

1911.

VICTORIA.

STATE RIVERS AND WATER SUPPLY COMMISSION.

SIXTH
ANNUAL REPORT.

1910-11.

PRESENTED TO BOTH HOUSES OF PARLIAMENT PURSUANT TO THE PROVISIONS OF
THE WATER ACTS.

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STATE RIVERS AND WATER SUPPLY COMMISSION.

ANNUAL REPORT, 1910-11.

In compliance with the provisions of the Water Acts the State Rivers and Water Supply Commission submits the following Report and Statement for the Financial Year 1910-11, and Estimates for the ensuing year.

Since the last Report was submitted a vacancy in the Commission's membership occurred through the regrettable death, on 12th June, 1911, of Mr. Commissioner George Garson, M.Inst.C.E., who had been a member of the Commission since its inception. The vacancy is being filled by Mr. Commissioner John Stewart Dethridge, M.Inst.C.E.

WORKS UNDER CONTROL OF COMMISSION.

The following statement gives a brief description, summary of cost, and other particulars relative to the works now controlled by the Commission. The debits set out against the districts have been varied somewhat since last year owing principally to alterations in district boundaries.

Since the last Report also a number of works of water supply constructed by municipalities from loans advanced by the State under the Mallee Tanks Acts, and the *Municipalities Advances Act 1898*, have been transferred to the Commission under the provisions of Section 37, *Water Act 1909*. The indebtedness assumed in respect of these works is included in this statement, and is also separately shown in the Report.

A.—FREE HEAD-WORKS.

DESCRIPTION OF WORKS.	Capital Debt at 30th June, 1911. Exclusive of cost of Loan Flotation.
1. Broken River Works :—Carey's Weir and offtake, with about 59 chains of channel to the Broken Creek; Gowangardie Weir with offtake sluice	£ 14,853
2. Goulburn River Works :—Weir on the Goulburn River, about 9 miles above Murchison, channel therefrom, about 23½ miles, to Waranga Reservoir; and that Reservoir	730,588
3. Kerang North-West Lakes Works :—Weir on the Loddon River at its confluence with the Pyramid Creek; regulating weirs at the effluence from the Loddon of the Sheepwash and Washpen Creeks; channel from the Washpen Creek regulator to Reedy Lake, Middle Lake, Third Lake, Lake Charin, Race-course Lake, Cullen's Lake, Kangaroo Lake, and Lake Tutchewop, and to the Little Murray River, with water storage works at these lakes	9,587
4. Kow Swamp Works :—Intake from the Murray River with regulator, at the effluence of the Gambower Creek; channel thence to the Kow Swamp Reservoir, and that Reservoir; channel along the northern side of the reservoir; channel from the outlet of the reservoir, about 23½ miles, to the left bank of the Loddon River	180,400
5. Lake Lonsdale Reservoir :—Reservoir at Lake Lonsdale, on the Little Wimmera River, near Ledcourt	49,054
6. Loddon River Works :—Laanecoorie Weir, on the Loddon; Bridgewater Weir, on the Loddon; Kinypanial Weir, on the Loddon	166,585
7. Long Lake Pumping Works :—Regulated intake to Lake Baker, from the Little Murray River; water storage works at Lake Baker and Long Lake, with channel connecting these lakes; pumping plant at Long Lake, with rising main thence about 7 miles to allotment 10M, parish of Kooem; system of main distributary channels, about 85 miles in length	27,346
8. Lower Wimmera Compensation Works :—Drung Drung Weir, on the Wimmera, near allotment 29, parish of Longerenong; Dimboola Weir, on the Wimmera, near Dimboola township; Antwerp Weir, on the Wimmera, at Antwerp Station homestead; Jeparit Weir, on the Wimmera, near Jeparit township	8,558
Total	£1,186,971

B.—WATERWORKS DISTRICTS

Distributary Works (including Mallee tanks transferred) within Districts under the control of the Commission as follow:—

Name of District (Including Urban Districts).	Advances made by State prior to transfer of District to Commission.	Capital Written Off by Acts 1625 and 1651.	Redemption Paid to Treasury.	Balance at Debt at transfer of District to Commission, less Redemption since paid.	Capital Expenditure from Loans and Revenue since transfer of District to Commission.	Capital Debt at 30th June, 1911.
	£	£	£	£	£	£
1. Birohip	9,051	..	489	8,562	62,016	130,654
2. Sea Lake	49,659	..	314	49,345		
3. Wycheproof	12,452	700	1,021	10,731		
4. Karkaroc	17,094	..	1,939	15,155		
5. Long Lake (Free Head-works excluded)	8,173	..	421	7,752	25,234	32,986
6. Western Wimmera	217,976	132,835	6,777	78,364	12,661	91,025
7. Wimmera United	156,024	36,392	6,046	113,586	4,484	118,070
8. Tyntynder .. .. .	..	..	..	..	8,285	8,285
9. Wonthaggi .. .. .	..	..	..	..	48,552	48,552
10. Coliban	1,171,622	..	..	1,171,622	30,842	1,202,464
11. Wimmera Main Channels (to be later apportioned to districts) .. .. .	..	..	..	..	30,430	30,430
	1,642,051	169,927	17,007	1,455,117	238,076	1,693,193
Carried forward						£2,880,164

Brought forward	£ 2,880,164
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C.—IRRIGATION AND WATER SUPPLY DISTRICTS.

Distributary Works within Districts under the control of the Commission as follow:—

Name of District.	Advances made by State prior to transfer of District to Commission.	Capital written off by Acts 1625 and 1651.	Redemption paid to Treasury.	Balance at Debit at transfer of District to Commission, less Redemption since paid.	Capital Expenditure from Loans and Revenue since transfer of District to Commission.	Capital Debit at 30th June, 1911.
	£	£	£	£	£	£
1. Bacchus Marsh ..	14,406	8,906	243	5,257	9,827	15,084
2. Campaspe ..	61,700	52,685	305	8,710	6,818	15,528
3. Deakin ..	70,359	54,748	2,144	33,477	36,417	69,894
4. Rodney ..	223,253	149,949	4,280	69,039	102,466	171,505
5. Shepparton ..	..	..	..	..	11,220	11,220
6. Swan Hill ..	24,800	19,799	306	4,695	21,731	26,426
Kerang Centre—						
7. Coluna ..	151,213	93,968	512	56,733	42,326	99,059
8. Dry Lake ..	1,704	686	299	719	..	719
9. Kerang ..	70,032	35,338	174	34,520	2,770	37,290
10. Koondrook and Myall and Benjeroop and Murrabit	28,405	19,280	1,356	7,769	26,449	34,218
Loddon Centre—						
11. East Boort ..	21,567	14,866	184	6,517	..	6,517
12. Leaghur and Meering	5,043	2,543	78	2,422	..	2,422
13. North Boort ..	6,977	4,867	52	2,058	..	2,058
14. Tragowel Plains	159,843	124,534	444	34,870	..	34,870
15. Twelve Mile ..	5,050	3,250	28	1,772	..	1,772
16. Wandella ..	14,302	9,733	52	4,517	216	4,733
Totals ..	858,684	575,152	10,457	273,075	260,240	533,315
Irrigation Areas—						
17. Nyah ..	..	..	..	..	20,159	20,159
18. White Cliffs (including small portion of proposed Waterworks District)	..	..	..	..	38,911	38,911
						59,070

D.—NEW WORKS.—COST TO BE APPORTIONED TO DISTRICTS BENEFITED.

1. Goulburn Main Channels (exclusive of Free Head-works)—	Interest on this Expenditure will be debited to the districts benefited. In Rodney a sum of £4,000 has this year been collected as part of the interest chargeable to the district for these works	
East Goulburn ..		132,573
Waranga Reservoir to Campaspe ..		239,441
Campaspe to Loddon ..		165,386
Main Distributary Channels ..		38,485
		575,885
2. Pykes Creek and Werribee Scheme—	To be apportioned to the two districts of Werribee and Bacchus Marsh. A portion of the expenditure has been debited to the latter district since 30th June, 1911	
Pykes Creek Reservoir ..		47,637
Diverting Weir and Distributary Works ..		10,053
Leaderderg River Works ..		337
		58,027
Carried forward		£4,106,461

				Capital Debt at 30th June, 1911. Exclusive of Cost of Loan Flotation.
Brought forward				£ 4,106,461
E.—WATERWORKS TRUSTS DISTRICTS.				
DISTRICTS HELD IN TRUST BY THE COMMISSION.				
The districts of the undermentioned Trusts have been placed under the Commission's control, in pursuance of Section 36 of the <i>Water Act 1909</i> , Section 10 of the <i>Carrum Drainage Works Act 1905</i> , and Section 278 of the <i>Water Act 1905</i> .				
Name of Trust.	Total Advances by State.	Capital written off by Acts 1925 and 1951.	Redemption paid to Treasury.	Capital Debt at 30th June, 1911.
	£	£	£	£
1. Avoca Water Trust	8,709	2,494	612	5,603
2. Carrum Waterworks Trust	25,732	7,732	1,011	16,989
3. Loddon United Waterworks Trust	21,334	1,717	1,116	18,501
	55,775	11,943	2,739	41,093
Grand Total				£4,106,461

MALLEE TANKS TRANSFERRED.

STATEMENT showing the loans advanced by the State under the Mallee Tanks Acts and the *Municipalities Advances Act 1898* to the undermentioned Shires for the construction of works of water supply, and transferred from them under the provisions of Section 37 of the *Water Act 1909*, to the debit of the following Waterworks Districts under the control of the Commission.

Transferred from Shire of—	Transferred to Waterworks District of—						Net Indebtedness Transferred.		
	Birchip.	Karkaroc.	Long Lake.	Sea Lake.	Western Wimmera.	Wimmera United.	Wycheproof.	£	s. d.
1. Birchip ..	£ s. d. 1,548 14 7	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d. 812 7 8	£ s. d.	2,361	2 3
2. Borung ..	435 10 10	930 17 11	.. .. .	.. .. .	2,945 16	9,431 7 8	.. .. .	7,749	6 4
3. Bimboola ..	.. .. .	621 4 2	.. .. .	.. .. .	1,258 2 1	.. .. .	.. .. .	1,879	6 3
4. Karkaroc ..	.. .. .	13,602 17 5	.. .. .	.. .. .	115 4 3	.. .. .	.. .. .	13,748	1 8
5. Swan Hill ..	.. .. .	.. .. .	2,475 4 2	900 3 8	.. .. .	.. .. .	.. .. .	3,375	7 10
6. Wycheproof ..	.. .. .	.. .. .	.. .. .	1,266 14 11	.. .. .	.. .. .	902 19 3	2,169	14 2
Totals ..	2,004 5 5	15,154 19 6	2,475 4 2	2,166 18 7	3,449 3 1	15,129 8 6	902 19 3	31,282	18 6

LANDS SUPPLIED WITH WATER WITHIN THE STATE.

The area of country lands within the State artificially supplied with water for domestic and ordinary use and for watering stock is, approximately, 17,000 square miles, equal to 10,880,000 acres. The extent of land under irrigated culture, for all kinds of crop, is 142,857 acres, an increase of 13,086 acres over the area irrigated in the previous year. About 11,000 acres have been watered under yearly permits granting authority to divert water from streams throughout the State. Further progress has been made during the year in bringing all such diversions under the control of the Commission, 469 permits authorizing diversions for Irrigation, Domestic and Stock, and Power purposes being now in force. This represents an increase of 89 during the year. The number of separate towns supplied, exclusive of the city of Melbourne and its suburbs, is 127, as shown in the following statement:—

Controlling Authorities.	Number of Town Supplies.	Estimated Population Served.
Commission	4 27	86,000
Waterworks Trusts	87	118,000
Local Governing bodies	13	75,000
Totals	127	279,000

LANDS UNDER IRRIGATED CULTURE.

The two statements herewith show the extent of Areas under Irrigation for last year in detail, and for the last five years totalled for comparative purposes.

The area irrigated last year (1910-11) shows an increase of 13,086 acres over the area watered in the previous year (1909-10).

STATEMENT OF THE EXTENT OF IRRIGATION AND OF AREAS OF DIFFERENT KINDS OF CROPS WATERED—YEAR 1910-11.

Name of District.	Area under Irrigation (Acres).							Total.
	Cereals.	Lucerne grown for Pasture and Hay.	Sorghum and other Annual Fodder Crops.	Pastures.	Vineyards, Orchards and Gardens.	Fallows.	Miscellaneous.	
<i>Supplied from Goulburn State Works.</i>								
Rodney	357	13,699	513	6,368	3,907	500	163	25,507
Deakin	27	1,075	170	854	84	121	..	2,331
Shepparton	105	415	155	199	95	21	21	1,011
Totals	489	15,189	838	7,421	4,086	642	184	28,849
<i>Supplied from Kow Swamp State Works.</i>								
Dry Lake	92	..	50	400	6	..	1	549
Kerang	5,691	793	1,838	11,391	9	40	1	19,763
Totals	5,783	793	1,888	11,791	15	40	2	20,312
<i>Supplied from Loddon State Works.</i>								
Wandella	643	306	117	1,902	14	30	..	3,012
East Boort	1,354	7	179	757	34	..	..	2,331
Leaghur and Meering	579	9	132	1,009	..	..	..	1,729
North Boort	221	..	147	292	15	60	..	735
Tragowel Plains	8,839	244	875	6,741	68	141	..	16,908
Twelve Mile	550	96	115	1,386	..	..	..	2,147
Totals	12,186	602	1,565	12,087	131	231	..	26,862
<i>Supplied from other State Works.</i>								
Bacchus Marsh .. .. .	..	356	2	5	16	..	..	279
Benjeroop and Murrabit	2,374	41	173	1,771	19	..	1	4,379
Campaspe .. .. .	..	433	7	138	20	..	..	598
Cohuna	6,302	2,850	2,221	7,995	159	40	11	19,578
Koondrook and Myall	1,326	152	109	3,268	12	..	..	4,867
Nyah	941	128	214	173	177	131	57	1,821
Swan Hill	2,003	1,916	782	1,941	45	86	149	6,922
Western Wimmera .. .. .	..	59	23	25	926	..	..	1,033
White Cliffs	966	240	609	..	346	..	158	2,319
Totals	13,912	6,175	4,140	15,316	1,720	257	376	41,896
<i>Lands supplied from Kerang North-West Lakes</i>	1,733	157	234	1,372	..	..	..	3,496
<i>Lands supplied directly from Kow Swamp State Works</i>	917	1,211	392	806	12	..	..	3,338
First Mildura	981	673	..	..	9,878	468	..	12,000
<i>Supplied from Coliban State Works</i>	167	236	272	233	1,758	216	278	3,160
<i>Private Diversions in Kerang Districts</i>	1,737	336	198	667	6	..	..	2,944
Grand Totals, 1910-11	37,905	25,432	9,527	49,693	17,606	1,854	840	142,857
Grand Totals, 1909-10	23,715	24,124	8,094	50,541	17,524	4,988	785	129,771

COMPARATIVE STATEMENT OF THE EXTENT OF IRRIGATION 1906-7 to 1910-11.

	Area under Irrigation (Acres).				
	1906-7.	1907-8.	1908-9.	1909-10.	1910-11.
Goulburn State Works	31,059	83,776	47,730	41,708	28,849
Kow Swamp State Works	22,493	30,217	25,578	15,097	20,312
Loddon State Works	13,056	27,608	30,177	14,363	26,862
Other State Works	22,454	54,628	42,067	32,624	41,896
Kerang North-west Lakes	5,263	8,838	4,621	4,828	3,496
Kow Swamp Works (direct)	2,415	5,453	4,940	2,807	3,338
First Mildura Trust Works	9,469	10,876	11,900	12,000	12,000
Coliban State Works	1,850	2,191	3,063	2,997	3,160
Private Works in Kerang District .. .. .	..	8,425	6,797	3,347	2,944
Totals	108,059	232,012	176,873	129,771	142,857

VALUATIONS RATES AND COMPULSORY IRRIGATION CHARGES.

The statements which follow set forth the whole of the districts supplied by the Commission with water for domestic and ordinary use, and for watering cattle or other stock, together with the annual value of the lands and tenements in such districts and the rates and compulsory irrigation charges made. An estimate of the number of persons dwelling in such districts is also appended.

During the year, the Shepparton Irrigation and Water Supply District, the Nyah and White Cliffs Irrigation Areas, and the Axe Creek, Karkaroc, Tyntynder, and Wonthaggi Waterworks Districts were constituted.

In nineteen districts the lands were for the purpose of making and levying rates arranged in divisions (not more than three in number) in accordance with the relative benefits derived by such lands from the works.

In five districts the Commission made and levied compulsory irrigation charges, details of which are set out hereunder. In connexion with Nyah and White Cliffs Districts the charge levied was, in pursuance of the powers given by the *Murray Settlements Act 1907*, fixed for the year at one-fourth of the estimated full amount required; this charge will, however, be uniformly increased each year so that in three years the full amount will be levied. It is proposed to levy the compulsory irrigation charge in a number of other districts during the ensuing year.

A.—VALUATIONS AND RATES.

Districts Supplied with Water for Domestic and Ordinary Use and for Watering Cattle or other Stock.	Annual Value of Lands and Tenements.	Rate in the £ made during year ended 30th June, 1911.	Period of Rate.	Estimated Number of Persons dwelling in District.
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IRRIGATION AND WATER SUPPLY DISTRICTS.

	Valuation by Commission. £	Rate in the £ made during year ended 30th June, 1911.		Period of Rate.	Estimated Number of Persons dwelling in District.
		s.	d.		
1. BACCHUS MARSH ..	2,207	..	.. 1 6	1st July, 1910, to 30th June, 1911	75
2. BENJEROOP AND MURRABIT	3,080	1st Division ..	1 6	" " "	170
		2nd Division ..	0 9	" " "	
3. CAMPASPE	13,881	1st Division ..	1 8	" " "	710
		2nd Division ..	0 10	" " "	
		3rd Division ..	0 5	" " "	
4. COHUNA	30,489	1st Division ..	3 0	" " "	1,660
		2nd Division ..	1 6	" " "	
5. DEAKIN	82,508	1st Division ..	1 0	1st July, 1910, to 30th June, 1911	3,720
		2nd Division ..	0 6	" " "	
		3rd Division ..	0 3	" " "	
6. DRY LAKE	250	(No rate made)		.. .. .	10
7. EAST BOORT ..	4,429	1st Division ..	2 0	" " "	140
		2nd Division ..	1 0	" " "	
8. KERANG	13,084	1st Division ..	2 6	" " "	660
		2nd Division ..	1 3	" " "	
		3rd Division ..	0 7½	" " "	
9. KOONDROOK AND MYALL	2,076	..	.. 4 6	" " "	100
10. LEAGHUR AND MEERING	1,461	1st Division ..	2 0	" " "	110
		2nd Division ..	1 0	" " "	
11. NORTH BOORT ..	1,965	1st Division ..	2 0	" " "	100
		2nd Division ..	1 0	" " "	

A—VALUATIONS AND RATES—*continued.*

Districts Supplied with Water for Domestic and Ordinary Use and for Watering Cattle or other Stock.	Annual Value of Lands and Tenements.	Rate in the £ made during year ended 30th June, 1911.	Period of Rate.	Estimated Number of Persons dwelling in District.
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IRRIGATION AND WATER SUPPLY DISTRICTS—*continued.*

	Valuation by Commission.				
	£		s. d.		
12. NYAH	859	.. .. .	2 0	1st July, 1910, to 30th June, 1911	200
13. RODNEY	109,820	1st Division ..	1 0	" " "	5,000
		2nd Division ..	0 6	" " "	
		3rd Division ..	0 3	" " "	
14. SHEPPARTON	2,754	.. .. .	0 8	14th September, 1910, to 30th June, 1911	500
15. SWAN HILL	6,507	.. .. .	2 0	1st July, 1910, to 30th June, 1911	500
16. TRAGOWEL PLAINS	22,702	1st Division ..	2 2	" " "	1,000
		2nd Division ..	1 1	" " "	
17. TWELVE MILE	1,146	.. .. .	2 0	" " "	90
18. WANDELLA	1,772	.. .. .	2 0	" " "	220
19. WHITE CLIFFS	1,704	.. .. .	2 0	" " "	650

WATERWORKS DISTRICTS.

20. AXE CREEK	1,405	.. .. .	2 0	16th August, 1910, to 30th June, 1911	300
21. BIRCHIP	23,908	1st Division ..	2 0	1st July, 1910, to 30th June, 1911	2,450
		2nd Division ..	1 0		
		3rd Division ..	0 6		
22. KARKAROOC.. .. .	85,767	1st Division ..	1 6	" " "	3,200
		2nd Division ..	0 9	" " "	
		3rd Division ..	0 4½	" " "	
23. LONG LAKE	40,766	1st Division ..	2 3	" " "	1,650
		2nd Division ..	1 1½	" " "	
		3rd Division ..	0 6½	" " "	
24. SEA LAKE	63,806	1st Division ..	2 0	" " "	2,400
		2nd Division ..	1 0	" " "	
		3rd Division ..	0 6	" " "	
25. TYNTYNDER	12,346	1st Division ..	2 9	1st July, 1910, to 30th June, 1911	600
		2nd Division ..	1 4½	" " "	
		3rd Division ..	0 8½	" " "	
26. WESTERN WIMMERA	242,009	1st Division ..	1 0	" " "	10,250
		2nd Division ..	0 6	" " "	
		3rd Division ..	0 3	" " "	
27. WIMMERA UNITED	253,800	1st Division ..	1 0	" " "	8,900
		2nd Division ..	0 6	" " "	
		3rd Division ..	0 3	" " "	
28. WYCHEPROOF	41,252	1st Division ..	2 0	" " "	2,160
		2nd Division ..	1 0	" " "	
		3rd Division ..	0 6	" " "	

A.—VALUATION AND RATES—*continued.*

Districts Supplied with Water for Domestic and Ordinary Use and for Watering Cattle or other Stock.	Annual Value of Lands and Tenements.	Rate in the £ made during year ended 30th June, 1911.	Period of Rate.	Estimated Number of Persons dwelling in District.
URBAN DIVISIONS AND DISTRICTS.				
	Municipal Valuation.			
	£	<i>s. d.</i>		
29. BACCHUS MARSH	6,277	.. .. 1 6	1st July, 1910, to 30th June, 1911	1,100
30. BIRCHIP	4,692	.. .. 2 6	" " "	820
31. DIMBOOLA	4,992	.. .. 1 9	" " "	680
32. LAKE BOGA	858	.. .. 3 0	" " "	250
33. MINYIP	2,403	.. .. 3 0	" " "	500
34. NATIMUK	2,246	.. .. 1 6	" " "	420
35. RAINBOW	5,027	.. .. 2 6	" " "	640
36. RUPANYUP	1,694	.. .. 3 0	" " "	450
37. SEA LAKE	1,607	.. .. 3 0	" " "	450
38. WYCHEPROOF	2,957	.. .. 2 0	" " "	700
39. WONTHAGGI	15,737	.. .. 1 3	1st January, 1911, to 30th June, 1911	3,700
COLIBAN SYSTEM.				
		<i>s. d.</i>		
40. COLIBAN	318,061	On Valuation up to £300 .. 1 6 (minimum 20s.) From £301 up to £700 .. 1 3 Over £700 .. 1 0 Vacant lands .. 1 6	1st July, 1910, to 30th June, 1911	66,000
WATERWORKS TRUSTS.				
	Valuation by Commission.			
	£	<i>s. d.</i>		
41. LODDON UNITED	75,603	1st Division .. 0 9 2nd Division .. 0 4½ 3rd Division .. 0 2½	1st January, 1911, to 31st December, 1911	2,350
	Municipal Valuation.			
42. AVOCA	27,033	.. .. 0 6	1st January, 1910, to 31st December, 1910	1,600
	27,454	.. .. 0 4½	1st January, 1911, to 31st December, 1911	
43. CARRUM	9,427	1st Division .. 6 0 2nd Division .. 3 0 3rd Division .. 0 6 4th Division .. 2 0	1st January, 1910, to 31st December, 1910	700
	11,735	1st Division .. 4 0 2nd Division .. 1 6 3rd Division .. 0 3 4th Division .. 0 6	1st January, 1911, to 31st December, 1911	

B.—COMPULSORY IRRIGATION CHARGES.

Irrigation and Water Supply District.	Area of District. In acres.	Area at present Irrigable. In acres.	Water Rights apportioned (including extra Rights.) In acre feet.	Compulsory Charge per acre foot of Water Right.	Period for which Charge is made.
RODNEY	265,025	181,094	46,536	5s.	1st October, 1910, to 31st March, 1911
SHEPPARTON	3,355	3,355	3,355	5s.	1st November, 1910, to 31st May, 1911
SWAN HILL	13,579	11,103	11,103	5s.	1st October, 1910, to 31st March, 1911
NYAH	2,923	2,420	6,050	3s. (one-fourth charge)	1st August, 1910, to 30th April, 1911
WHITE CLIFFS	5,871	5,361	13,402	3s. (one-fourth charge)	1st August, 1910, to 30th April, 1911

CONTRACTS.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1911.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
569	C. Monteath and Sons ..	C. I. Pipes and Special Castings, Wonthaggi ..	9,171	13	9
570	The Austral Otis Engineering Coy. Ltd.	C. I. Pipes, Wonthaggi	7,478	7	8
571	T. A. Vinnicombe and A. H. Vinnicombe (trading as Vinnicombe Bros.)	Main Southern Channel, Nyah	137	11	10
572	T. A. Vinnicombe and A. H. Vinnicombe (trading as Vinnicombe Bros.)	Main Southern Channel, Nyah	137	7	6
573	James Martin	Cannie Channel, Long Lake	110	10	0
574	Determined.				
575	James Martin	Cannie Channel, Long Lake	100	10	0
576	James Martin	Cannie Channel, Long Lake	22	0	0
577	James Martin	Cannie Channel, Long Lake	106	1	9
578	Determined.				
579	Determined.				
580	Determined.				
581	William J. Cavanagh and T. Cavanagh (trading as Cavanagh Bros.)	Boorong Channel, Long Lake	116	12	11
582	John O'Connor	Main Southern Channel, Nyah	132	13	9
583	Edward Fitzgerald	Main Southern Channel, Nyah	138	19	2
584	James V. Cain	Darley Channel, Bacchus Marsh	642	1	8
585	J. H. Thomas	Spur Channel, Shepparton	64	12	10
586	J. G. Spence	Main Southern Channel, Tyntynder	131	13	9
587	James V. Cain	Channelling, Bacchus Marsh	106	7	1
588	B. Deutscher	Telferson's Channel, Wimmera United	50	5	0
589	Determined.				
590	Determined.				
591	F. Cooling and W. Wilson	Spur Channel, Shepparton	55	13	3
592	M. Malone	Spur Channel, Shepparton	93	17	11
593	Robison Bros. and Coy. Pty. Ltd.	Centrifugal Pump, Cannie Ridge, Long Lake	70	0	0
594	Mephan Ferguson	Riveted Steel Pipes and Castings, Cohuna	253	12	2
595	A. H. McDonald and Co.	Gas Engine and Suction Gas Plant, Wycheproof	405	10	2
596	Mephan Ferguson	C. I. Pipes and Special Castings, Wonthaggi	4,490	5	10
597	Orton and Burns	Fireplugs, Covers, Pillar Hydrants, and Fowler Hydrants, Wonthaggi	271	15	0
598	John Danks and Son Pty. Ltd.	Sinice Valves, Covers, and Air Escapes, Wonthaggi	330	5	6
599	C. Monteath and Sons	C. I. Pipes and Special Castings, Wonthaggi	429	10	4
600	The Austral Otis Engineering Coy. Ltd.	Cast iron Pipes, Wonthaggi	1,123	9	6
601	E. Baker	Posts and Fencing, Laanecoorie	17	0	9
602	Macdonald Bros.	Commission's Office, Murtoa, Wimmera United	767	5	0
603	James Martin	Distributary Channel, Cohuna	113	5	5
604	J. M. Peebles	Spur Channel, Shepparton	66	1	8
605	James Martin	Distributaries, Cohuna	158	8	8
606	R. Heath	North-Eastern Channel, Long Lake	131	5	0
607	R. Guilmartin	South Ultima Channel, Long Lake	110	10	0
608	James Crothers	Main Central Channel, Wimmera United	204	3	4
609	A. Brennan	Stock and Domestic Supply Channel, Werribee	35	0	0
610	Peter McNamara	Main Southern Channel, Tyntynder	185	5	0
611	F. J. McMahon	Main Southern Channel, Tyntynder	111	0	0
612	E. Fitzgerald	Main Southern Channel, Tyntynder	185	5	0
613	Malcolm Findlay	Main Southern Channel, Tyntynder	148	19	2
614	Malcolm Findlay	Main Southern Channel, Tyntynder	138	9	7
615	Malcolm Findlay	Main Southern Channel, Tyntynder	141	11	10
616	D. C. Moriarty	Deviation of Distributary Channel, Cohuna	153	10	5
617	John Ahern, jun.	Spur Channel, Shepparton	224	5	10
618	M. Millerick, for Millerick Bros.	Spur Channel, Shepparton	33	7	3
619	L. Tuana	Spur Channel, Shepparton	145	4	1
620	Arthur Sims	Theobald's Channel, Long Lake	60	0	0
621	Geo. Beasley	Boorong Channel, Sea Lake	164	0	0
622	F. Wabwright	Boorong Channel, Sea Lake	140	5	0
		Carried forward	20,605	11	4

CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1911—continued.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
		Brought forward	29,605	11	4
623	M. Malone	The Darveniza Spur Channel	176	18	7
624	M. Malone	McKenzie-Lancaster Loop Channel, and King's Spur Channel, Rodney	524	7	10
625	M. Malone	Cussen-Kavanagh Loop Channel, Rodney ..	559	18	11
626	M. Malone	McKenzie-Lancaster Loop Channel, Rodney ..	530	1	9
627	James Fitzpatrick	Flight's Spurs, Cussen Channel, Rodney ..	353	6	0
628	J. Piper	Spur Channel, Shepparton	37	14	0
629	James Peebles	Spur Channel, Shepparton	70	16	0
630	J. Livingston (trading as J. and J. Livingston)	Distributary Channel, Cohuna	181	7	2
631	Albert Thompson (trading as Thompson Bros.)	Distributary and Spur Channels, Cohuna ..	357	10	10
632	Albert Thompson (trading as Thompson Bros.)	Distributary and Extension Distributary, Cohuna	366	7	0
633	Munn and Traeger	Main Channel, White Cliffs	176	1	11
634	I. S. Drape	Contour Survey of portion of Pentel Island ..	161	0	0
635	M. Malone	Deep Creek Channel, Cohuna	2,168	5	0
636	Frederick Charles Fasham	Firewood, Koondrook	104	3	4
637	A. J. Harman	Firewood, Koondrook	112	10	0
638	D. Douglas	Twin Earthen Storage Tanks, Jeparit	2,196	10	0
639	Thomas W. Kent and John J. Kent (trading as Kent Bros.)	Gnarwee Channel, Long Lake	29	6	8
640	G. Weymouth Pty. Ltd.	Centrifugal Pump, Wycheproof	100	0	0
641	J. Doherty	Spur Channel, Shepparton	22	1	6
642	Gollan Bros.	Spur Channel, Shepparton	18	14	10
643	F. Cooling and W. Wilson	Spur Channel, Shepparton	22	2	8
644	T. Moynihan	Spur Channel, Shepparton	73	2	9
645	Joseph Tyndall	Spur Channel, Shepparton	24	8	1
646	J. Pullin, for Pnllin Bros.	Spur Channel, Shepparton	28	0	0
647	W. J. Cahill	Spur Channel, Shepparton	38	1	8
648	William Sands	Bitchigal Channel, Sea Lake	169	15	0
649	William Sands	Bitchigal Channel, Sea Lake	169	10	0
650	W. Mathers	Jeparit Channel, Western Wimmera	191	15	9
651	G. Baston	North-Eastern Channel, Long Lake	206	12	11
652	R. M. Drummond and George Snell	W.B. House for Engineer, Nyah	331	1	0
653	Joseph Nixon and Sons	Special Castings and C.I. Pipes, Jeparit, Beulah, Minyip, and Rupanyup, Wimmera-Mallee	1,324	4	6
654	Johnson and Sons Pty. Ltd. ..	Mild Steel Screws, Waranga Reservoir ..	44	11	0
655	Determined.				
656	G. R. Wilkinson and M. Findlay	26-mile Tank Channel, Tyntynder	96	0	5
657	G. R. Wilkinson and M. Findlay	26-mile Tank Channel, Tyntynder	95	11	3
658	Determined.				
659	J. G. Spence	26-mile Tank Channel, Tyntynder	139	0	0
660	Determined.				
661	M. Malone	Koyuga Channelling, Rochester	894	15	1
662	John Ahern	Koyuga Channelling, Rochester	1,015	2	1
663	Matteo Gaspero	Koyuga Channel, Rochester	1,077	18	10
664	John Ahern	Koyuga Channel, Rochester	862	15	2
665	Thomas Moore	Namcella Channels, Rochester	611	5	0
666	John McKimmie	Spur Channels, Namcella and Rochester ..	305	0	0
667	W. Schmedes	1,000 tons of Firewood, Maldon, Coliban District	235	8	4
668	W. Mathers	Ellam Channel, Western Wimmera	144	8	11
669	W. Mathers	Antwerp Channel, Western Wimmera	147	5	1
670	W. Mathers	Antwerp Channel, Western Wimmera	160	5	5
671	W. Mathers	Katyl Channel, Western Wimmera	194	14	6
672	W. Mathers	Katyl Channel, Western Wimmera	186	16	3
673	W. Mathers	Katyl Channel, Western Wimmera	87	15	10
674	John Danks and Son Pty. Ltd. ..	C. I. Pipes and Special Castings, Campbell's Creek, Coliban	216	16	3
675	R. Guilmartin	Storage Tank, Nyah	105	8	4
676	E. H. Jones	West Lalbert Channel, Long Lake	158	10	0
677	E. H. Jones	West Lalbert Channel, Long Lake	144	15	0
678	A. Castle	Ellam Channel, Western Wimmera	137	11	10
679	Thomas Malone	Bamawm Eastern Channel, Rochester	506	19	2
		Carried forward	48,000	0	9

CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1911—continued.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
		Brought forward	48,000	0	9
680	Thomas Malone	Banawm Eastern Channel, Rochester	472	0	10
681	Thomas Malone	Banawm Eastern Channel, Rochester	475	9	2
682	M. J. Fitzpatrick	McColl Channel Deviation, Rodney	479	7	1
683	John McKimmie	Hector Spur Channel, Rodney	332	14	0
684	John McKimmie	Craven Spur Channel, Rodney	87	15	6
685	Drummond and Snell	Weatherboard Cottage, Nyah.. ..	336	13	6
686	Munn and Traeger	Wargan Channel, White Cliffs	333	1	0
687	John Danks and Son Pty. Ltd.	C. I. Pipes and Special Castings, Coliban	411	17	5
688	John Hayes	Murnungin Channel, Long Lake	114	15	0
689	J. Hayes	Murnungin Channel, Long Lake	122	15	0
690	J. Hayes	Murnungin Channel, Long Lake	126	15	0
691	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	134	5	0
692	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	164	0	0
693	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	137	5	0
694	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	171	0	0
695	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	185	5	0
696	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	160	15	0
697	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	153	5	0
698	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	148	0	0
699	E. S. Watts and A. T. Henry	Joop Channel, Western Wimmera	146	15	0
700	J. Hayes	Main Southern Channel, Tyntynder	154	5	10
701	John Hayes	Main Southern Channel, Tyntynder	100	17	3
702	J. Hayes	Main Southern Channel, Tyntynder	73	6	3
703	A. J. Fisher	Sutton's Channel, Sea Lake	148	6	0
704	M. Hogan	Woomelang Channel, Sea Lake	188	10	0
705	A. J. Fisher	Woomelang Channel, Sea Lake	162	5	0
706	James Crothers	Minyip Tank Channels, Wimmera United	395	10	0
707	Determined.				
708	Determined.				
709	Determined.				
710	Jas. Hall	Outfall Spur Channel, Shepparton	36	9	8
711	Albert Thompson	Southern Channel, Koondrook	357	0	0
712	Albert Thompson	Southern Channel, Koondrook	378	0	0
713	James Howe	Stable at Waranga Reservoir	60	0	0
714	L. Noonan	Spur Channel, Shepparton	36	15	1
715	James Martin	Removal of Block, and Completion of Embankments, Little Picanniny Creek, Waranga-Mallee	85	15	0
716	Geo. W. Pinner	Outfall Spur Channel, Shepparton	72	10	9
717	A. J. Fisher	Woomelang Channel, Sea Lake	40	17	11
718	Jas. Hall	Outfall Spur Channel, Shepparton	38	2	11
719	J. W. Jones	Spur Channel, Shepparton	36	15	10
720	H. W. L. Tucker	Storage Tank, Beulah	710	15	0
721	M. Moloney (trading as Moloney Bros.)	Boorong Channel, Sea Lake	144	14	2
722	M. Moloney (trading as Moloney Bros.)	Boorong Channel, Sea Lake	155	0	2
723	A. J. Fisher	Cronomby Channel, Sea Lake	86	15	0
724	Edward Shepherd	Firewood, Cannie Ridge, Long Lake	162	10	0
725	James Sayers	Koro-Ganeit Channel, Tyntynder	111	0	0
726	James Sayers	Koro-Ganeit Channel, Tyntynder	107	5	0
727	Determined.				
728	H. Codling and Co.	Offices for Commission, Swan Hill	899	0	0
729	I. S. Drape	Contour Survey of Parish of Benjeroop, 18½ sq. miles, at £7 per sq. mile	131	5	0
730	Jos. Lockhart, jun.	Purchase of Machinery, Koondrook	525	0	0
731	Henry Angus	Purchase of Machinery, Swan Hill	105	0	0
732	James Sayers	South Ultima Channel, Long Lake	123	0	0
733	R. Guilmartin	Allison's Channel, Tyntynder	114	16	8
734	M. J. Phyland	East Kunat Channel, Long Lake	142	10	0
735	E. Fitzgerald	Chillingollah Channel, Tyntynder	132	8	4
736	E. Fitzgerald	Chillingollah Channel, Tyntynder	149	0	10
737	Geo. W. Pinner	Outfall Spur Channel, Shepparton	212	6	8
738	Hugh Lavery and Patrick Lavery	Nypo Channel, Karkaroc	1,292	5	0
739	I. S. Drape	Contour Survey, Dingee-Tandarra, 26½ sq. miles, at £7 per sq. mile	183	15	0
740	Walter Munn and E. G. Traeger	Wargan Channel, White Cliffs	337	12	9
		Carried forward	60,885	1	4

CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1911—*continued.*

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
		Brought forward	60,885	1	4
741	Walter Munn and E. G. Traeger	Main Channel, White Cliffs	321	11	8
742	Thos. Elliott	Cannie Channel Branch, Long Lake	122	3	9
743	Alfred Castle	Ellam Channel, Western Wimmera	142	15	0
744	H. W. L. Tucker	Storage Tanks, Gama	320	5	0
745	H. Walker	Firewood, White Cliffs	500	0	0
746	J. Spellacy	Firewood, White Cliffs	550	0	0
747	M. J. Hayes	Firewood, Nyah	72	10	0
748	F. O. Wallin	Firewood, Nyah	825	0	0
749	F. O. Wallin	Firewood, Swan Hill	290	12	6
750	R. Guilmartin	Main Southern Channel, Tyntynder	156	10	10
751	Mephan Ferguson Ppty.	Spiral Riveted Pipes, Jeparit	1,560	0	0
752	Alex. Rangott	26-mile Tank Channel, Tyntynder	158	14	2
753	H. B. Irwin	Batchica Channel, Karkaroo	141	15	0
754	M. Corrigau	Firewood, Sea Lake	56	5	0
755	Frederick John Storey	Meter Wheels, Waranga-Mallee	756	6	10
756	Albert Thompson	Southern Spur Channel, Koondrook	230	14	5
		Total	67,090	5	6

In addition to the works carried out under the above contracts, a large extent of channel work was, owing to the difficulty of obtaining tenders and the necessity of expediting construction, carried out as piece-work at current rates. This system was adopted for the Goulburn distributary works to the extent of an expenditure of some £5,000.

WORKS CARRIED ON OR COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1911.

COLIBAN DISTRICT.

Extensions and improvements of pipe reticulation were carried out in Bendigo, Eaglehawk, and Castlemaine. The lifting of the 1-in. and 1½-in. galvanised wrought-iron mains and relaying with 4-in. cast-iron are being steadily continued.

Extensive renewals of culverts and flumes on the Raywood and Sebastian Race were carried out, and wherever practicable flumes were replaced with Monier pipe siphons.

A sum of £1,000 was spent in the Castlemaine District on race extensions at Ravenswood, Harcourt, Barker's Creek, and Gaol Hill.

During the year a separate waterworks district, comprising the lands commanded by the Axe Creek Race, was constituted under the name of the Axe Creek Waterworks District. Provision is made in the *Water Act* 1909 for the inclusion in separate districts of lands in the Coliban area, and it is proposed to constitute districts similar to Axe Creek District in all cases where the revenue from such lands is not sufficient to meet interest on cost, and maintenance, of races constructed for their benefit.

IRRIGATION AND WATER SUPPLY DISTRICTS.

RODNEY DISTRICT.

The new works carried out during the year involved an expenditure of £13,300. These consisted principally of distributary channels and outlets necessary for the effective and regular delivery of supplies assigned to irrigable lands.

SWAN HILL DISTRICT.

The construction of new channels, and the remodelling of old channels and structures, necessary for delivery under a new rotation system of the supplies now assigned to the district have been carried out.

DISTRICTS ADMINISTERED FROM KERANG CENTRE.

In that portion of the Cohuna District, previously known as No. 1 Riding, several new channels have been constructed, while old channels have been remodelled, outlets provided, and all other necessary works carried out in preparation for the introduction of the compulsory irrigation charge system, under which a quantity of water is apportioned as a water right to each holding and delivered under a proper rotation scheme. It is proposed next year (1911-12) to make this portion a separate district, under the name of Cohuna, to be controlled by an engineer stationed at Cohuna Township.

The remaining portion of the old Cohuna district will be also formed into a separate district, under the name of Gannawarra, which in like manner will be controlled by the local engineer referred to. It is proposed to introduce the compulsory irrigation charge system in this portion as soon as the channels have been so extended and remodelled as to enable a full supply to be given. It is anticipated that these works will be completed before the end of next year.

In the Koondrook and Myall and Benjeroop and Murrabit Districts new channels, structures, and outlets were constructed in preparation for the delivery of water by rotation to the irrigable lands under the water rights to be apportioned under the compulsory charge system next year (1911-12). These two districts, together with a small portion of Cohuna, will be united, so as to form one district with the name of Koondrook.

In the districts of Gunbower West, Kerang East, Macorna North, South Kerang, Marquis Hill, and portion of Wandella, which this year have been united into the one district of Kerang, works of improvement were much retarded by unfavorable weather. Arrangements will be made to carry out such works at the first favorable opportunity.

Boring has been proceeded with below the Kow Swamp Headworks, "Torrumbarry," with a view of ascertaining whether it would be feasible to construct a diverting weir in the Murray River to provide a better supply of water to the districts dependent on the Kow Swamp works, and to the North-west Lakes, and to give a gravitation instead of a pumped supply to Cohuna and Koondrook districts. It is expected that sufficient information for the preparation of designs and estimates will be available before the end of next year.

DISTRICTS ADMINISTERED FROM LODDON CENTRE.

These are the Tragowel Plains district on the east side of the Loddon River, and the East Boort, Leaghur and Meering, North Boort, Twelve-Mile, and Wandella districts on the west side.

Works for the year have been confined to maintenance and renewals of structures. Next year it is proposed to construct a new head sluice for the Kinypanial Creek, which is the principal offtake for the districts on the west. Remodelling of works and provision of measuring outlets will be proceeded with in the Tragowel Plains District to provide for the increased supply from the Goulburn Works, which should be available next year. It is proposed to unite the districts on the west side of the Loddon into one district, to be known as Boort.

CAMPASPE DISTRICT.

This district will be considerably reduced by excision of the portion north of the Main Western Channel. The supply from the Campaspe River, which formerly had to be distributed over the whole area and was rarely adequate therefor, is now available for the remaining portion of the district. Necessary maintenance works have been carried out during the year.

DEAKIN DISTRICT.

In this district certain portions are to be excised and constituted new districts with closer settlement conditions. In the other portion of the district work for the year has been confined to maintenance.

An investigation of a drainage scheme for the low-lying lands that suffer by flooding from the Wanalta and Cornelia Creeks has been authorized.

BACCHUS MARSH—WERRIBEE SCHEME.

Pyke's Creek Reservoir has been completed and filled. The capacity is 14,850 acre feet, with a maximum depth of 90 feet.

At Bacchus Marsh a channel has been constructed from Maddingley syphon to right bank of Lerderderg River, at Darley. A suspension bridge is being constructed at this point for conveyance of water across the river for the supply of the east Lerderderg irrigable lands. The new works will allow the irrigable area to be increased from 600 to about 3,350 acres. It is intended next year (1911-12) to apportion water rights to, and levy a compulsory charge on, the irrigable lands.

At Werribee the channels for domestic and stock supply for the non-irrigable portion of the Werribee Estate are being proceeded with, while works are to be undertaken for the irrigation of about 1,000 acres.

WHITE CLIFFS DISTRICT.

Work during the year consisted mainly of building some further structures and outlets in the irrigable area, and the extension of domestic and stock supply channels in the back country. It is proposed later to constitute the "back" country, where already there are some 18 miles of channels, a waterworks district.

NYAH DISTRICT.

The works in this district were added to by some new structures, and were overhauled and brought into use for the irrigation season. The Nyah pumping plant is also being utilized for the supply of the new Tyntynder Waterworks District constituted during the year.

LONG LAKE WATERWORKS DISTRICT.

Considerable alterations were made in the boundaries of this district during the year. An area of about 120 square miles in the northern part was transferred to the Tyntynder District, as it was more easily and economically supplied from the Nyah pumping plant. The district was extended on its south-western, eastern, and southern boundaries by the inclusion of portions (aggregating 65 square miles) of the parishes of Kunat Kunat, Korrak Korrak, Cannie, Tittybong, and Lalbert. Some further extensions of the district southerly and south-westerly are contemplated.

During the year tenders for the construction of 45 miles of channels have been accepted.

The erection of the second lift pumping plant for the supply of the high country known as Cannie Ridge is completed, and the channels to serve this hitherto unwatered country are almost completed.

The reticulation and works for the supply of Ultima Township are finished. The plant, consisting of a windmill and pump supplying an 80,000 gallon concrete standpipe, is giving satisfaction.

TYNTYNDER WATERWORKS DISTRICT.

The Tyntynder Waterworks District has been constituted with an area of about 230 square miles; considerable extensions will from time to time be made westerly to serve the interior country as it becomes settled. This district will be served from the Nyah pumping plant.

During the year, tenders for the construction of 30 miles of new main and branch channels have been accepted, and extensive surveys are in hand for necessary additions.

WIMMERA WATER SUPPLY.

WESTERN WIMMERA AND WIMMERA UNITED WATERWORKS DISTRICTS.

During the year steady progress has been made with the construction of works for the diversion northwards of the Lake Lonsdale storage water, and as much of the Wimmera River water as practicable. The Main Central Channel, to carry these waters to the branch channels of the Wimmera United Waterworks District and a supplementary supply to the Sea Lake system of channels when required, is now complete to the offtake of the Marma Branch Channel, a distance of some 42 miles from Lake Lonsdale. The remainder of the Main Central Channel to the Yarriambiack Creek will be constructed immediately, and other main channel feeders will be pushed on during the coming year.

Contracts for 50 miles of branch channels have been let—45 miles in the Western Wimmera Waterworks District, and 5 in the Wimmera United Waterworks District.

The Jeparit town supply gravitation scheme has been completed with the exception of the reticulation, which is well advanced. The whole of the works, costing about £4,900, should be in operation next year.

The necessary plans are now being prepared for the carrying out of the proposed extensive additions and improvements to the existing supplies at Minyip and Rupanvup, the estimated cost being £2,250 and £2,500 respectively.

BIRCHIP, SEA LAKE, AND WYCHEPROOF WATERWORKS DISTRICTS.

Further progress has been made with extensions of the channel system of these districts, tenders having been accepted for the construction of 30 miles of branch channels. Surveys have been made for some 65 miles of additional channels to serve large areas in the parishes of Toort, Wangie, Murrungia, Bunguluke, Wycheproof, and in the eastern portion of Thalia. It is expected that the construction of these channels will be proceeded with in the coming year.

Extensive improvements to the Wycheproof town supply, consisting of a new earthen storage reservoir with a capacity of 40,000 cubic yards, new pumping plant and rising main, additions to existing service basin (increasing its capacity to 80,000 gallons), and extensions of reticulation, have been completed and will provide a much improved service to the town.

A scheme for the reticulation of the township of Woomelang has been prepared, and should be carried out during the ensuing year.

KARKAROO WATERWORKS DISTRICT.

The Karkaroo Waterworks District, embracing practically the whole of the settled portions of Karkaroo Shire (except the parish of Bitchigal and the eastern portions of the parishes of Minapre and Cronomby) has been constituted. The present area of the district, which includes that portion of the shire lately within the Wimmera United District, is about 850 square miles, but large extensions northerly to embrace the new country now being opened up will be made from time to time.

Extensive works for the improvement and enlargement of the existing channels and the construction of new branch channels have been undertaken. Contracts for 25 miles of branch channels have been let during the year, and plans have been prepared for the construction of some 30 miles in addition.

A large amount of survey work for the location of other new channels is now being carried out. These surveys will also disclose whether it is practicable to serve the Ouyen District by any northward extensions.

The reticulation of Beulah Township is being proceeded with. The scheme, which is estimated to cost £4,600, provides for a storage reservoir (already completed), the erection of a reinforced concrete standpipe, with a capacity of 120,000 gallons, and the installation of a suitable pumping plant.

WONTHAGGI WATER SUPPLY.

The scheme for the supply of Wonthaggi, which was commenced by the Department of Mines and was, at the request of the Government, taken over by the Commission, is nearing completion. A reticulation service has been provided in the town, and a temporary supply was given during the year. The reservoir at Lance Creek will be far enough advanced to provide a good supply for the ensuing summer.

GOULBURN MAIN CHANNELS AND DISTRIBUTARIES.

The extension of the Western Main Channel from Picaninny Creek to Serpentine Creek, a distance of 29 miles, has been pushed on as rapidly as the unfavorable season would permit. It is expected that the work will be ready for the supply of Goulburn water to the Tragowel Plains District early in 1912.

Distributary channels, totalling 117 miles in length, to serve areas proposed to be constituted new Irrigation and Water Supply Districts with closer settlement conditions, on the western side of the Goulburn River have been constructed in the parishes of Bama win, Rochester West, Nanneella, Koyuga, and Tongala.

On the eastern side of the Goulburn River a system of distributary channels has been constructed throughout the Shepparton Irrigation and Water Supply District of 3,500 acres.

The total expenditure for the year on Goulburn Main Channels and Distributary Works was £72,720.

LODDON-AVOCA PROPOSED WATER SUPPLY SCHEME.

A scheme for a domestic and stock supply to an area of about 600 square miles, between the Loddon and Avoca Rivers, north of Borung and Wychitella, has been prepared and submitted to the land-holders interested for their consideration.

LAANECOORIE WEIR.

The work of restoring the embankment of Laanecoerie Weir, destroyed by the great flood of August, 1909, has been carried out at a cost of £13,000.

OUYEN DISTRICT.

A drought reserve tank, with capacity of 40,000 cubic yards, has been completed and partly filled at Boulka. At Yellangip Plain, progress with a similar work was stopped by the phenomenal rains of February, 1911, which covered the site for the tank to a depth of several feet. Work will be resumed as early as practicable.

NORTHERN MALLEE WATER SUPPLY.

At the request of the Government the Commission has arranged to take over from the Department of Agriculture the work of boring for and storing water in the Mallee country north of the township of Ouyen. This includes all exploratory work of determining the presence and quality of underground supplies, the putting down of permanent bores where satisfactory underground supplies have been discovered, and equipping the same with pumps and troughs for the use of settlers. In the area where underground water is not found, including the country east of Ouyen and north of Lake Tyrrell, it is proposed to construct large tanks at convenient points; these tanks are, however, only to be used as reserves against droughts, and not for the ordinary use of settlers, who in every case must make the necessary tank provision on their own holdings. In addition to the works mentioned, the Commission is, at the request of the Government, undertaking the clearing of the roads in the areas mentioned. It is estimated that the outlay for the ensuing year on these works will be some £28,000, but the greater part of this amount is covered by a small acreage charge already added to the purchase price of the land.

WORKS CONTROLLED BY OTHER AUTHORITIES.

During the year a number of works was undertaken by other authorities on the recommendation of the Commission, which is now, under the *Water Act 1909*, authorized to deal with such matters.

A new Trust to carry out and control a supply for the township of Trentham was constituted. The supplies to the towns of Avoca and Colac were practically finished. Pipe additions were made by the local authorities at Avenel, Kerang, Nagambie, Shepparton, Traralgon, Wangaratta, and Warracknabeal, while works are proceeding for the improvement of supplies at Donald, Hamilton, Horsham, Leongatha, Mooroopna, Rutherglen, and Tatura. The First Mildura Irrigation Trust is also carrying out an improved pipe service to Mildura township, and is providing a pumping plant and mains for the Deakin Avenue Irrigation Area.

RIVER GAUGING.

As provided by Section 38 of the *Water Act 1905*, the work of gauging and recording the flow of the rivers and streams in this State has been continued. The supply stored in reservoirs and the volumes used therefrom have also been recorded and published weekly. The total number of gauging stations in the State is now forty-six.

During the year the field observation and office work connected with these gaugings have been considerably advanced, the Yarra and Saltwater Rivers and their tributaries having received particular attention.

A good deal of work has also been done towards ascertaining the losses in the channels serving irrigation districts, and in the preparation of discharge tables for use in such districts. The results of river gaugings are in manuscript, and are available for reference at the office of the Commission. These will be published as early as practicable.

DIVERSION OF WATER.

The right of the State to the use and flow and control of water in rivers, creeks, streams, lakes, lagoons, and swamps is being asserted, and persons diverting water are required to obtain authority under licence or yearly permit. This is proving satisfactory in establishing efficient control over natural waters throughout the State.

The number of authorized diversions in force during the year 1910-11 was—

Yearly permits	..	..	..	469
Licences	..	..	..	9
				—
Total	..	..	..	478
				—

GENERAL.

ALLOTMENT OF WATER RIGHTS AND CHARGES THEREFOR.

The irrigation districts which have an adequate and reliable water supply are making substantial progress. This is in part due to the character of the supply, and in part to the compulsory charge for water, which is a potent incentive to its larger use. Last year water rights were allotted and compulsory charges imposed in five districts, viz. :- Shepparton, Rodney, Swan Hill, Nyah, and White Cliffs. In addition to these, water rights will be allotted next year to Cohuna, Koondrook, and Bacchus Marsh Districts.

In Rodney the water right apportionment is 3 acre inches for each irrigable acre commanded; in Shepparton and Swan Hill the allotment is 1 acre foot, or 12 acre inches for each irrigable acre commanded, and this will be the apportionment in Bacchus Marsh, Cohuna, and Koondrook districts; in Nyah and White Cliffs it is $2\frac{1}{2}$ acre feet, or 30 acre inches for each acre commanded. The price of water in Shepparton, Rodney, Cohuna, Koondrook, and Swan Hill next year will be 5s. an acre foot; in Nyah and White Cliffs, 6s. an acre foot; and in Bacchus Marsh, 20s. an acre foot. In Nyah and White Cliffs the charge mentioned represents about one-half of the amount required. This will be increased annually, until in two years the full amount is levied.

Water will be supplied next year to all settlers who are prepared to use it in Nanneella, Bamawm, Koyuga, and Tongala districts; but the compulsory charge will not be imposed until 1912-13. The price next year will be 5s. an acre foot.

DISTRIBUTION OF WATER UNDER ROTATION.

Before the passage of the Amending Water Act, water was delivered for irrigation as ordered by the land-owners. The volumes ordered varied widely from day to day, or from week to week; sometimes the demand would be largely in excess of the supply, sometimes there was no demand, and the water which filled the channels ran to waste.

This lack of system caused an excessive waste of water when the demand was irregular, and often great delay in supplying it in dry seasons, when there was a general demand. Measurements made showed that in many cases more water was wasted than was used.

Such waste curtails the efficiency of pumping plants and the value of reservoirs. To prevent it, the Commission proposes next season, in districts having the compulsory charge, to institute a rotation schedule for the deliveries of water, in which the days on which water will be delivered to each user will be fixed in advance. This will enable users to make arrangements for irrigating in advance, and the Commission to turn into channels only the water required.

AGRICULTURAL PROGRESS.

Before these allotments of water could be made many miles of new channels had to be built, old channels enlarged, and new and larger pumps erected on the Murray. The Commission has been engaged on this work for the past three years. It has cost a large sum of money, but it has given these districts a much larger and more reliable water supply, and created in farmers and fruit-growers, who believe in irrigation, a confidence they lacked before. As a result, new activity is being manifested, land is being graded, lucerne and other fodder crops seeded, orchards and vineyards planted. Over 700 acres of new orchards have been planted in Rodney this season, a larger area has been planted to trees and vines in White Cliffs, and substantial additions have been made to the intensively cultivated areas in Swan Hill and Cohuna.

In order to enable settlers who arrived late this year to have a summer supply of fodder, the Commission, by arrangement with the Closer Settlement Board, has ploughed, graded, and seeded to lucerne about 3,000 acres of land in tracts of from 5 to 20 acres on individual blocks. It also prepared and seeded several hundred additional acres to annual fodder crops. This is probably the greatest increase in the area seeded to lucerne made in one year since the irrigation districts were started.

It is as yet too early to forecast the contribution to the State's wealth which these new settlers will make. Much of their work is at present preparatory. They are building fences, putting up farm buildings, digging ditches, planting trees, and getting their land ready for cultivation. Notwithstanding this, there are many who have been in the State less than a year who are making large returns each month.

FINANCIAL IMPROVEMENT.

The increased use of water and the compulsory charge for the volume allotted for irrigation is also improving the financial condition of these districts, as will be seen from the following statement, which gives the actual revenue from sales of water for 1909-10, the last year before the water law was amended, and the estimated revenue from the compulsory irrigation charge in 1911-12 from five districts:—

District.	Water Sales, 1909-10.	Estimated Irrigation Charges, 1911-12.	Estimated Increase in Revenue from Irrigation Water.
	£	£	£
Bacchus Marsh	39	2,160	2,121
Cohuna	2,260	5,500	3,240
Koondrook	351	3,300	2,949
Rodney	2,875	11,305	8,430
Swan Hill	1,082	2,762	1,680

INFLUENCE OF IMMIGRATION ON DEVELOPMENT.

This development would not have been possible had there not been a marked increase in population and labour in the irrigation districts. There was not enough labour to cultivate the land properly before the water supply was increased, and the increased water supply only aggravated the scarcity of labour and made the need for smaller holdings and more people imperative. It was this situation which led to the State sending a delegation abroad to secure settlers and farm labourers for the irrigation areas.

There were not enough Victorian settlers to use the surplus water, and in 3½ years prior to July, 1910, only 1,554 immigrants of all classes had come from over-sea. The mission of the delegation abroad was to find settlers and workers for the irrigation areas. It restricted its efforts to this task and as in the single year from July, 1910, to June, 1911, 6,008 people arrived and were dealt with by the office handling this class of immigrants, it created new and better conditions, and awoke new confidence and energy. In addition to those reported by the Immigration Department, a considerable number of settlers from abroad has been attracted to the irrigation districts by the wide publicity given to its opportunities, and has gone there without being included in the above total. The arrival of these settlers has stimulated local interest and increased settlement by Victorians, and as a result, irrigation has made greater progress in the last twelve months than for many years previously; vacant blocks at White Cliffs, Nyah, Cohuna, and Shepparton have been taken, and practically the whole of the new closer settlements at Koyuga, Nanneella, and Bamawn is occupied.

Since the present movement for irrigated closer settlement began, 69,658 acres of land have been acquired by the State, and 40,209 acres have been taken by 757 settlers. Over 29,000 acres is being subdivided and made ready for settlers, and negotiations for the purchase of a large additional acreage are pending. The following table gives the details of this settlement:—

TABLE SHOWING THE NUMBER OF ACRES ACQUIRED, THE NUMBER OF ACRES SETTLED, AND THE NUMBER OF BLOCKS ALREADY TAKEN BY SETTLERS.

District.	Area acquired.	Area settled.	Number of Blocks taken.
	Acres.	Acres.	
Nanneella	6,321	4,245	87
Bamawn	12,311	8,680	138
Koyuga	4,750	4,350	45
Tongala	14,050	330	13
Cohuna	11,782	8,220	100
Swan Hill	5,108	3,300	48
Shepparton.. .. .	6,599	2,770	96
Nyah	2,923	2,719	67
White Cliffs	5,814	5,595	163
	69,658	40,209	757

MORE SETTLERS NEEDED.

The number of new settlers from oversea who have taken blocks will be increased in the near future, because a considerable percentage has accepted temporary employment in the irrigation districts in order to gain experience before taking up land. The percentage of farmers to farm labourers among the immigrants is, however, decreasing. The reason for this is not obscure. Farmers with capital and established homes are harder to move than labourers with little or no capital, because there is much more to be done before they leave home, and much more to lose if conditions are not as represented. To secure farmers with capital and capacity requires, therefore, harder and more persistent efforts and greater expenditure than would be required to secure farm labourers. Immigration agents are thus inclined to restrict their efforts to the latter class. Even when interested, prudent and capable farmers prefer to see the land and select their new home before disposing of or leaving the old one.

LAND SEEKERS' EXCURSIONS.

It has been recognised from the outset that provision should be made to enable intending settlers to visit Victoria and inspect the opportunities offered in comfort and at moderate cost as a preliminary to immigration and settlement, and one of the original features of the State's immigration policy was land seekers' excursions. While in Great Britain the delegation had repeated inquiries as to when these excursions would be inaugurated, and it was evident that many who thought well of the State's opportunities, and who were qualified to succeed, would not emigrate without first seeing the country. While in Canada and the United States, the delegation found that low rate return fare land seekers' excursions are the basis of all land settlement movements in those countries. It is very rare that the American farmer moves his family and capital to a new country until he has seen, approved, and selected the land for his new home. Much of Canada's success in attracting farmers and capital from the United States has been due to its effective system of land seekers' excursions, and to the attention given to the comfort of those who join them.

EXPERT IRRIGATORS REQUIRED.

As yet this feature of the Victorian immigration policy has not been carried into effect, and one fundamental idea of that policy, which was to secure farmers who were experts in irrigated agriculture, is in danger of being lost sight of. It is of the utmost importance that this matter should have early attention. The State is attempting in irrigation districts to make a small area support a large population, and to create the kind of agriculture which will give as comfortable a living from 50 irrigated acres as can be had from 300 acres dependent on rainfall. In other words, it is attempting to establish on a large scale the highest form of agriculture known. The soil, climate, and water supply make these results possible. It is a region of great and varied possibilities, but these can only be realized through having in these districts a considerable percentage of farmers who are able to do the required work in the best manner, and who will be content with nothing less. Such men will be an example and incentive to beginners without experience. These districts need orchardists who know how to grow citrus fruits; they need vineyardists who have had experience in growing and shipping table grapes; they need farmers who understand dairying, lucerne-growing, and lamb fattening; and above all, they need a considerable percentage of settlers who believe in irrigation and are skilled in its practice.

In saying this, no reflection is implied on settlers now on the land; they are, as a rule, earnest and industrious men, many of whom are now doing well, and the great majority of whom ought to succeed; but, as a rule, they lack experience, and have limited capital. As a result, irrigated agriculture is not having a fair chance to demonstrate its advantages.

ADDITIONAL EXPENDITURE TO SECURE SETTLERS OF THE RIGHT CLASS RECOMMENDED.

There is also a danger that the pressure of applicants may lead to the acceptance of settlers who cannot possibly meet the conditions of payment for land and water fixed by the State. Many intending settlers from abroad, as well as some from Victoria, regard the settlement in the irrigation areas as a movement to give men who lack the money or experience needed to begin farming elsewhere an opportunity to make a start under irrigation. Where men realize that lack of capital and lack of experience must be overcome by additional effort and persistence on their part, no harm will result from this, but this is not always understood; in any event, the chances of success of every settler so handicapped will be greatly improved by having in each district a considerable number of farmers who have both capital and experience.

The magnitude of the State's interest in this development warrants a considerable effort to secure settlers of the right class. It is the surest way to hasten the complete use of the existing works and insure satisfactory results therefrom; and it will be the best possible basis for future extensions. In considering this question it must be remembered that the State is only at the beginning of its irrigation development. Last season irrigators in Victoria only diverted 4 per cent. of the total flow of the Murray, and only used 2 per cent. of the total flow of the Goulburn. The extension of irrigated agriculture to the extent which this unused water supply makes possible means so much to Victoria that no precaution should be neglected which will insure its complete success. Nothing will be more effective in promoting this than the presence in each district of several farmers who do their work in the best manner and thus incite and encourage others to follow their example. The surest way to reach this class is to offer them an opportunity to see for themselves the conditions here presented for the profitable use of their special knowledge and experience.

It is confidently believed that, if the opportunity for such inspection is given, the desired class of farmers will avail themselves of it, and there is no doubt that their verdict will be favorable. During the past five years, experts in intensive agriculture from noted irrigation districts have visited the Victorian irrigation areas, and all have united in admiration for their resources and surprise at the neglect to use the great opportunities they present.

The Commission, therefore, urges—

1. Arrangements for a reduced second class return fare from Europe to Victoria for approved land seekers.
2. Provision for a land seekers' excursion from America.

It is understood that the latter has been delayed on account of an effort to secure the co-operation of other Australian States, but the requirements of our irrigation development are such that longer delay in this matter is believed to be unwise, and may be injurious.

CO-OPERATION OF CLOSER SETTLEMENT BOARD AND INTELLIGENCE BRANCH OF LANDS DEPARTMENT.

The successful development of the irrigation districts will not depend entirely on the efforts of the Commission; it requires the active assistance of the Closer Settlement Board and the Intelligence Branch of the Lands Department. The progress in settlement made during the year is largely due to their active and cordial co-operation.

EXPERIMENTAL AND DEMONSTRATION FARMS IN THE IRRIGATION DISTRICTS.

The changes in agriculture taking place in the irrigation areas, and the large number of new settlers to whom its conditions and methods are strange and new, render it desirable that provision be made for their instruction. Much good work in this direction has been done by the Department of Agriculture, and the establishment of the experimental farm in the Bamawm District will also help to settle some important questions. The Commission believes, however, that similar farms should be established in other irrigation districts.

TATURA FARM.

This farm was acquired to show how land should be prepared for irrigation, and to make experiments in the growing and harvesting of lucerne. The first of these objects has been achieved. The grading demonstrations made at the farm have shown what tools were required and how they should be used, and have led to the local manufacture of grading implements in large numbers. Farmers in the irrigation areas now generally realize that there is no difficulty in irrigating lucerne if the land has been properly graded.

The experiments in growing and harvesting lucerne were undertaken because the growth of this fodder plant will improve the heavy soils, and do more than any other fodder crop to provide emergency food supplies for stock in dry years.

That it only requires proper grading and fertilizers to grow profitable crops of lucerne has been shown at Tatura. The land which was not manured did not produce more than 500 lbs. of dry hay at each cutting; the land which has been properly manured now produces 1 ton of hay to a cutting.

The study of these problems requires more time than the Commission can give, and is, moreover, within the special sphere of the Department of Agriculture. It has been decided, therefore, to dispose of the farm at Tatura, and bring to a close the experimental and demonstration work carried out there for the past three years.

ADDITIONAL STORAGE WORKS.

If the settlement of irrigated lands continues at the present rate, there will be need before many years for works on both the Murray and Goulburn to provide an additional water supply for the latter half of the irrigation season. These works will involve a large outlay, and early consideration should be given to their location and the preparation of plans and estimates.

The works which should be first dealt with are a weir at Torrumbarry, and a reservoir on the Goulburn. The investigations now being carried on at Torrumbarry have been mentioned in another portion of the Report. The carrying out of this work will cheapen the cost of water in the Cohuna, Gannawarra, and Koondrook districts by substituting gravitation for pumped water, and it will give greater security to irrigators depending on the reservoirs at Kow Swamp, North West Lakes, Long Lake, and Lake Boga. In regard to the need for additional storage on the Goulburn it should be pointed out that at present only one-fourth of the irrigable land in the Rodney District has a full water supply, and no provision has been made for a considerable area of land in the Deakin District. The indications are that such water supply will be required in the near future, and a request for the extension of irrigation to 9,000 acres of land under the East Goulburn Channel had to be deferred this season pending decision regarding the construction of additional storage on the Goulburn. Investigations to determine the best site have been carried on for three years, and a conclusion has been reached that the best location is at the site of the weir. By raising this weir to a greater height, additional storage, varying from 50,000 to 550,000 acre feet could be provided.

THE MURRAY RIVER INQUIRY.

In January last, an Inter-State Conference was held at Melbourne, attended by the Premiers and other representatives of the Governments of New South Wales, South Australia, and Victoria, to consider questions connected with the conservation and increased use of the Murray River.

Two resolutions were adopted at this Conference. One authorized the use of Lake Victoria as a reservoir by South Australia; the other provided for an engineering inquiry to collect data which would aid in preparing an Inter-State agreement to govern the use of the Murray.

Mr. John Stewart Dethridge, then Chief Engineer, but now a Member of the Commission, was appointed Engineer for Victoria to assist in this inquiry.

PLANS AND DIAGRAMS.

Attached to this Report are the following plans and diagrams:—

- (1) Plans (2) showing development of Goulburn Irrigation Scheme.
- (2) Plan showing development of Murray River Irrigation Schemes.
- (3) Plan showing Closer Settlement Areas at Bamawm, Cohuna, Koyuga, Nanneella, Shepparton, and Swan Hill.
- (4) Plan showing areas settled and available at Tongala, and additional areas available at Bamawm and Swan Hill.
- (5) Diagram of Goulburn River flows.
- (6) Diagram showing proportion used of the flows of the Goulburn and Murray during the year 1910.

ADMINISTRATION.

ENGINEER IN CHARGE OF NORTHERN MALLEE WATER SUPPLY.

Mr. A. S. Kenyon, who was previously in the service of the Department of Agriculture in charge of operations for the supply of water in the Northern Mallee, has been appointed an Officer of the Commission. Mr. Kenyon will remain in charge of the operations for supply of water in the area named, which has now been placed under the control of the Commission.

AMALGAMATION OF DISTRICTS.

The districts of Gunbower West, South Kerang, Marquis Hill, Kerang East, Macorna North, and portion of Wandella have been united into one district under the name of Kerang Irrigation and Water Supply District. It is proposed next year to unite the two irrigation and water supply districts of Benjeroop and Murrabit and Koondrook and Myall so as to form the one district of Koondrook. In like manner, it is intended to amalgamate the districts of East Boort, Leaghur, and Meering, North Boort, Twelve Mile, and Wandella so as to form one district to be known as Boort Irrigation and Water Supply District.

COHUNA CENTRE.

In view of the great development that is taking place in the Cohuna Irrigation and Water Supply District, and of the intention of the Commission to introduce into the district the "compulsory irrigation charge" system, it is thought desirable to place the Cohuna District under the direct management of an Engineer stationed at Cohuna Township. Mr. G. C. Kreutzer will accordingly be appointed to take charge of this area, which will be subdivided into two districts, viz., Cohuna, comprising practically the old No. 1 Riding, and Gannawarra, comprising practically the old No. 2 and No. 3 Ridings of the old District.

NEW APPOINTMENTS.

Mr. C. P. Farie Wright has been appointed Resident Engineer in charge of the Kerang Centre, in place of Mr. C. R. Anderson; Mr. G. C. Kreutzer will, as previously mentioned, be appointed Resident Engineer and Secretary in charge of Cohuna Centre; and arrangements have been made to place Mr. E. J. Kenny in charge as Resident Secretary of White Cliffs District. In the new Karkaroc Waterworks District, Mr. R. Long has been appointed Secretary, with an office at Warracknabeal.

OFFICES IN COUNTRY CENTRES.

Offices for the conduct of the Commission's business have been erected at Swan Hill. It is proposed to also erect offices at Cohuna and Rochester. The erection of the offices will not entail the State in any additional annual outlay, as rent formerly paid will be saved.

NEW DISTRICTS CONSTITUTED.

Since last Report, the Irrigation and Water Supply District of Shepparton has been constituted, as have also the Irrigation Areas of Nyah and White Cliffs. The Waterworks Districts of Karkaroc and Tyntynder, and the Urban District of Wonthaggi, have similarly been formed. In the Coliban Area, the small Waterworks District of Axe Creek, comprising lands benefited by the race of that name, has been constituted, and it is proposed to constitute Waterworks Districts in respect of other lands in this area benefited by various races. In the ensuing year, areas at Bamawm, Koyuga, and Nanneella, which are being closely settled, will be constituted Irrigation and Water Supply Districts.

RECEIPTS, DISBURSEMENTS, AND ESTIMATES.

The total revenue of the Commission for the year was £136,750, an increase of £20,299 on the amount for 1909-10. The greater portion of this increase came from those Irrigation and Water Supply Districts in which the compulsory irrigation charge was levied.

The Coliban System showed a decrease of £1,682 in receipts as against last year. This was, however, almost counterbalanced by a decrease in the year's expenditure of £1,216. The net return to the State on capital cost is 2·25 per cent., as against 1·9 per cent. in the year 1905-6.

Although the revenue from the Irrigation and Water Supply Districts is £14,531 more than the amount for last year, the aggregate revenue deficit of the districts—*i.e.*, the excess of disbursements, interest, and depreciation over receipts—is now £38,919, as against £28,973 in 1909-10. This is caused largely by the increase in interest on Capital in respect of new works from which no return can be received for a few years. In this result also is included a new charge of £6,616 against some of the districts served by the Goulburn Main Channel Scheme for the maintenance of and interest on such works. Although the financial position of these districts is still far from satisfactory, it is gratifying to note that, while the deficit on last year's operations was, including this item for Goulburn Works, £23,065, this year it is only £9,946. The Commission believes that, with the introduction of the compulsory irrigation charge in districts having an ample water supply, not only will this drift be stopped, but that eventually the accumulated deficits will be paid off.

In the various Waterworks Districts (exclusive of the Coliban System) under the control of the Commission the revenue has in the aggregate overtaken the expenditure, and the revenue deficit, which in 1908-9 was £19,274, is now reduced to £2,252.

The expenditure for the year from annual votes was £75,014, an increase of £2,674 over that of the previous year. This expenditure is not only, like last year, exclusive of capital amounts, but is also this year exclusive of a sum of £4,777, representing three-fourths of the expenditure in the Nyah and White Cliffs Irrigation Areas, where, under the provisions of the *Murray Settlements Act 1907*, only one-fourth of the expenditure was charged. It is intended to uniformly increase the proportion of expenditure charged to these areas so that in three years the full amount will be charged.

In the Swan Hill Irrigation and Water Supply District a sum of £561 was allowed off the interest charged to the district as an equivalent for rates and irrigation charges on the unoccupied lands held by the Closer Settlement Board.

Arrangements have been made to commence payments to Redemption and Depreciation Funds in a number of districts. The Commission was not, under the Principal Act, authorized to establish these funds, but, as both were necessary to place the districts on a sound financial basis, it secured the inclusion of the enabling provisions in the Amending Water Act, which became law in 1910.

The Estimates for 1911-12 show an increase of £20,000 in Receipts over the previous year's estimate, while the estimated Disbursements show an increase of only £2,900. The estimated sum available to apply towards meeting the interest to be paid by the State on its Loan Expenditure for works of water supply is £45,300, to which should be added £51,200, estimated to be received by the State from other authorities, making a total of £96,500. The total interest charges on loans for the year amount to £243,621; of this amount £92,857 is debitable against Free Headworks, Amounts Written Off, and Unexpended Balances, while £150,764 is debitable against the Commission and other Authorities.

The loan liability of the State for works of water supply at the close of the year was £7,242,082. Of this total, £1,225,436 is for Free Headworks; £1,268,972 has been written off; £147,046 was advanced as free grants to some early-formed local authorities; £44,606 has not been expended; and £186,760 has been paid off by authorities. The balance, £4,369,262, is the sum on which interest should be paid by the occupiers or owners of the properties benefited by the various works.

RECEIPTS AND DISBURSEMENTS.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1911.

Works.	REVENUE.	EXPENDITURE.			EXCESS.	
		From Annual Votes.	Deduct Capital and Other Expenditure not Chargeable to Districts.	Net Expenditure on Maintenance and Management.	Revenue over Net Expenditure.	Expenditure over Revenue.
	£	£	£	£	£	£
Coliban	37,477	12,666	2,207	10,459	27,018	
Other State Works—						
Goulburn	62	2,469	..	2,469	..	2,407
Loddon River	6	357	..	357	..	351
Kow Swamp	150	2,336	..	2,336	..	2,186
Broken River	7	174	..	174	..	167
North-West Lakes	183	334	..	334	..	151
Lake Lonsdale	147	328	..	328	..	181
Lower Wimmera .. .. .	..	202	..	202	..	202
Irrigation Districts	47,294	32,143	4,777	27,366	19,928	
Waterworks Districts —						
Rural	43,391	18,491	122	18,369	25,022	
Urban	5,150	2,260	..	2,260	2,890	
Licences, Diversions, Pumping, and Miscellaneous	2,883	1,168	..	1,168	1,715	
	136,750	72,928	7,106	65,822	76,573	5,645
<i>Not Revenue Producing—</i>						
River Gaugings, Surveys and Reports, New Projects .. .. .	..	4,263	..	4,263	..	4,263
Waterworks Trusts—						
Administration .. .. .	..	1,547	..	1,547	..	1,547
Land Settlement—						
Services by Commission .. .. .	..	925	..	925	..	925
Loan Works—						
Services on account of, defrayed from Votes .. .. .	..	2,457	..	2,457	..	2,457
Totals	136,750	82,120	7,106	75,014	76,573	14,837

COLIBAN SYSTEM.

During the year the Axe Creek Waterworks District, which comprises about 4,550 acres commanded by the Axe Creek Race within the Coliban Area, was constituted a separate District.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1911.

District.	Disbursements from Consolidated Revenue.			ACTUAL RECEIPTS for year 1910-11. (Receipts for 1909-10 shown in brackets.)	Receipts over Net Expenditure on Maintenance and Management, showing rate per cent. on total cost. (Same for preceding year in brackets.)
	CAPITAL DEBIT at 30th June, 1911.	INTEREST on Capital at 4 per cent.	Net MAINTENANCE and MANAGEMENT.		
	£	£	£	£	£
Coliban	1,200,714	48,029	10,341	37,331 (39,013)	26,990 = 2·25 per cent. (27,456 = 2·29 per cent.)
Axe Creek	1,750	70	Maintenance .. 27 Water Supply .. 66 Management and Valuations .. 25 — 118 Add Interest .. 70 — 188	Rates .. 97 Water Sales .. 49 — 146	Expenditure over Receipts 42

IRRIGATION AND WATER SUPPLY DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1911; and of Interest, charged at the rate of 4 per cent. on Capital Debts; and also of Depreciation charged, as at 30th June, 1911. (Free Head-works excluded.)

RECEIPTS.

District.	1st May, 1906, to 30th June, 1910.	1st July, 1910, to 30th June, 1911.				Total.	Grand Total at 30th June, 1911.
		Rates.	Compulsory Irrigation Charge.	Water Sales.	Interest, Miscellaneous.		
1. Bacchus Marsh	£ 3,698	£ 654	£ ..	£ 263	£ ..	£ 917	£ 4,615
2. Campaspe	3,343	771	..	11	1	783	4,126
3. Deakin	9,435	3,464	..	754	19	4,237	13,672
4. Rodney	38,525	5,252	10,622	1,604	101	17,579	56,104
5. Shepparton .. .. .	..	27	251	..	51	329	329
6. Swan Hill	8,412	468	1,977	432	29	2,906	11,318
Kerang Centre—							
7. Cohuna	30,411	4,010	..	3,237	186	7,463	37,874
8. Dry Lake	144	..	..	..	29	29	173
9. Kerang	16,452	1,845	..	1,563	34	3,442	19,894
10. Koondrook, including Benjeroop and Murrabit	5,450	839	..	664	21	1,524	6,974
Loddon Centre—							
11. East Boort	2,702	475	..	215	4	694	3,396
12. Leaghur and Meering	1,021	143	..	136	..	279	1,303
13. North Boort	1,157	181	..	73	..	254	1,411
14. Tragowel Plains	15,329	2,500	..	1,295	12	3,807	19,136
15. Twelve Mile	882	143	..	110	2	255	1,137
16. Wandella	1,951	157	..	177	1	335	2,286
Irrigation Areas—							
17. Nyah	97	61	625	34	3	723	820
18. White Cliffs .. .. .	..	128	1,465	38	107	1,738	1,738
Miscellaneous	4	..	..	..	..	..	4
	139,016	21,148	14,940	10,606	600	47,294	186,310

DISBURSEMENTS AND INTEREST AND DEPRECIATION CHARGED.
(Inclusive of portion of Charges on Account of the Goulburn Main Channel Works.)

District.	DISBURSEMENTS.					INTEREST CHARGED.				DEPRECIATION CHARGED.	Grand Total at 30th June, 1911.
	1st May, 1906, to 30th June, 1910.	During 1910-11.			Total at 30th June, 1911.	1st May, 1906, to 30th June, 1910.	1st July, 1910, to 30th June, 1911.	Total at 30th June, 1911.			
		Repairs and Maintenance.	Distribution of Water.	Management.					Total.		
1. Bacchus Marsh	£ 2,354	£ 153	£ 189	£ 29	£ 371	£ 2,725	£ 1,212	£ 603	£ 1,815	£ 56	£ 4,596
2. Campaspe	2,445	132	140	94	366	2,811	2,310	621	2,931	..	5,742
3. Deakin	4,179	1,025	892	358	2,275	6,454	5,546	3,756	9,302	..	15,756
4. Rodney	22,653	2,809	3,037	906	6,752	29,405	19,322	11,660	30,982	..	60,387
5. Shepparton .. .. .	..	294	86	60	440	440	..	969	969	..	1,409
6. Swan Hill	9,969	289	1,622	239	2,150	12,119	2,278	496	2,774	768	15,661
Kerang Centre—											
7. Cohuna	24,267	3,214	3,531	833	7,578	31,845	13,827	3,962	17,789	2,400	52,034
8. Dry Lake	1	..	..	..	..	1	145	29	174	..	175
9. Kerang	8,483	728	608	145	1,481	9,964	7,414	1,492	8,906	..	18,870
10. Koondrook (including Benjeroop and Murrabit)	5,006	139	772	109	1,020	6,026	2,667	1,369	4,036	751	10,813
Loddon Centre—											
11. East Boort	1,773	101	100	28	229	2,002	1,255	261	1,516	..	3,518
12. Leaghur and Meering	586	18	57	11	86	672	485	97	582	..	1,254
13. North Boort	1,270	207	87	40	334	1,604	399	82	481	..	2,085
14. Tragowel Plains	11,019	1,369	772	282	2,423	13,442	6,670	1,395	8,065	..	21,507
15. Twelve Mile	515	31	57	12	100	615	319	71	390	..	1,005
16. Wandella	896	93	53	20	169	1,065	829	180	1,019	..	2,033
Irrigation Areas—											
17. *Nyah	1,086	47	335	46	475	1,531	955	172	1,127	472	3,161
18. White Cliffs	1,235	16	999	111	1,117	2,103	1,506	339	1,895	875	5,173
	97,783	10,662	13,381	3,323	27,366	125,154	67,139	27,614	94,753	5,322	225,229

* A sum of £31 interest transferred to Tynbynder Waterworks District for year 1909-10.

[For summary see next page.]

IRRIGATION AND WATER SUPPLY DISTRICTS—*continued.*
SUMMARY OF RECEIPTS AND DISBURSEMENTS AND INTEREST AND DEPRECIATION
CHARGES.

1st May, 1906, to 30th June, 1911.

Receipts to 30th June, 1910	£139,016	Disbursements, Interest, Depreciation, to 30th	
Receipts, year 1910-11	47,294	June, 1910	£167,989
Total Receipts to 30th June, 1911	£186,310	Add for year 1910-11	57,240
Revenue Deficit to 30th June, 1910	28,973		
Deficit, year 1910-11	9,946		
Revenue Deficit to 30th June, 1911	£38,919		
Total	£225,229	Total	£225,229

WATERWORKS DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st July, 1906, to 30th June, 1911; and of Interest charged, at the rate of 4 per cent. on Capital Debts; and also of Depreciation charged, as at 30th June, 1911. (Free Head-works excluded.)

RECEIPTS.

District.	1st May, 1906, to 30th June, 1910.	1st July, 1910, to 30th June, 1911.				Grand Total at 30th June, 1911.
		Rate.	Water Sales.	Interest and Miscellaneous.	Total.	
<i>Rural.</i>						
1. Birchip	£	£	£	£	£	£
2. Sea Lake	14,980	2,075	10	5	2,090	24,477
3. Wycheproof		4,612	25	37	4,674	
4. Karkaroo		2,707	15	11	2,733	
5. Long Lake .. .. .	..	4,394	..	24	4,418	4,418
6. Tyntynder	12,405	4,206	35	56	4,297	16,702
7. Western Wimmera .. .. .	..	957	..	6	963	963
8. Wimmera United	18,843	9,429	584	131	10,144	28,987
	20,144	13,894	16	162	14,072	34,216
<i>Urban.</i>						
9. Birchip	576	612	16	7	635	1,211
10. Dimboola	2,803	518	829	35	1,382	4,185
11. Lake Boga	147	145	..	2	147	294
12. Minyip	519	478	2	4	484	1,003
13. Natimuk	912	220	210	4	434	1,346
14. Rainbow	100	658	..	9	667	767
15. Rupanyup	446	316	11	5	332	778
16. Sea Lake	366	315	..	3	318	684
17. Wycheproof	646	290	50	2	342	988
18. Wonthaggi .. .. .	..	29	380	..	409	409
	72,887	45,855	2,183	503	48,541	121,428

DISBURSEMENTS AND INTEREST AND DEPRECIATION CHARGED.

District.	DISBURSEMENTS.					INTEREST CHARGED.			DEPRECIATION CHARGED.	Grand Total at 30th June, 1911.	
	1st May, 1906, to 30th June, 1910.	During 1910-11				Total at 30th June, 1911.	1st May, 1906, to 30th June, 1910.	1st July, 1910, to 30th June, 1911.			Total at 30th June, 1911.
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.						
<i>Rural.</i>											
1. Birchip	15,898	3,533	638	585	4,756	20,654	12,591	4,765	17,356	..	38,010
2. Sea Lake											
3. Wycheproof											
4. Karkaroo	136	908	32	208	1,148	1,284	343	2,227	2,570	..	3,854
5. Long Lake	9,057	818	929	291	2,038	11,095	2,829	1,214	4,043	1,532	16,670
6. Tyntynder .. .. .	..	255	..	96	351	351	31	443	474	..	825
7. Western Wimmera	8,368	1,956	1,679	556	4,191	12,559	7,642	3,283	10,925	..	23,484
8. Wimmera United	11,068	3,518	1,447	920	5,885	16,953	8,346	4,047	12,393	..	29,346
<i>Urban.</i>											
9. Birchip	213	20	199	48	267	480	456	282	738	45	1,263
10. Dimboola	1,540	336	422	128	886	2,426	360	243	603	220	3,249
11. Lake Boga	18	..	9	6	15	33	195	105	300	12	345
12. Minyip	270	..	132	38	170	440	383	194	577	38	1,055
13. Natimuk	20	60	..	11	71	91	330	146	476	..	567
14. Rainbow	10	136	35	18	189	199	303	386	689	80	968
15. Rupanyup	265	5	81	12	98	363	280	156	436	42	841
16. Sea Lake	371	10	143	34	187	558	150	65	215	84	857
17. Wycheproof	527	..	286	53	339	866	216	186	402	62	1,330
18. Wonthaggi .. .. .	..	..	20	18	38	38	..	978	978	..	1,016
	47,761	11,555	6,052	3,022	20,629	68,390	34,455	18,720	53,175	2,115	123,680

DISTRICTS HELD IN TRUST BY THE COMMISSION.

AVOCA WATER TRUST.—BALANCE-SHEET.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 31ST DECEMBER, 1910.

Revenue Account.

RECEIPTS.			DISBURSEMENTS.		
	£	s. d.		£	s. d.
Balance from 1909	198	3 6	Interest on Loan	339	16 6
Arrears of Rates	454	8 8	Redemption of Loan	58	1 9
Current Rate	504	11 6	Maintenance and Repairs	136	4 5
Interest on Arrears and Exchange	7	7 0	Management	£28	18 6
Sales of Water	33	5 0	Rate Collector	49	1 0
Overpaid Rates	0	1 9			
Overpayment to Bank	0	2 0	Overpaid Rates	77	19 6
			Bank Charges	5	14 6
			Bank Balances, 31/12/1910	3	19 3
				576	3 6
Total	1,197	19 5	Total	1,197	19 5

Statement of Assets and Liabilities.

LIABILITIES.			ASSETS.		
	£	s. d.		£	s. d.
Treasurer of Victoria—Loan	5,603	14 9	Works at Cost	£8,709	5 0
Rates Overpaid	0	1 9	Less Amount		
Bank Overpayments	0	2 0	Written off		
General Account Balance	1,444	12 11	Act No.		
			1625	£2,494	0 0
			Repayment		
			of Loan	124	5 6
				2,618	5 6
Total	7,048	11 5		6,090	19 6
			Arrears of Rates	376	1 8
			Interest Outstanding	5	6 9
			Bank Balances, 31/12/1910	576	3 6
			Total	7,048	11 5

Statement of Rates.

	£	s. d.		£	s. d.
Current Rate	675	13 0	Current Rate Collected	504	11 6
Arrears from 1909	662	10 10	Arrears of Rates Collected	454	8 8
			Rates Written Off	3	2 0
			Arrears Carried Forward to 1911	376	1 8
Total	1,338	3 10	Total	1,338	3 10

DISTRICTS HELD IN TRUST BY THE COMMISSION—*continued.*

CARRUM WATERWORKS TRUST.—BALANCE-SHEET.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 31ST DECEMBER, 1910.

Revenue Account.

RECEIPTS.			DISBURSEMENTS.		
	£	s. d.		£	s. d.
Balance from 1909	645	9 10	Interest on Loan	1,536	3 3
Arrears of Rates	1,569	7 11	Redemption of Loan	961	8 7
Current Rate	1,000	8 6	Maintenance and Repairs	330	15 4
Interest on Arrears	17	5 2	Rate Collector	40	0 0
Miscellaneous	3	12 0	Stationery, Printing, &c.	22	15 0
Overpaid Rate	0	11 6			
Overpayment to Bank	0	0 6	Bank Charges		62 15 0
			Bank Balance, 31/12/1910	342	19 5
Total	£3,236	15 5	Total	£3,236	15 5

Special Works Account.

RECEIPTS.			DISBURSEMENTS.		
	£	s. d.		£	s. d.
Balance from 1909	581	4 7	Bank Charges		0 13 6
Special Rate Receipts	162	14 2	Bank Balance, 31/12/1910	774	8 9
Special Rate Interest	31	3 6			
Total	£775	2 3	Total	£775	2 3

Statement of Assets and Liabilities.

LIABILITIES.			ASSETS.		
	£	s. d.		£	s. d.
Treasurer of Victoria—Loan	16,989	0 11	Works at Cost	25,732	9 6
Overpaid Rate	0	11 6	Less Amount written off	7,732	0 0
Overpayment to Bank	0	0 6			18,000 9 6
		0 12 0	Arrears of Rates		2,119 12 8
General Account Balance	3,473	8 8	Bank Balance, 31/12/1910		342 19 5
Total	£20,463	1 7	Total	£20,463	1 7
Special Works—			Special Works—		
Balance of Works to be carried out	1,520	10 3	Amount of Special Rate	8,144	15 6
			Less Amount Received	7,939	13 9
					205 1 9
			Balance of Money at Treasury		540 19 9
			Bank Balance, 31/12/1910		774 8 9
Total	£1,520	10 3	Total	£1,520	10 3

Statement of Rates for 1910..

	£	s. d.		£	s. d.
Current Rate	1,995	8 0	Current Rate Collected	1,000	8 6
Arrears from 1909	2,694	1 1	Arrears of Rates Collected	1,569	7 11
			Arrears carried forward to 1911	2,119	12 8
Total	£4,689	9 1	Total	£4,689	9 1

Special Works Rate.

	£	s. d.		£	s. d.
Arrears from 1909	367	15 11	Arrears Collected during 1910	162	14 2
			Arrears carried forward to 1911	205	1 9
Total	£367	15 11	Total	£367	15 11

DISTRICTS HELD IN TRUST BY THE COMMISSION—*continued*.

LODDON UNITED WATERWORKS TRUST.—BALANCE-SHEET.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 31st DECEMBER, 1910.

Revenue Account.

RECEIPTS.			DISBURSEMENTS.		
	£	s. d.		£	s. d.
Balance from 1909	97	19 1	Interest on Loan	1,003	19 7
Arrears of Rates	339	7 1	Redemption of Loan	220	3 5
Current Rate	1,735	3 6	Maintenance and Repairs	638	9 3
Interest on Arrears	26	2 0	Water Bailiff	130	16 0
Sales of Water	21	12 6	Management, including Salary, Printing, Stationery, and Advertising	69	3 10
Rates Overpaid	2	5 0	Bank Balance, 31/12/1910	159	17 1
Total	2,222	9 2	Total	2,222	9 2

Statement of Assets and Liabilities.

LIABILITIES.			ASSETS.		
	£	s. d.		£	s. d.
Treasurer of Victoria—			Works at Cost	19,617	4 9
Loan	£18,501	1 5	Arrears of Rates	£117	18 0
Less Redemption due	67	7 5	Interest due on Rates	1	10 2
	18,433	14 0	Bank Balance, 31/12/1910	159	17 1
Treasurer of Victoria—					
Interest	£132	12 7			
Redemption	67	7 5			
	200	0 0			
Overpaid Rates	£2	17 7			
Overpaid Interest	0	1 1			
	2	18 8			
General Account Balance	1,259	17 4			
Total	19,896	10 0	Total	19,896	10 0

Statement of Rates.

	£	s. d.		£	s. d.
Current Rate	1,829	8 7	Current Rate Collected	1,735	3 6
Arrears from 1909	364	10 0	Arrears of Rates Collected	339	7 1
			Rates Written Off	1	10 0
			Arrears Carried Forward to 1911	117	18 0
Total	2,193	18 7	Total	2,193	18 7

LOAN EXPENDITURE.

STATEMENT OF LOAN EXPENDITURE FOR THE YEAR ENDED 30TH JUNE, 1911.

Name.	Loans Application Act, No. 2219.			Loans Application Act, No. 2280.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
<i>Free Headworks.</i>									
1. Goulburn River Works (Waranga Reservoir)	30	0	1	1,938	5	9	1,968	5	10
2. Loddon River Works (Laanecoorie) ..	2,707	12	1	19	10	2	2,817	2	3
<i>Waterworks Districts.</i>									
3. Birchip, Sea Lake, and Wycheproof ..	3,724	12	4	6,368	16	1	10,093	8	5
4. Karkaroc	1,249	19	0	4,178	10	9	5,428	9	9
5. Long Lake	1,506	4	9	4,642	5	0	6,148	9	9
6. Tyntynder	1,368	9	9	3,347	1	5	4,715	11	2
7. Western Wimmera	329	7	8	719	17	8	1,049	5	4
8. White Cliffs	111	17	3	339	4	8	451	1	11
9. Wimmera United	1,036	6	11	1,165	6	8	2,201	13	7
10. Wimmera Main Channels	3,269	9	2	10,234	9	5	13,503	18	7
<i>Towns.</i>									
11. Beulah	6	13	4	793	8	11	800	2	3
12. Birchip	62	19	0	144	2	4	207	1	4
13. Boga	13	2	10	14	1	1	27	3	11
14. Dimboola	441	4	2	1,065	18	10	1,507	3	0
15. Hopetoun .. .. .	..	..	..	21	2	2	21	2	2
16. Jeparit	46	3	11	2,069	16	10	2,116	0	9
17. Minyip	1	4	4	4	12	4	5	16	8
18. Rainbow	2	16	9	242	5	10	245	2	7
19. Rupanyup	113	4	0	277	2	7	390	6	7
20. Sea Lake	5	1	9	144	10	3	149	12	0
21. Wonthaggi .. .. .	..	..	..	48,552	7	2	48,552	7	2
22. Wycheproof	105	3	1	1,347	8	0	1,452	11	1
<i>Irrigation and Water Supply Districts.</i>									
23. Bacchus Marsh and Werribee Estate ..	8,016	19	9	13,254	17	4	21,271	17	1
24. Campaspe	11	16	4	0	10	0	12	6	4
25. Cohuna	4,551	1	8	9,003	13	1	13,554	14	9
26. Deakin	8	13	6	0	13	6	9	7	0
27. Kerang	207	10	1	764	18	8	972	8	9
28. Koondrook (including Benjeroop and Murrabit)	3,878	1	7	5,517	13	10	9,395	15	5
29. Rodney District	5,701	9	6	7,573	5	5	13,274	14	11
30. Swan Hill	468	9	10	1,958	0	0	2,426	9	10
31. Goulburn Main Channels	20,717	19	7	52,001	19	0	72,719	18	7
<i>Irrigation Areas.</i>									
32. Nyah	307	2	5	2,472	11	10	2,779	14	3
33. White Cliffs	740	7	11	5,717	15	4	6,458	3	3
<i>Miscellaneous.</i>									
34. Goulburn Storage Surveys, &c. ..	84	12	0	14	5	11	98	17	11
35. Murray River Weir Surveys, &c. ..	..	..	..	187	14	2	187	14	2
Totals	60,915	16	4	186,098	2	0	247,013	18	4

ESTIMATES.

Anticipated requirements to meet Disbursements by the Commission and Estimate of the moneys available from its Revenues to provide the same for the year ending 30th June, 1912.

ESTIMATED DISBURSEMENTS.

Revenue Producing Works—

A.

Coliban District	£12,000
Irrigation and Water Supply Districts	37,600
Waterworks Districts	22,000
Drainage Districts	1,050
General Expenditure and Salaries (proportion) over £250 to be apportioned to above Districts	11,100
	<hr/>
	£83,750

Not Revenue Producing Works—

B.

River Gaugings, Diversions from Streams, Surveys, New Projects, General Expenditure and Salaries (proportion) over £250	£3,550
Loan Works, Services on Account defrayed from Votes	2,750
Waterworks Trust Administration	1,000
	<hr/>
	£7,300

Free Headworks and Grant—

C.

Goulburn-Waranga	£1,700
Kow Swamp	2,300
Loddon River... ..	300
North-West Lakes	400
Broken River	300
Lake Lonsdale	300
Lower Wimmera	150
	<hr/>
	5,450
Charlton Waterworks Trust Grant	1,200
	<hr/>
	£6,650
	<hr/>
	£97,700
	<hr/>

ESTIMATED RECEIPTS.

Coliban District	£39,500
Irrigation and Water Supply Districts	56,000
Waterworks Districts	44,300
Drainage Districts	200
Other State Works	1,400
Miscellaneous	1,600
	<hr/>
	£143,000
	<hr/>
Estimated amount available from Revenues of Commission to meet Interest	£15,300
To which add Estimated Revenues from Other Authorities—	
Waterworks Trusts... ..	£35,200
Local Bodies	16,000
	<hr/>
	£51,200
	<hr/>
Total Estimated amount available from Revenues of all Authorities to meet Interest... ..	£96,500
	<hr/>

ESTIMATE of the sums to be provided by the State to meet Interest on its Loan Expenditure for Works of Water Supply, both State Works of Water Supply and Works vested in Authorities other than the Commission; and of the sums available from the revenues of the Commission, and from the moneys receivable from such Authorities, to provide such Interest for the year ending 30th June, 1912:—

Works.	Loan Liability of State for Works of Water Supply at 30th June, 1911, exclusive of Melbourne Water Supply.				Interest payable by State on Net Advances.			Total Interest of £243,021 debitable to—			Estimated Amount Available from Revenues of all Authorities to meet Interest, see page 34.
	Total Advances, including Cost of Loan Floating.	Deduct Redemption Paid.	Net Advances.	(A.) Amounts Written Off (B.) Free Head-works. (C.) Loans Unexpended.	Balance as Debit of Authorities.	(A.) Written Off. (B.) Free Head-works. (C.) Loans Unexpended.	Commission and Other Authorities.	£	£	£	
Waterworks Districts	£ 1,917,268	£ 17,007	£ 1,900,261	(A.) 169,927 (B.) 575,152 (C.) ..	£ 1,730,334	(A.) 5,863 (A.) 19,845	£ 59,709	£ 59,709	£ 65,572	£ 59,709	
Irrigation and Water Supply Districts	£ 1,205,119	£ 10,457	£ 1,194,662	(A.) 594,863 (B.) .. (C.) ..	£ 619,510	(A.) 19,845	£ 21,377	£ 21,377	£ 41,222	£ 21,377	
Goulburn Works (exclusive of Free Headworks) } Districts supplied are being debited with their portion of Interest on this Expenditure	£ 594,863	..	£ 594,863	..	£ 594,863	..	..	..	£ 20,525	£ 20,525
Pyke's Creek and Werribee	£ 59,938	..	£ 59,938	..	£ 59,938	..	..	..	£ 2,067	£ 2,067
Waterworks Trusts (including First Mildura)	£ 1,280,190	£ 73,797	£ 1,206,393	(A.) 327,409 (B.) .. (C.) ..	£ 878,984	(A.) 11,299	£ 30,329	£ 30,329	£ 41,628	£ 30,329	
Local Bodies (Municipalities)	£ 667,895	£ 85,049	£ 582,846	(A.) 163,760 (B.) 32,724 (C.) 1,225,436	£ 419,086	(A.) 5,650 (B.) 42,286	£ 14,460	£ 14,460	£ 20,110	£ 14,460	
Irrigation Trusts Abolished	£ 32,754	£ 30	£ 32,724	(A.) 32,724 (B.) .. (C.) ..	£ ..	(A.) 1,501	£ ..	£ ..	£ 1,301	£ ..	
Free Headworks	£ 1,225,856	£ 420	£ 1,225,436	(B.) 1,225,436 (C.) ..	£ ..	(B.) 42,286	£ ..	£ ..	£ 42,286	£ ..	
Free Grants to Local Authorities	£ 147,046	..	£ 147,046	(B.) 147,046 (C.) ..	£ ..	(B.) 5,073	£ ..	£ ..	£ 5,073	£ ..	
Surveys, Exploratory, and Preliminary Works, including Purchase of Land reserved for Reservoirs	£ 66,547	..	£ 66,547	..	£ 66,547	..	£ 2,297	£ 2,297	£ 2,297	£ 2,297	
Loan Moneys unexpended	£ 44,606	..	£ 44,606	(C.) 44,606	£ ..	(C.) 1,540	£ ..	£ ..	£ 1,540	£ ..	
Totals	£ 7,212,082	£ 186,760	£ 7,025,322	£ 2,686,000	£ 4,339,322	£ 92,857	£ 150,764	£ 150,764	£ 243,621	£ 96,500	

Dated at the Office of the State Rivers and Water Supply Commission,
Treasury Gardens, Melbourne, the 30th day of October, 1911.

ELWOOD MEAD, Chairman.

WM. CATTANACH, Commissioner.


J. S. DETHRIDGE, Commissioner.

M. NALLY, Secretary.

DIAGRAM

SHOWING PROPORTION OF THE FLOW OF THE MURRAY RIVER USED IN VICTORIA
YEAR 1910

Volume passing Mildura 6,150,000 acre feet



■ Volume used in Victoria 259,000 acre feet = 4%

DIAGRAM

SHOWING PROPORTIONS OF THE FLOW OF THE GOULBURN RIVER DIVERTED AND USED
YEAR 1910

■ Total flow at Goulburn Weir 2,151,000 acre feet

■ Volume diverted . . . 136,000 acre feet *

■ Volume used (approx) 40,000 acre feet = 2%

* The greater part of this volume was diverted to fill Waranga Reservoir,
and was subsequently allowed to flow to the Murray, by way of the Campaspe.
