

the past year was 39,329 acres. This shows an increase of 482 acres since the 1935-36 season for the twelve schemes concerned.

On these schemes the area which should have been irrigated was 43,135 acres, the difference representing the area to which water was refused on account of the non-payment of rates.

The past summer and autumn was a very wet one—in fact, the wettest experienced by old settlers—and the reduced demand for irrigation water was reflected in sales to settlers on the Omakau scheme. There, although the number of irrigators had increased from thirty-three to forty-one, and the area irrigated showed an increase of 300 acres, the sales of water were only 87 per cent. of those of the previous year.

The total irrigable area commanded by all schemes is in excess of 60,000 acres, and the number of irrigators supplied was 465, as against 459 for the 1935-36 season. The total area irrigated on all schemes shows an increase of 782 acres.

The completed schemes in operation are shown in the following table, the second column showing the area that should have been irrigated had all arrears of rates been paid :—

Scheme.				Area actually irrigated.	Area that should have been irrigated.	Number of Irrigators.
				Acres.	Acres.	
Arrow River	..	..	..	2,200	2,936	45
Ardgour	..	..	..	1,364	1,364	13
Bengerburn	..	..	..	114	144	13
Earnsclough	..	..	..	1,863	2,058	47
Galloway	..	..	..	2,589	2,618	21
Hawkdun	..	..	..	7,244	8,517	57
Idaburn	..	..	..	565	565	8
Ida Valley	..	..	..	11,102	11,474	54
Last Chance	..	..	..	1,931	2,118	31
Manuherikia	..	..	..	4,389	4,795	72
Tarras	..	..	..	2,574	2,675	17
Teviot River	..	..	..	3,394	3,870	46
				39,329	43,135	424
Omakau	..	..	..	5,300	..	41
Totals	..	..	..	44,629	..	465

The second column shows a reduction from the previous year's figures. This has been due to the cessation of irrigation on certain areas of the Hawkdun and Manuherikia schemes, which had proved unsuitable for further development.

The financial results of the year's operations are as follows : Revenue, £23,963 ; working-expenses, £27,234 ; loss on working, £3,271.

Included in working-expenses is the sum of £6,390 expended on the renewal of the Teviot pipe-lines. Another factor contributing to the increase in working-expenses was the higher wages paid to racemen, this not being offset by any increase in revenue.

Where irrigators have been in arrears with their payments, current water-rates, as far as possible, have been collected in advance. The total amount collected for the year under review was £19,682, an increase over the preceding year of £2,659.

The cases of irrigators who have arrears of rates are being dealt with either by the Departmental Committee, consisting of representatives of the Public Works, Lands, and Agriculture Departments, or by the Mortgage Adjustment Commission. Settlements made in these cases, coupled with the fact that irrigation-rates are now a first charge on the produce of the land, will ensure less difficulty as regards collection of rates in the future.

SCHEMES UNDER CONSTRUCTION.

Omakau Scheme.—The main works on this scheme were completed during the previous year, but a considerable amount of detail work remained to be done. A further 11 m. of distributary races were excavated, and numerous stock-bridges, gauge-boxes, race-drops, and other structures installed.

This scheme has been in satisfactory operation, and an irrigable area of 13,400 acres is commanded. This area will shortly be increased through the installation of a pumping plant to supply higher levels.

Teviot Scheme.—Seven of the old 36 in. diameter riveted steel pipe-lines in Ewing's race were replaced with 22 in. diameter concrete-lined steel pipes, the total length renewed being 4,660 ft. A considerable amount of labour was involved in the cartage of pipes to the site.

Portion of the main pipe-line from the power-house to the Roxburgh East side, which consisted of riveted pipes of various diameters, was in a bad state of repair, and was renewed in reinforced-concrete pipe of 24 in. diameter, the total length replaced being 5,000 ft.

Butcher's Dam.—This structure, a concrete arch of 105 ft. radius and 82 ft. in height, was completed early in the year, the total yardage of concrete being 2,056 cubic yards. A considerable amount of foundation grouting-work was carried out. Since the beginning of January water was supplied to Alexandra Borough, and to irrigators under the Last Chance extension scheme.

Earnsclough Scheme : Fraser River Dam.—This dam, which is nearing completion, is a concrete arched structure of 175 ft. radius and 102 ft. in height. Very satisfactory progress has been made,