

HARBOURS

The Department has continued to control the harbours of Westport, Picton, and Dargaville.

The work at Picton includes the maintenance of lights in the Cook Strait area and the regular servicing of the Brothers Lighthouse by the Harbourmaster's launch.

At Dargaville the Harbourmaster maintains the harbour services, including the replenishment of navigation lights in the wide Kaipara Harbour area.

WESTPORT HARBOUR

As is no doubt well understood, the governing factor in the successful operation of a river port is the depth available at high water at the entrance or, otherwise, the mouth of the river. It is the inevitable situation that, due to several variable physical circumstances, what is so generally known as a bar or patch of shoal water occurs at such entrance, and it is the depth of water on this shoal which fixes the working depth at and draught to which vessels may work for their outward loading of cargoes; in the case of Westport, as with Greymouth, predominately coal for transport to the North Island.

A factor which further affects the available depth is the tidal rise—appreciably better at times of “spring” tides as compared to “neap” tides—and intensity of swell or sea running over the bar. The circumstances differ on an average basis from year to year, month to month, and even from day to day.

It is interesting to note, then, that in respect to the year now under review—*i.e.*, 1st April, 1946, to 31st March, 1947—the mean of daily available high-water (working) depths, taken month by month, is the best for many years, and, with the exception of one year, the best for the last fifteen years. As immediate comparison, for instance, the yearly means of high-water depths are: 1944–45, 21 feet 4 inches; 1945–46, 20 feet 8 inches; 1946–47, 22 feet 2 inches.

In my report covering the previous year—*i.e.*, 1945–46—I stated that, as at the close of that year, the low-water depth (low water spring tide datum) on the bar had improved to 12 feet, as against the very low depth of 9 feet which had obtained three months or so earlier.

Such improvement in low-water depth remarked upon, however, did not continue consistently into the earlier few months of this year, falling to 10 feet 6 inches in July. It was not a long period of recession, the mean of high-water depths throughout being, on the average, consistently better than during the preceding period of several months.

The weather conditions during July and August were the very worst consistently experienced for many years, with continuous freshets of considerable strength in the river and strong seas on the bar. These conditions more appreciably were to the disadvantage of shipping, with loss of coal shipments to the North Island of probably several thousand tons, but, on the other hand, a decided improvement to the depth on the bar resulted—a most satisfactory condition which maintained until just prior to the close of the year.

From the time of the improvement mentioned until late in December, however, rather consistently adverse weather conditions with rough seas and freshets in the river somewhat depreciated the good working depths which were available, though not to an extent which should have mitigated against the maintenance of good coal shipments, which for the year totalled 384,800 tons, slightly less than the total shipments during the previous year.

From New Year on the weather vastly improved, extending into the driest period known in the district, with the Buller River falling to its lowest recorded level. Nevertheless—an uncommon circumstance under such conditions, due to absence of the usually prevailing strong south-westerly winds during fine weather which actuate littoral drift in favour of bar shoaling—the good depth of water maintained until March, for which month the mean of high-water working depths fell to 20 feet 8 inches, as against the 22 feet to 24 feet which had obtained for seven months previously, with the least depth at low water (“spring” tide datum) of 11 ft., as against 13 ft. to 14 ft. extending over the same previous months.