

The number of irrigators has increased from 443 (1944-45) to 445. Out of twelve schemes commanding a total of 53,000 acres, 43,832 acres were actually irrigated in the 1945-46 season.

The financial statement for Central Otago Schemes shows revenue at £24,700 and working-expenses £29,778, which include the cost of a new raceman's cottage and £800 for pipe-line replacements. The loss there is £5,078.

Rates collected have decreased from £26,616 (1945) to £24,566 (1946).

The term of irrigation agreements in various schemes has now expired and the question of future irrigation charges is being investigated, so that new agreements can be made.

Canterbury.—This year saw the completion of the waste-race system and initial operation of the Ashburton-Lyndhurst Irrigation Scheme; also the installation of additional flood-discharge siphons on the Rangitata diversion race.

Levels Irrigation Scheme—commanding 12,000 acres—has been in operation eight years. This year 1,780 acres were irrigated for a revenue of £402 from forty-three irrigators. Working-expenses, £2,877.

Redcliff Scheme—commanding 4,600 acres—has been in operation nine years. Twenty-eight acres were irrigated this year for a revenue of £54 from two irrigators. Working-expenses, £858. Irrigation has been effected by rainfall and the prevalent high ground-water conditions.

Ashburton-Lyndhurst Scheme—commanding 68,000 acres—commenced operation this year, irrigating 1,404 acres for a revenue of £428 from thirty-six irrigators. Working-expenses were £7,279.

Water was applied regularly to 699 acres previously prepared by the border-dyke method. Unprepared areas also received water to save turnip crops during dry conditions at the end of the season.

Whilst the waste-race system was proceeding to completion, extra flood-discharge siphons were installed on many points of the scheme, and work was carried out on small race extensions, of which one only remains to be completed.

Mayfield-Hinds Scheme—eventually to provide for 78,000 acres—is under construction, work being confined to small concrete structures on the race reticulation. No start has been made on the intake works, but extra camps have been set up to accommodate seasonal workers expected during the winter season.

Rangitata Diversion Race.—Additional flood-discharge siphons have been installed, and the repair and strengthening of concrete protective work on the crossings of the North and South Ashburton and South Hinds Rivers has been completed. Maintenance on the race section and banks is being carried out. Access crossings, fencing, and the erection of a control-gear structure have been completed.

Marlborough.—Systematic water level readings were taken in the Wairau River during the year in connection with the proposed Marlborough Irrigation Scheme.

WATER-SUPPLY

Downlands Water-supply.—A considerable amount of flood damage occurred during the flood which followed the major flooding of February, 1945.

It was necessary to re-establish No. 1 sub-main crossing over the Opihi River, where several piers were washed away, and also the main crossing of the North and South Pareora Rivers. Recaulking of the main pipe-line has been effected over $2\frac{3}{4}$ miles, and general maintenance and operation of the scheme undertaken.