been obtained. The spoil from dredge 17, working from the Whakatane River southwards, has been deposited on the existing stop-bank along the west side of Te Rahu Road, and the present great size of the bank testifies to the excavating-capacity of the machines.

As a result of heavy rains up-country during March the Whakatane River was very high, and the water backed up considerably in the Kopeopeo bend. Levels taken at the dam in the Kopeopeo Canal showed the Whakatane River water to be 3 ft. 6 in. higher than the water in the canal. Moreover, the flood-water flowed back from the Whakatane River up the Tohakawakawa Stream, and caused the waters from the Waioho Stream, which in normal times comes down the White-pine Bush drain and flows into the Tohakawakawa Stream, to back up and spread over the northern portion of Section 30, eventually finding its way to Te Rahu Canal. To remedy this state of affairs it is proposed to cut a canal from Te Rahu Canal in a south-easterly direction on to the Waioho Stream, where it crosses the southern boundary of Section 38. The proposed cut is two miles in length, and when completed will divert the Waioho Stream into Te Rahu Canal. The Tohakawakawa Stream can then be blocked to prevent flood-waters from the Whakatane River coming back on to Section 30. One of the drag-line excavators will commence operations on this new canal early in the period 1922-23.

Reid's Central drain has been widened to a 30 ft. canal by means of a Priestman dredge, and at the close of the year the dredge was within a few chains of the railway. On reaching there it will return down the canal, cleaning it out and taking up further fall. All drains have been cleaned and dragged systematically, and in many cases have had to be cleared of slips.

WESTERN DISTRICT.

Marked progress has been made on the Omeheu Canal, and towards the end of the year the dredge had reached the southern boundary of Section 155. The effect of this canal is very evident in the surrounding country, which is drying rapidly, and ample fall is now available to settlers relying on this outlet.

The Omeheu Adjunct will now be blocked at its junction with the canal, and when the dredge reaches the south end of the Omeheu drain that drain will also be blocked. As a result all water from Kohohinau drain, Tengaroa drain, Murray's drain, and McIvor's drain will flow down the canal. The Omeheu drain will be blocked again at the Tarawera Cross-road, as a drain has been cut from the Omeheu Canal westwards along the northern boundaries of Sections 153, 152, and 151.

During last year Murray's drain has been continued westward along the southern boundary of Sections 156, 150, 149, and 148, and then southwards across the top end of Hallett's catchwater. From there McIvor's drain has been cut through the Crown land recently subdivided. The Tumurenu drain has been widened and deepened throughout, and now adequate fall is available for Section 164.

When the dredge at present engaged in cutting off two bends in the Tarawera River adjoining Section 147 has completed the cut the river will be blocked at the south end of cut, and some 2 ft. more fall will be available up the Mangaone Stream and Tumurenu drain. The cut in question should be completed about the end of May. The Tarawera Western drain was deepened from the Awaite Road drain southwards to boundary between Sections 136 and 139, and shortly afterwards a new walking dredge was put to work on the same drain, commencing operations at the railway. Great progress has been made in the dredging, the drain being deepened several feet, so that the Matuku Settlement, part of which has always been wet, will have considerably more freeboard. A good deal of timber has been encountered in this drain, retarding progress somewhat, but despite this drawback excellent work is being done.

The Awaite drain has been deepened by day labour as far as the Tarawera Cross-road, and though a great deal of timber was met with a good job was made of the drain.

The Awakaponga drain and Collins drain have been cleaned out periodically, and as soon as a dredge is available it will be placed on the Awakaponga Canal. Section 109 drain has been widened and deepened by a Priestman dredge, and there is now less than a mile left to complete this work.

All drains have been periodically cleaned out during the period under review, and when necessary slips have been thrown out.

DREDGES.

Four Priestman dredges have been working during the past twelve months, and a most satisfactory yardage has resulted. No. 3 dredge, working on the old Kopeopeo Canal through Section 62, and then up Reid's central drain, has done excellent work, a total of 122,017 cubic yards of spoil being excavated over a distance of 213 chains. During the first few months of the year progress was retarded owing to shortage of coal and necessity for repairing one "chute." In July, 1921, the dredge commenced working one shift only, and the results have proved completely satisfactory.