

IRRIGATION AND WATER-SUPPLY—continued.

SCHEDULE OF SCHEMES UNDER INVESTIGATION.

Scheme.	Source of Supply.	River Discharge (Minimum).	Main Canals Discharge (Maximum), as per Design.	Average Rainfall from Records available.	Rainfall, 1935.	Area commanded (Gross).	Length of Main Canal.	Length of Distributions.	Expenditure to 31st March, 1936.*	Remarks.
<i>Canterbury South</i> —										
Barthill ..	Rangitata River	Cusecs. 3,500	Cusecs. ..	Inches. ..	Inches. 25·0	Acres. 53,000	Miles. ..	Miles. ..	£ 16,049	Investigations into the feasibility of irrigation in the Canterbury Province have been in hand since January, 1934. Investigations include the following phenomena, viz.: Soil moisture, mechanical analysis of soil, depth of ground water, evaporation, rainfall, and river-flow.
Mayfield-Hinds ..	Rangitata River	3,500	..	..	26·5	113,000	..	..
Orari ..	Rangitata River	3,500	..	..	26·5	40,000	..	..
Rakaia ..	Rakata River	4,000	450	..	25·37	92,000	40	..		
Valetta-Tinwald ..	Rangitata River	3,500	800	23	28·44	84,000	..	..
Investigations of other proposed schemes	..	..	..	..	..	..	..	..	..	..
<i>Marlborough</i> —										
Investigation of proposed schemes	..	..	..	..	..	..	..	..	748	Comprehensive investigation surveys of schemes for the Wairau Valley and parts of the Wairau Plains are in hand.
<i>Otago Central</i> —										
Cromwell Flat and Lowburn (Roaring Meg)	Hydro-electric development of Roaring Meg and pumping from Clutha and Kawarau Rivers	29 (Roaring Meg)	..	20·55 (Luggate)	22·85	..	..	..	3,774	Hydro-electric scheme under investigation. Power would be available for pumping irrigation supplies to 8,000 acres in Upper Clutha Valley. Portion of this area could be supplied from Hawea River power and pumping scheme.
Maniototo (Upper Taieri)	Taieri River and storage dam	25	500	16·84 (Waipiata)	14·73	100,000	60	..	15,315	Modified scheme for complete irrigation of 5,000 acres is possible without storage, or for reasonable partial irrigation of 15,000 acres. Surveys practically complete for scheme to irrigate 100,000 acres.
Scandinavian ..	Tributaries of Manuhierikia River	..	20	30·66 (St. Bathans)	31·76	..	..	..	..	For lands about St. Bathans. To bear £15,000 towards cost of Falls dam, Upper Manuhierikia scheme. Irrigable area, 3,000 acres.
Upper Clutha Valley (including Hawea Flats)	Hawea and Clutha Rivers (pumping) with power-station at outlet of Lake Hawea	580 (Hawea R.) 3,000 (Clutha R.)	..	21·78 (Hawea Flat, Luggate, and Tarras)	23·28	..	..	..	..	Investigations have been made for a hydro-electric power development at the outlet of Lake Hawea. Sufficient power would be available to pump water from the Hawea and Clutha Rivers to 13,700 acres in the Upper Clutha Valley.
Upper Manuhierikia (extension of Omakau Scheme)	Manuhierikia River and storage dam at Manuhierikia Falls	36 (at dam-site)	..	20·30 (Clyde, Ophir, and Blackstone Hill)	19·61	16,000	58	60	6,553	Surveys and investigations have been made for the extension of the Omakau scheme (now under construction) to supply lands between Tiger Hill and Clyde. Irrigable area, 12,000 acres.
Investigation of proposed schemes	..	..	..	..	..	..	..	..	2,145	Includes the reading of river and rain gauges.
Total: Schemes under investigation	..	..	..	..	..	..	..	..	44,584	
Grand total ..	..	..	..	..	..	..	..	..	1,487,884	

* Includes expenditure from Public Works Fund, Consolidated Fund, Unemployment Fund; also administration and loan charges.