

completed. The three 60 ft. girder spans at the Otago end have been launched into position, and the steel for the 210 ft. central-truss span is now being assembled, riveted, and erected.

Advantage was taken of a favourable transport price to complete the metalling of a second section of the deviation of the Kurow-Omarama Highway, 1½ miles in length. Although the road deviation is not required immediately, it requires only a small expenditure on fencing to make it ready to hand over to the control of the local body.

Electric power is now received directly from the Government power-lines from Lake Coleridge at 66,000 volts, and is reticulated to all parts of the works at 400 volts for all plant that can utilize electric power economically, such as pumps, air-compressors, inclined tramways, concrete-mixers, machine tools, drills, &c. The consumption averages over 200,000 units per month, and the maximum monthly load varies between 400 and 500 kw.

Contracts were let and completed for the various buildings comprising the Glenavy switching-station. These include two residences of concrete-block construction, a reinforced concrete building containing switchroom, workshop, and battery-room, a garage, and oil-filter house.

To assist in the relief of unemployment manual labour is being utilized where practicable, and reasonably economical, in preference to excavating machinery. Special attention is paid to the safety and well-being of the workmen by equipping all parties with electrically or pneumatically driven equipment, at the same time ensuring a good output at a reasonable rate. Serious accidents have been few, and in those that have happened it has been established that neither the plant nor the methods have been at fault.

At the date of my last report, 1,080 men, including permanent staff, were employed at the works. This number gradually diminished to 927 in last March. Owing to financial considerations the number was reduced in April to 620. At the present time the number engaged is 532, and it is anticipated that this number will be retained for the remainder of the financial year.

Continuous observations of the Waitaki River flow have been taken near the dam from which to obtain a complete hydrograph. Automatic water-level recorders have been installed at the three lakes, Ohau, Pukaki, and Tekapo, which will enable complete hydrographic analyses of the drainage area to be compiled.

IRRIGATION.—CENTRAL OTAGO.

OPERATION OF COMPLETED IRRIGATION SCHEMES.

An unusually dry period was experienced during the latter part of the irrigation season, but, in spite of this, with the exception of the Hawkdun and the extension of the Last Chance schemes, ample water-supplies were available during the period. All lands requiring water were regularly supplied, the only interruption to continuity of supply being caused by a heavy thunderstorm, which damaged portions of the Galloway and Hawkdun races shortly before Christmas. A week's work effected all necessary repairs to the damaged races.

The schemes in operation on a trading basis are as follows: Arrow, Ardgour, Bengerburn, Earnsclough, Galloway, Hawkdun, Ida Valley, Last Chance, Manuherikia, Tarras, and Teviot.

Accounts for water have been rendered for £20,604, and working-expenses amount to £13,196. The amount of anticipated revenue from sale of water has increased by £6,484 over the season before, chiefly on account of the higher grades reached on the deferred scale of payment in some schemes. Working-expenses are somewhat less than they were last year, and will decrease further under the reduced rate of wages now in force.

This year should have shown a profit on working of £7,408, but, unfortunately, only 30 per cent. of the season's accounts have so far been paid. The low prices received for farm-produce for the last two years have been given by defaulters as the chief cause in this untoward delay in payment of rates.

The number of irrigators and the total areas irrigated on all Government schemes for the past season are as set out in the following table:—

Scheme.	Number of Irrigators.	Acres under Irrigation.	Scheme.	Number of Irrigators.	Acres under Irrigation.
Ardgour	12	1,462	Last Chance	26	2,915
Arrow	37	4,077	Manuherikia	78	5,385
Bengerburn	14	144	Tarras	19	2,860
Earnsclough	46	2,053	Teviot	59	3,841
Galloway	22	2,503			
Hawkdun	62	8,096		425	44,587
Ida Valley	50	11,251			

For the previous year the totals were 408 irrigators and 42,672 acres.

Owing to the completion of the Poolburn Dam last year, it was possible to give a full supply of water under the Ida Valley and Galloway schemes last season without pumping from the Manuherikia River. It is proposed with the anticipated additional water that will be stored in this dam to extend the area under irrigation in Ida Valley, but the filling up of the reservoir has been so slow, owing to the dry season, that this matter is held in abeyance until the yield of the spring of this year is ascertained.