

The major portion of the Last Chance scheme is completed, and the main race is being extended to supply lands nearer Alexandra, which will permit of a few new Crown sections being thrown open for settlement. It is expected that the whole scheme will be available for the next irrigation season.

The construction work on the Tarras scheme is well advanced, and it is hoped that the scheme will be completed before the next irrigation season opens. Land of excellent quality is brought under this scheme, and lends itself well to irrigation. Favourable results may therefore be expected when the scheme is in operation.

The Teviot River scheme has been carried out in conjunction with the hydro-electric-power scheme supplying Roxburgh and surrounding district. The water is drawn from the Teviot River, and, after passing through the turbines in the power-house, is discharged into the irrigation-canals. The progress of work has been of a very satisfactory nature.

The Bengerburn scheme is supplying from the Bengerburn Stream at Ettrick, and was commenced at the request of settlers who were, at the time, applying for the forfeiture of certain private water rights held in the Bengerburn. An agreement was arrived at by which the Crown acquired portion of the water right, and construction work was commenced in November last. The work is now completed, and irrigation of 1,000 acres is assured.

Surveys for other schemes have been carried out, as well as the collation of much information relative to gauging of streams, investigation of rainfall, and other matters affecting irrigation possibilities.

WORKS TO BE UNDERTAKEN.

The most important project investigated during the year was one for further utilizing the waters of the Manuherikia River. The present scheme utilizes the low-water flow on country lying in the triangle between the junction of the Manuherikia with the Clutha River. No storage is provided. The flow of this river fluctuates to an extraordinary degree on account of the nature of the watershed. If all the water falling could be conserved in reservoirs a great deal of additional land could be irrigated. Numerous dam-sites have been investigated, the most favourable of which now appears to be one at the Manuherikia Falls, in the vicinity of St. Bathans. With the storage obtained in this reservoir it will be possible to irrigate 64,000 acres, and the revenue from this area, when settled, will be sufficient to provide for the upkeep of the works and leave sufficient over to pay interest on the cost of construction. In addition to permitting irrigation in the Manuherikia Valley itself, the storage of flow water for that purpose will permit of the diversion of the low-water flow for the principal reaches of a number of the tributaries being diverted into the upper Idaburn Valley and on to the Maniototo Plain between the Eweburn and Naseby by the present Mount Ida Race, thus still further extending the field of usefulness of this river.

The details of the scheme are not all worked out, but present indications are sufficiently favourable to justify the preparatory work in the direction of setting out the definite lines of races, so that settlers may see just where they will be supplied with water, and thereafter canvassing the settlers in order to obtain binding agreements with them to take the water after same has been made available. When the Government interests are thus secured I shall be in a position to recommend the issue of an Order in Council authorizing the commencement of the works.

The total cost of this development will be approximately £800,000, but I do not anticipate that any charges under the scheme will come to hand during the current financial year, and the works at present in hand will keep the staff fully employed for that period.

OFFICERS TO BE SENT ABROAD.

To gain further information regarding the latest methods in irrigation, it is intended to send an officer of the Public Works Department who has had considerable experience in connection with the various schemes in Central Otago, together with an officer of the Department of Agriculture, to California, and