

HARBOUR WORKS.

Westport Harbour.—No further construction work has been carried out on this harbour during the year. The average working depth on the bar at high water was 21 ft., an increase of 1 ft. 5 in. on that of the previous year, and this has been quite adequate for the shipping using the port. The steady progressive improvement in bar conditions was most noticeable during the first six months of the year. Gradual retrogression took place after September, when bad weather conditions and easterly sets resulted in general shoaling over the bar area. There was, however, an improvement again towards the end of the year.

The survey and investigation of the harbour referred to in the report of last year was completed. The objective was an examination of the possibilities of maintaining a greater depth of water on the bar, and the conclusion drawn has been that no permanent increase in depth would result from the extension of the existing walls. A temporary improvement would in all probability be obtained, but there would be a rapid return to old conditions and, in the meantime, the gradient of the river would be decreased, and its capacity for removing sand thereby lessened. The most promising means of deepening the water on the bar is to increase the tidal area inside the harbour, thereby inducing a greater inflow and outflow of water. This would necessitate considerable dredging, expenditure on which is not warranted as long as the bar maintains its present depth.

Dredging operations were confined solely to the suction dredge "Eileen Ward." The bucket dredge "Maui" and the suction dredge "Rubi Seddon" were out of commission. The "Eileen Ward" dredged on 187 days of the year, the material lifted being dropped at sea. The total quantity of material taken from the bar was 449,766 cubic yards, from the lower river 134,939 cubic yards, from berthages 34,152 cubic yards, and from the floating basin 12,496 cubic yards, making a total yardage shifted of 631,353 cubic yards.

The rainfall recorded on the harbour gauge for the year was 79.57 in., which fell on 169 days. For the three preceding years the figures were: 1933-34, 81.27 in., 174 days; 1932-33, 66.99 in., 179 days; 1931-32, 114.55 in., 178 days.

Seas on the bar were rough on forty-eight days, the bar being unworkable to shipping on sixteen full days and five half-days.

The use of the tug "Mana" was necessary on two occasions for towing vessels outward from the port.

The willow-plantations along the river have been kept in good order.

Running repairs to the "Eileen Ward" and other working-plant has kept the workshops fully employed. Cranes on the western breakwater and at the Cape Foulwind Quarry were chipped, scraped, and painted. The pilot launch "Kaiuranga" was placed on the "grid," painted, and tail-shaft drawn.

The signal station beacons and harbour lights are in good order, and diving-gear and rocket apparatus have also been overhauled and are ready for use when required.

Shipping at this port showed a slight improvement on that of last year, the total tonnage entering port being 253,041, an increase of 12,909 tons. Coal shipped from the port was 291,685 tons, against 280,080 tons in 1933-34.

Sixteen large overseas vessels worked the port.

Karamea Harbour.—Owing to the aggradation of the river by debris from earthquake slips, Karamea has ceased to be a port. The river now finds its way to sea through the Otumahana Lagoon, and no definite channel exists.

The harbour has not been worked since November, 1931, and all shipping to the district has been diverted to Little Wanganui.

Little Wanganui Harbour.—The port has been worked fairly regularly at spring tides by the a.s. "Fairburn." At times the channel has shoaled due to lack of freshes, which are relied on to maintain a fairly straight channel over the bar, but shipping was not at any time unduly delayed.

The shed at the wharf was overhauled and painted, and access road formed to the back of the shed so that merchandise can be handled more expeditiously. The tram-line on the wharf was taken up and relaid with new sleepers.

A railway-iron beacon was concreted into the rock on the south side at the entrance.

Waikokopu.—Operation of the port has been carried out by the Wairoa Harbour Board on behalf of the Public Works Department. During the year seventy-nine coastal vessels worked the port and handled 3,509 tons of general cargo, 247 bales of wool, and 8,666 sheep. In addition, and consequent on the reopening of the freezing-works at Wairoa, five overseas vessels were worked at the roadstead by lighters, handling frozen meat, wool, tallow, and skins. Minor repairs have been carried out to the wharf and buildings as required.

Early in the year 56 tons of concrete were placed in the breakwater to repair storm damage, and at the close of the year preparations were in train for more work of a similar nature.

Soundings taken during the year revealed no appreciable change in depths either at the wharf or in the roadstead.

Pitt Island Jetty—Chatham Islands.—This jetty was completed under contract during the year. It is a 29 ft. by 22 ft. structure, built of mixed Australian hardwood timbers on piles at approximately 6 ft. centres. On the jetty is a cattle-race 3 ft. wide, 15 ft. long, with a 31 ft. approach-race to same on shore. A 2 ton crane has also been erected on the jetty.

Great Barrier Island: Tryphena Wharf and Approaches.—Site No. 1: A stone-walled approach extending 120 ft. from high-water mark has been constructed. The wharf at this site is to be built by the settlers without Government subsidy.

At No. 3 site a stone-walled approach is constructed 4 ft. above high-water spring tide and extending to 55 ft. from high-water mark. From that point a jetty of turpentine piles and mixed