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IRRIGATION—CENTRAL OTAGO.

OPERATION OF COMPLETED SCHEMES.

During the past year the several completed schemes have been maintained in good condition, and all lands requiring water have been supplied. The season was a record dry one, and all rivers and streams were exceptionally low. In respect to some of the schemes that have no water-storage the supply was for a while below requirements, but, taking the season as a whole, all irrigators were supplied with their full complement of water. Of the schemes in operation, Ida Valley, Galloway, Teviot River, and Bengerburn are being operated on a trading basis, the results for the year being as follows: Revenue, £8,233; working-expenses, £4,123; profit on working, £4,110; or an increase for the year of £530 on the previous year's results.

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.	Remarks.
Ida Valley Galloway		48 21	Acres. 11,248 2,396	The enlargement of main race was completed.
Manuherikia		73	5,635	Maintenance-work was heavy owing to breaks in main race.
Earnscleugh		54	1,900	Maintenance includes recoating Earnscleugh Extension pipe-line.
Ardgour		12	1,494	20 ch. of race were lined in concrete.
Tarras	\	17	4,373	60 ch. of race were enlarged.
Last Chance		26	2,960	
Teviot River	••	41	2,799	59 ch. of top race replaced by steel pipe and fluming.
Bengerburn		14	144	
Totals		3 06	32,949	

These totals compare with figures for the previous year of 288 irrigators and 31,102 acres under irrigation.

The several demonstration plots that have been laid down on the border-dyke method have been maintained and kept in operation, and have demonstrated the efficiency of the method with its resultant economy in the use of water.

NEW SCHEMES UNDER CONSTRUCTION.

Hawkdun Scheme.—Steady progress has been made during the year. 27½ m. of the main race have been enlarged and renovated, 60 m. of distributory races have been constructed, 15 ch. of siphons and flumes have been erected, and the remainder of the work on road-crossings, culverts, &c., is in hand. A telephone-line has been constructed along portion of the main race, commanding 40 m. of its length. Most of the area will be supplied with water next spring.

Arrow River Scheme.—With the exception of the pipe-lines and siphons, this scheme is practically complete. 2 m. 70 ch. of race were constructed and 80 road and private crossings of various types and two measuring-weirs were built. Contracts totalling £32,000 have been let for the steel pipes required for the pipe-lines and siphons, and erection of these will commence as soon as deliveries begin.

Teviot River Extension.—This extension is to command a further irrigable area of 2,066 acres on the east bank of the Clutha River between Roxburgh and Miller's Flat, and work was commenced during the current year. 6 m. 24 ch. of race have been cut, and the construction of culverts, weirs, &c., is in hand. A contract for the supply of steel pipes for the siphons has been let. Most of the area to be irrigated under this extension will be supplied with water next spring.

SURVEYS AND INVESTIGATIONS.

Surveys and reports on a further extension of Teviot scheme, on the Miller's Flat scheme, and on dam-sites in the Lindis Valley have been made.

Soil surveys which had been in hand during the two previous years were completed last season by the Geological Survey Branch of the Department of Scientific and Industrial Research. The survey last season included the Arrow and Upper Clutha Valley areas. Plans showing results of these surveys are in hand.

TRAMWAYS.

Wellington.—23 ch. of duplication at Rongotai, Seatoun, 5 ch. of loop at Pitt Street, Wadestown, and $3\frac{1}{2}$ ch. at Wellington Road, Miramar, were inspected and passed. Twelve new cars were examined, tested, and passed for traffic.

Wanganui.—One of the existing trams was satisfactorily converted to one-man control, and is now in operation.