

Westport Harbour.—Very satisfactory depths were maintained on the bar throughout the year the average depth at high-water being 22 ft. 2 in. as against 22 ft. 8 in. last year. However, during the last few days in March a flood in the river meeting a calm sea caused considerable siltation on the bar 1,500 ft. beyond the moles, reducing the least depth to 10 ft. 6 in. at L.W.O.S.T. While this condition is maintained, the larger coal-carrying coastal vessels will be restricted in loading by the depths available, but not to the extent of limiting coal export. Overseas tramp steamers calling for bunkers will not be affected.

Dredging operations were again confined to the suction dredger "Eileen Ward," and though, due to overhaul and repairs, the vessel worked during seven months of the year only, her dredging performance was relatively good. The total excavated was 384,320 cubic yards, of which 240,000 cubic yards were removed from the bar. In the previous year comparable figures were 535,000 cubic yards and 267,000 cubic yards. Following a survey of the "Eileen Ward" in January to ascertain the cause of cracking in boiler-rivets, a close examination revealed hair-cracks radiating from a rivet-hole in the heavy strap. The dredger was immediately towed to Wellington for a more complete examination, and prices were obtained for repairs. These prices were so high in comparison with prices obtained from Great Britain for new boilers that it was clearly advisable to instal new boilers in the vessel. These boilers have now been ordered. The dredger "Rubi Seddon" has been recommissioned to take up work.

It has been decided to recommend the Government to put in hand the scheme for harbour improvement at Westport aimed at securing improved and steadier depths on the bar. The proposal formulated by the Marine Engineer is to remove by dredging two to three million cubic yards of material from low-lying backwaters adjacent to the entrance, and so increase the tidal capacity and, in consequence, the scouring velocity of the tidal movements. The material excavated would be largely used in the formation of an aerodrome-site.

During the year ended 31st March, 1938, 375 steamers and 51 auxiliary sailing-vessels, aggregating 288,621 tons net register, entered the port, as against 338 steamers and 46 auxiliary sailing-vessels, 257,506 tons register, last year, an increase of 42 vessels and 31,115 tons.

Coal shipped: 425,779 tons, as against 345,509 tons last year, an increase of 80,270 tons.

Twenty-two large overseas vessels called for bunker coal during the year, as against twenty-two last year.

Rainfall was 68.35 in. for 168 days' rain, 56 of which were overnight.

Sunshine recorded : 1,906 hours 54 minutes.

Installation of electric light at the main beacons, signal-station, and the two signalmen's cottages, reticulation for which was in hand at the close of the previous year, was completed early in the year. The work involved erection of $3\frac{1}{2}$ miles of transmission-line, nearly three miles of which is high-tension line. Later in the year the gas-flashing port light at the signal-station was replaced with an electric flashing-light. Also an electric Morse signalling-lamp was installed, which is usable during the day for signalling to ships off the port in lieu of the old system of flag-signalling.

In readiness for conveyance of stone from the Cape Foulwind quarry to the west breakwater and Organ's Island protective work the railway-line to the Cape was thoroughly overhauled, and the same action is being taken in respect to the branch line from the Te Kuha main line into Organ's Island. Nine men were employed on this work, and some 1,823 old sleepers had to be replaced in the line.

The reconstruction of the bridge across to Organ's Island was almost complete at the close of the period. In this work the existing piers of nine old spans were strengthened with two extra piles per pier and old hardwood stringers placed. Fifteen new 22 ft. spans, of which nine were with pile piers and six trestles, were erected.

At the quarry twenty side-tipping, and ten end-tipping trucks were reconditioned, whilst several defective rails and points and crossings were replaced. Considerable barring-down of stone was done, whilst the 25-ton and 5-ton cranes were overhauled and boiler transferred from the old 10-ton crane and fitted to the 7-ton crane, also new rope with shackles, &c. At the close of the period all was in readiness for the loading of stone.

During last year the average working-depth on the bar at high water was 22 ft. 3 in., which is not as good as the 22 ft. 8 in. for the preceding year, but is much better than the 20 ft. 10 in. and 20 ft. recorded for the respective years previous to 1936-37.

From the following table, which shows the number of days in each year during the past ten years on which the respective depths were maintained by high water, it will be seen that, despite the foregoing, the improvement in bar conditions, taken over the year, was fairly well maintained during the period under review :—

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