

## WORKS

By a co-ordinated, carefully balanced plan for the efficient regulation and wise use of both land and water along the headwater drainage of our streams, water can be kept out of the streams and the soil can be saved. Until this long-term object can be achieved, short-term palliatives for the control of water once in the streams and its guiding into the sea without damage to farm lands and settlements are necessary and both more spectacular and expensive.

The following is a brief résumé of the principal activities in the various districts for the control of concentrated flood flows :—

*Auckland District.*—Ruawai Drainage : “ G ” Canal was cleared for its full length of silt accumulated over a number of years. Work commenced in 1943 on stone pitching of Raupo foreshore was completed.

Ruakaka Lake : Work for deepening and extending main drain from Ruakaka River to the northern end of the lake completed.

Uwhiroa Stream, Herekino : Work of clearing and deepening in hand.

Waihou and Ohinemuri Rivers Improvement Scheme : Thirteen miles of stop-banks have been cleaned, Komata Stream cleared of willows, and flood-gates and doors overhauled. Ngahina Wharf and goods-shed have received considerable repairs.

Matatoki Drainage Area, Wharepoa : Four miles of stop-bank have been formed, six flood-gates placed, and 2 miles of drains cleaned.

Hudsons Floodgate : Installation of one flood-gate has completed the programme of work.

Tirohia-Rotokohu Drainage Area : Four and a quarter miles of drains have been cleaned, completing this work.

Turua Stop-banking, Guntown Road to Orongo : Three and one-half miles of stopbanking have been built to full height.

*Waikato District.*—Shipmast Locust (*Robinia pseudoaccacia erectissima*) : The plantings at Whakatane of these imported rooted cuttings are well established.

Whakatane River : Above Taneatua five settlers are being assisted with willow protection to banks, and work is more than half completed. The work of holding erosion above the Whakatane Bridge by bank protection with loose rock is completed. The willow and netting groyne protection at Ruatoki Bridge was completed. The engineering survey of 28 miles of the river is now in hand.

Waioeka and Otara Rivers : Two small subsidized river-bank-protection works were completed by settlers.

Waimana River : A cut 25 chains long, protected by netting groynes, has been completed and has successfully straightened the river and reduced the danger of a break through.

Waiotapu River, Reparoa : This work, which consists of cuts and diversions to reduce flooding of farm lands, is nearly one-third complete.

Wanganui River, Taumarunui : A concrete block facing 5 chains long by 16 ft. deep, together with a stop-bank was completed in the borough, and although damaged by a very severe flood stood up to the attack and prevented the erosion of the bank at a critical point. Heavy boulder protection of 25 chains of river frontage is in hand.

Tokaanu Stream and Korohe Drain, Turangi : Weed-clearing and drain-cleaning were completed.

Tongariro River, De Latours Pool : Willow protection works were completed.