

WAIKATO CAMP, NGARUAWAHIA.

During the past year steady progress has been made with the erection of the various buildings and other structures required for the training and mobilization camp, Ngaruawahia. The Ordnance Depot in reinforced concrete, 320 ft. by 100 ft., commenced at the end of the previous year, is now complete save for some plastering and painting. The internal fittings are being made on the ground. The Ordnance Offices and the Quartermaster's Store were erected during the year. Cottage No. 4 was finished, and cottages Nos. 1, 2, and 3 are in hand. Electric light, water-supply, and sewerage is being completed as the several buildings are ready.

IRRIGATION—CENTRAL OTAGO.

OPERATION OF COMPLETED SCHEMES.

General.—During the past year the several completed schemes have been maintained in good condition, and all lands requiring water have been supplied. Certain minor extensions to races have been made to supply new areas. Of those in operation, the Ida Valley, Galloway, Teviot River, and Bengerburn schemes are being operated on a trading basis, and, with full working-expenses being incurred, show results as follows: Revenue, £7,388; working-expenses, £3,806: profit on working, £3,582, this being an increase for the year of £450.

The number of irrigators and the total area irrigated on all Government schemes for the past year is as follows:—

Scheme.	Number of Irrigators.	Area under Irrigation.	Additional Works carried out during Year.
		Acres.	
Ida Valley ..	49	10,498	35 ch. distributary race.
Galloway ..	21	2,064	See below.
Manuherikia ..	65	5,178	Small extension to serve Borough of Alexandra.
Earnsclough ..	54	1,851	..
Ardgour ..	14	1,494	16 ch. race lined in concrete.
Tarras ..	15	4,171	..
Last Chance ..	25	2,960	..
Teviot River ..	35	2,742	..
Bengerburn ..	10	144	..
Totals ..	288	31,102	

The corresponding total figures for the previous year were 279 irrigators and 27,314 acres irrigated.

On the Galloway scheme the new work comprised 900 ft. of pipe siphons, 2½ m. of new race, and the renovation of 1 m. of old race. These works enable a supply to be given to an additional area of 700 acres.

The three demonstration plots on the border-dyke method that were laid down and sown in the autumn and spring of 1926 in Galloway, Manuherikia, and Earnsclough give indications of affording useful results. Another demonstration plot has been laid down in Tarras, and will be sown in the coming spring.

NEW SCHEMES UNDER CONSTRUCTION.

Hawkdun Scheme.—Steady progress has been made during the year, and works completed include the renovation and enlargement of 37 m. 50 ch. of the Mount Ida Race, the renovation and re-laying of 51 ch. of pipe siphon, and the lining with concrete of the old Eweburn tunnel (length, 7½ ch.).

Arrow River Scheme.—The benching for the pipe-line in the gorge (length, 3¼ m.) is complete. Almost the whole of the main and distributary races are now complete, the length constructed during the year being 19½ m. Owing to shortage of funds, the building of the various siphons and pipe-lines could not be gone on with.

SURVEYS AND INVESTIGATIONS.

Teviot River Scheme Extension.—A survey for an extension to serve an additional area of 1,800 acres on the east bank of the Clutha River has been completed, and construction will be put in hand shortly. A survey for an extension to an area on the west bank of the Clutha River has also been completed, and plans are in course of preparation.

Upper Manuherikia Scheme.—Investigations are still in hand to determine the irrigable area, the duty of water, and the financial possibilities of this big scheme.

Surveys are also being made in connection with the Miller's Flat and Roaring Meg schemes.

Soil surveys are in progress over the irrigable area of Central Otago as a result of arrangements made with the Geological Survey Branch of the Department of Scientific and Industrial Research. During the summer season 1926–27 this survey covered the Ida Valley, Upper Manuherikia, Scandinavian, Hawkdun, and Maniototo irrigation areas, representing an area of about 554 square miles. The result of these soil surveys will be of great value in assisting in the determination of the economic possibilities of the various proposed irrigation schemes, and in examinations into the question of the duty of water on irrigation areas.