

A number of works buildings have been erected, including office, store, fitting-shop, and carpenters' shop. Accommodation erected includes 4 cookhouses, 23 cottages, 270 single men's huts, a Y.M.C.A. hall and post-office, a recreation-hall, and shower, ablution, and latrine blocks.

An average of 220 workmen has been employed throughout the year.

Black Jack's Point Investigations.—Fabrication and erection of a foot suspension bridge over the Waitaki River at the site is finished and the bridge is being used for access between No. 1 camp and the work.

A contract has been let for the exploratory tunnel under the ridge.

Accommodation at No. 1 camp (on the Canterbury side of the river) has been increased and the amenities improved. A start has now been made with No. 2 camp, on the Otago side.

Clutha River Investigations.—Investigations have been continued for the purpose of finding the best possible dam-site in the lower gorge some 5 miles up-stream from Roxburgh. During the year the Pleasant Valley and Tamblyn's orchard areas have been investigated closely and much survey work has been done.

Detailed geological investigations and checking of river-flood levels at various points have been continued. Gutters and crush-zones have been investigated by boring and by open cuts.

In Pleasant Valley a number of shafts and bores have been sunk to establish rock bottom and the overlying strata.

Rock profiles have been established over the line of the lower No. 4 site, and all rock faults found on the surface have been checked and located underground. An exploratory drive, 520 ft. long has been driven from the face above the river into the dividing ridge between the river and Pleasant Valley. On the same site a drive 183 ft. long has been taken across under the river from a shaft on the right bank 80 ft. deep.

Trial boring and grouting with neat cement grout under high pressure has also been done.

Camp accommodation has been increased as necessary and a start has been made with a camp for 200 single men. The average number of men employed was 40.

IRRIGATION

Central Otago.—In common with some other areas, the summer in Central Otago has been particularly dry: the rainfall at Alexandra for the year 1947 was only 10.23 in. the third lowest in the last thirty-one years. As a result, most streams were exceptionally low by the end of January, and on schemes such as Tarras, Ardour, and Hawkdun, where there are no storage dams, supplies had to be restricted for periods of several weeks.

The light winter snowfall on the high country had an adverse effect on the Manorburn storage, which is a main feeder for the Ida Valley and Galloway Schemes. The Manorburn Dam was practically empty at the end of the irrigation season, and advantage was taken of this to carry out some necessary repair work. The Poolburn Reservoir fared better and still retained 18.5 per cent. of its storage at the end of the season.

Fortunately, there was a comparative lack of hot, drying winds during the summer and there were good rains in March. As a result, production on most irrigated areas was maintained in spite of some restriction of supplies.

There was no shortage of water on the Teviot and Earnsclough Schemes.

In the case of the Manuhierikia Scheme, supplies were restricted for four weeks, but irrigated areas showed no sign of deterioration.