

1926.

VICTORIA.

STATE RIVERS AND WATER SUPPLY COMMISSION.

TWENTY-FIRST  
ANNUAL REPORT.

1925-26.

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

APPROXIMATE COST OF REPORT.

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## STATE RIVERS AND WATER SUPPLY COMMISSION.

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WM. CATTANACH, CHAIRMAN,

J. S. DETHRIDGE, COMMISSIONER (died 15.5.1926).

E. SHAW, COMMISSIONER.

Since last Report a vacancy in the Commission's membership occurred through the regrettable death, on 15th May, 1926, of Mr. Commissioner John Stewart Dethridge, M.Inst.C.E., who had been a member of the Commission since 1911. The vacancy has since been filled by the appointment of Mr. Richard Henry Horsfield, C.E.

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## ANNUAL REPORT, 1925-26.

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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 1925-26, and Estimates for the ensuing year.

### WORKS UNDER CONTROL OF COMMISSION.

The following statement gives a brief description, summary of cost, and other particulars relative to the undermentioned works controlled by the Commission.

#### A.—FREE HEADWORKS.

DESCRIPTION OF WORKS.	Capital Debit at 30th June, 1926. Exclusive of cost of Loan Flotation
1. <b>Broken River Works</b> :—Casey's Weir and offtake, with about 59 chains of channel to the Broken Creek; Gowangardie Weir with offtake sluice .. .. .	£ 14,853
2. <b>Goulburn River Works</b> :—Weir on the Goulburn River, about 9 miles above Murchison; channel therefrom, about 23½ miles, to Waranga Reservoir; and that Reservoir (but exclusive of the work of its enlargement) .. .. .	738,244
3. <b>Kerang North-West Lakes Works</b> :—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 Charm, Race-course Lake, Cullen's Lake, Kangaroo Lake, and Lake Tutchewop, and to the Little Murray River, with water storage works at these lakes .. .. .	21,653
4. <b>Kow Swamp Works</b> :—Intake from the Murray River with regulator, at the effluence of the Gunbower 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 .. .. .	187,566
5. <b>Lake Lonsdale Reservoir</b> :—Reservoir at Lake Lonsdale, on the Little Wimmera River, near Ledcourt .. .. .	49,054
6. <b>Loddon River Works</b> :—Laanecoorie Weir, on the Loddon; Bridgewater Weir, on the Loddon; Kinypanial Weir, on the Loddon .. .. .	167,636
7. <b>Long Lake Pumping Works</b> :—Inlet 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. <b>Lower Wimmera Compensation Works</b> :—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 home- stead; Jeparit Weir, on the Wimmera, near Jeparit township .. .. .	8,558
Total .. .. .	1,214,910

#### B.—MAIN SUPPLY WORKS.

##### IRRIGATION AND WATER SUPPLY DISTRICTS, WATERWORKS DISTRICTS, AND FLOOD PROTECTION DISTRICTS.

Cost Apportioned and to be Apportioned to Districts benefited.

Name of Work.	Capital Debit at 30th June, 1926. £	Tentative Debits to Districts, 1925-26. £	
Goulburn Main Channels (Free Headworks excluded)—		Rodney .. .. . 120,000	
1. East Goulburn .. .. .	250,218	Tragowel Plains .. .. . 100,000	
2. Waranga Reservoir to Campaspe ..	274,484	Rochester .. .. . 74,000	
3. West of Campaspe .. .. .	414,069	Tongala .. .. . 58,000	
4. Goulburn Main Channel Distri- butaries .. .. .	156,190	Shepparton .. .. . 57,000	
		Deakin .. .. . 24,000	
		Echuca North .. .. . 17,000	
		Dingee .. .. . 15,000	
		Stanhope .. .. . 15,000	
	1,094,961	480,000	
Goulburn Storages—			1,094,961
5. Sugarloaf Reservoir .. .. .	1,268,980		
6. Waranga Reservoir Enlargement	585,140		
	1,854,120		1,854,120
Bacchus Marsh and Werribee Schemes—		Werribee .. .. . 8,900	
7. Ballan Tunnel .. .. .	18,906	Bacchus Marsh .. .. . 76,962	
8. Pykes Creek Reservoir .. .. .	66,056	Werribee .. .. . 84,760	
9. Melton Reservoir .. .. .	84,760		
	169,722		169,722
Maffra-Sale Scheme—			
10. Glenmaggie Reservoir and Channels	758,277	Irrigation District to be debited later ..	758,277
Red Cliffs Scheme—			
11. Main and Distributary Channels	701,836	Irrigation District to be debited later ..	701,836
Millewa District—			
12. Main and Distributary Channels	257,524	Waterworks District to be debited later	257,524
Flood Protection Districts—			
13. Kooweerup and Cardinia .. .. .	286,211	Lower Kooweerup and Cardinia £134,400	
14. Goulburn Levees .. .. .	58,125		
	344,336		344,336
Carried forward .. .. .			6,395,686

WORKS UNDER CONTROL OF COMMISSION—*continued.*Capital Debt  
on 30th June,  
1926,  
Exclusive  
of Cost of Loan  
Flotation.

Brought forward .. ..

£  
6,395,686

## C.—IRRIGATION AND WATER SUPPLY DISTRICTS.

Distributary Works within Districts under the control of the Commission.

Name of District (Including Urban Divisions).	Total Capital Expenditure.	Capital Written Off by Acts 1625 and 1651.	Redemption Paid to Treasury.	Capital Debit at 30th June, 1926.
	£	£	£	£
1. Bacchus Marsh .. ..	88,746	8,906	493	79,347
2. Boort .. ..	71,537	35,259	1,794	34,484
3. Campaspe .. ..	64,178	52,685	305	11,188
4. Cohuna and Gannawarra ..	327,323	82,376	1,338	243,609
5. Deakin .. ..	88,063	34,748	2,144	51,171
6. Dingee .. ..	15,576	..	..	15,576
7. Dry Lake .. ..	1,704	686	299	719
8. Echuca North .. ..	21,346	..	..	21,346
9. Kerang .. ..	99,456	35,338	2,334	61,784
10. Koondrook .. ..	181,858	30,872	1,562	149,424
11. Leitchville .. ..	19,407	..	..	19,407
12. Merbein .. ..	200,087	..	133	199,954
13. Mystic Park .. ..	12,811	..	..	12,811
14. Nyah .. ..	97,668	..	..	97,668
15. Rochester .. ..	182,984	..	..	182,984
16. Rodney .. ..	531,467	149,949	8,967	372,551
17. Shepparton .. ..	110,838	..	428	110,410
18. South Shepparton .. ..	11,775	..	..	11,775
19. Stanhope .. ..	63,203	..	..	63,203
20. Swan Hill .. ..	145,988	19,799	371	125,818
21. Third Lake .. ..	22,726	..	..	22,726
22. Tongala .. ..	88,461	..	..	88,461
23. Tragowel Plains .. ..	253,530	124,534	527	128,469
24. Tresco .. ..	84,011	..	..	84,011
25. Werribee .. ..	88,808	..	10,242	78,566
	2,873,551	575,152	30,937	2,267,462

2,267,462

## D.—WATERWORKS AND FLOOD PROTECTION DISTRICTS.

Distributary Works within Districts under the control of the Commission.

Name of District (Including Urban Districts).	Total Capital Expenditure.	Capital Written Off by Acts 1625 and 1651.	Redemption Paid to Treasury.	Capital Debt at 30th June, 1926.
	£	£	£	£
1. Birchip .. ..	505,791	700	2,473	502,618
2. Sea Lake .. ..				
3. Tyrrell .. ..				
4. Wycheproof .. ..				
5. Carwarf .. ..	26,840	..	..	26,840
6. Coliban .. ..	1,351,413	..	..	1,351,413
7. Dandenong .. ..	32,034	5,128	1,506	25,400
8. Karkarooc .. ..	158,093	..	2,893	155,200
9. Kerang North-West Lakes ..	1,879	..	..	1,879
10. Long Lake .. ..	82,073	..	835	81,238
11. Mornington Peninsula .. ..	505,587	..	..	505,587
12. Ouyen .. ..	16,994	..	..	16,994
13. Tyntynder .. ..	188,220	..	50	188,170
14. Upper Western Wimmera ..	60,059	26,567	3,370	30,122
15. Upper Wimmera United ..	74,366	10,918	4,379	59,069
16. Walpeup East .. ..	4,842	..	..	4,842
17. Walpeup West .. ..	26,875	..	..	26,875
18. Werribee .. ..	11,190	..	..	11,190
19. Western Wimmera .. ..	239,636	106,268	12,878	120,490
20. Wimmera United .. ..	173,254	25,474	9,951	137,829
21. Wonthaggi .. ..	66,156	..	8,571	57,585
22. Yelta .. ..	4,197	..	..	4,197
23. Wimmera Main Channels ..	325,749	..	..	325,749
24. Wimmera Storages—	Amounts being debited to Districts benefited.	..	..	..
Fyans Lake .. ..				
Taylors Lake .. ..				
Pine Lake .. ..				
Lake Whitton .. ..				
25. Echuca Flood Protection ..	1,168	..	..	1,168
	4,182,635	175,055	46,906	3,960,674

3,960,674

Carried forward .. ..

12,623,822

WORKS UNDER CONTROL OF COMMISSION— <i>continued.</i>					Capital Debt at 30th June, 1926, Exclusive of Cost of Loan Flotation.
Brought forward .. .. .					£ 12,623,822
<b>E.—WATERWORKS TRUSTS DISTRICTS.</b>					
<b>DISTRICTS HELD IN TRUST BY THE COMMISSION.</b>					
Name of Trust.	Total Advances by State.	Capital Written Off by Acts 1625 and 1651.	Redemption Paid to Treasury.	Capital Debt at 30th June, 1926.	
	£	£	£	£	
1. Avoca Water Trust—					
Rural District .. .. .	9,890	2,494	2,132	5,264	
Urban District (Quambatook) .. .. .	4,089	..	467	3,622	
2. Carrum Waterworks Trust .. .. .	30,770	7,732	3,576	19,462	
3. Loddon United Waterworks Trust—					
Rural District .. .. .	22,171	1,717	5,376	15,078	
Urban District (Mitiamo) .. .. .	3,213	..	94	3,119	
	70,133	11,943	11,645	46,545	
Grand Total .. .. .					£ 12,623,822

#### 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, 22,500 square miles, equal to about 14,400,000 acres.

The area under irrigated culture for all kinds of crops was 343,685 acres. Although this area is 31,818 acres less than the area irrigated in the previous year, it is 9,011 acres above the average of the previous four years. The area irrigated last year includes some 17,000 acres watered under yearly permits granting authority to divert water from streams throughout the State.

A feature of the year, however, is the fact that the decrease in the area watered took place in grass lands, as all kinds of cultivated crops under irrigation showed increases.

The number of separate towns supplied, exclusive of the City of Melbourne and its suburbs, is as shown in the following statement :—

Controlling Authorities.	Number of Towns Supplied.	Estimated Population Served.
Commission ... ..	73	108,940
Waterworks Trusts ... ..	108	177,240
Local Governing Bodies .. ..	18	73,620
Totals ... ..	199	359,800

## LANDS UNDER IRRIGATED CULTURE.

The two Statements hereunder show the extent of Areas Irrigated—(A) during last year in detail, and (B) during the last five years totalled for purposes of comparison.

(A) STATEMENT OF THE EXTENT OF IRRIGATION AND OF AREAS OF DIFFERENT KINDS OF CROPS WATERED—YEAR 1925-26.

Name of District.	Area Irrigated (Acres).						
	Cereals.	Lucerne grown for Pasture and Hay.	Sorghum and other Annual Fodder Crops.	Pastures.	Vineyards, Orchards, and Gardens.	Fallow.	Miscellaneous.
<i>Supplied from Goulburn State Works.</i>							
Shepparton .. .. .	1,825	3,214	1,352	1,262	9,350	120	665
South Shepparton .. .. .	860	400	320	280	10	180	60
Rodney .. .. .	8,509	30,189	1,028	3,238	8,547	649	367
Stanhope .. .. .	693	10,429	526	177	322	202	1
Tongala .. .. .	1,307	10,414	649	721	1,928	472	40
Rochester .. .. .	2,581	21,928	1,342	2,143	2,188	296	226
Echuca North .. .. .	138	1,359	425	1,075	..	266	254
Dingee .. .. .	177	2,731	87	849	34	..	..
Tragowel Plains .. .. .	11,491	771	5,597	9,088	22	16	648
Deakin .. .. .	2,885	1,529	229	220	23	40	..
Boort .. .. .	1,000	89	1,000	2,215	8	37	..
Totals .. .. .	31,466	83,053	12,555	21,268	22,432	2,278	2,261
<i>Supplied from River Murray State Works.</i>							
<i>(a) Torrumbarry Weir.</i>							
Leitchville .. .. .	546	3,249	387	51	..	12	..
Cohuna .. .. .	1,720	9,227	2,569	2,707	159	228	1,171
Gannawarra .. .. .	3,498	1,397	4,064	4,825	4	23	960
Koondrook .. .. .	4,235	1,909	2,836	2,512	714	10	10
Swan Hill .. .. .	3,068	3,632	2,024	3,861	3,120	382	..
Third Lake .. .. .	517	50	164	488	7	45	8
Mystic Park .. .. .	150	215	335	465	10	25	..
Tresco .. .. .	..	..	..	..	1,374	..	..
Kerang .. .. .	4,562	780	5,249	6,477	20	159	..
Dry Lake .. .. .	30	..	100	..	2	..	..
Kerang North-West Lakes .. .. .	1,273	188	1,205	895	462	..	..
Lands supplied direct (outside Districts) .. .. .	1,107	1,700	427	611	10	..	..
Totals .. .. .	20,706	21,747	19,360	22,892	5,882	884	2,149
<i>(b) Direct from River.</i>							
Nyah .. .. .	..	20	40	..	2,740	..	20
Red Cliffs .. .. .	..	25	..	..	8,600	..	..
Merbein .. .. .	..	40	..	..	7,670	..	..
Totals .. .. .	..	85	40	..	19,010	..	20
Totals (River Murray State Works) .. .. .	20,706	21,832	19,400	22,892	24,892	884	2,169
<i>Supplied from Loddon and Other Northern State Works.</i>							
Boort .. .. .	1,998	90	1,000	2,216	8	37	..
Coliban .. .. .	250	530	300	930	4,400	250	240
Campaspe .. .. .	613	314	3	171	3	..	..
Western Wimmera .. .. .	7	40	114	26	1,342	..	..
Totals .. .. .	2,668	974	1,417	3,343	5,753	287	240
<i>Supplied from Southern State Works.</i>							
Bacchus Marsh .. .. .	27	1,628	217	418	154	158	..
Werribee .. .. .	189	5,467	15	457	215	35	461
Hallam .. .. .	..	..	..	..	52	..	..
Maffra .. .. .	40	240	240	30	30	20	500
Totals .. .. .	256	7,335	472	905	451	213	961
<i>Supplied from other Works.</i>							
First Mildura District .. .. .	..	165	148	..	11,472	..	..
Private Diversions—Kerang (Outside Districts) .. .. .	421	154	398	277	..	..	..
Other Private Diversions throughout the State .. .. .	2,270	3,240	2,950	2,660	4,108	1,440	419
Totals .. .. .	2,691	3,559	3,496	2,937	15,580	1,440	419
<b>Grand Totals, 1925-26 .. .. .</b>	<b>57,987</b>	<b>116,753</b>	<b>37,340</b>	<b>51,345</b>	<b>69,108</b>	<b>5,102</b>	<b>6,050</b>
<b>Grand Totals, 1924-25 .. .. .</b>	<b>45,215</b>	<b>103,200</b>	<b>30,683</b>	<b>119,563</b>	<b>66,780</b>	<b>4,863</b>	<b>5,199</b>

(B) COMPARATIVE STATEMENT OF THE EXTENT OF IRRIGATION, 1921-22 TO 1925-26

	Area under Irrigation (Acres).				
	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.
Goulburn State Works .. .. .	141,562	166,022	144,131	179,720	175,313
River Murray State Works .. .. .	90,668	112,656	112,829	135,470	112,775
Loddon and other Northern State Works .. .. .	18,671	31,158	31,050	19,258	14,882
Southern State Works .. .. .	7,273	7,885	8,193	8,560	10,593
Mildura and Private Diversions .. .. .	29,733	33,006	28,355	32,495	30,122
Totals .. .. .	287,907	350,727	324,558	375,503	343,685

## VALUATIONS, RATES, FLOOD PROTECTION CHARGES 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, flood protection charges and compulsory irrigation charges made in all districts. An estimate of the number of persons dwelling in such districts is also appended.

During the year rates were, for the first time, made in the new Urban Waterworks Districts of Dingee, Lockington, and Stanhope, and in the Urban District of Pyramid Hill, which was formerly a Waterworks Trust District, but on the 1st January, 1926, was placed under the jurisdiction and control of the Commission; rates were also made for the first time in the Leitchville, South Shepparton, and Third Lake Irrigation Districts, and for a half-year in the Lower Millewa Waterworks District, while flood protection charges on an acreage basis were for the first time made in the Kanyapella and Loch Garry Flood Protection Districts. The Waterworks District of Tyrrell was subdivided into the Tyrrell and Eureka Waterworks Districts.

In twenty-nine 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. The Lower Kooweerup and Cardinia Flood Protection Districts, where the charging is on an acreage basis, were similarly divided into three divisions. As heretofore in the urban portion of the Coliban System, a minimum and tapering rate has been made, while the Carrum Waterworks Trust District has, as in past years, been arranged in five rating divisions in accordance with the relative benefits derived by such lands from the works.

Under the powers conferred by Section 5 of the *Water Act* 1916, a minimum annual rate on the basis of £8 per 640 acres was fixed by the Commission on the first division lands of the Western Wimmera and Wimmera United Waterworks Districts, while in the Birchip, Carwarp, Karkarooc, Long Lake, Sea Lake, Tyntynder, Tyrrell, Upper Western Wimmera, Upper Wimmera United, and Wycheproof Waterworks Districts the minimum was fixed at £10 13s. 4d. per 640 acres, in Carwarp Central District at £16 per 640 acres, in Eureka District at £18 13s. 4d. per 640 acres, in Lower Millewa £21 6s. 8d. per 640 acres, and in the Walpeup West Waterworks District at £3 6s. 8d. per 640 acres.

In eighteen districts the Commission made and levied compulsory irrigation charges, while in five Flood Protection Districts and in five Waterworks Trusts Districts taken over by the Commission a rate or charge was also made. Details of all rates and charges made are set out hereunder:—

### A.—VALUATIONS, RATES, AND FLOOD PROTECTION CHARGES.

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 £1 made during Year ended 30th June, 1926.	Period of Rate.	Estimated Number of Persons dwelling in District.
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#### IRRIGATION AND WATER SUPPLY DISTRICTS.

	Valuation by Commission.	Divisions.				
		1st.	2nd.	3rd.		
		s. d.	s. d.	s. d.		
1. BACCHUS MARSH ..	£ 14,846	1 0	..	..	1st July, 1925, to 30th June, 1926	786
2. BOORT ..	18,035	2 0	1 0	..	" " "	1,050
3. CAMPASPE ..	11,190	2 0	1 0	0 6	" " "	576
4. COHUNA ..	20,639	2 0	1 0	..	" " "	1,175
5. DEAKIN ..	53,059	1 8	0 10	0 5	" " "	1,900
6. DINGEE ..	3,543	1 0	..	..	" " "	200
7. DRY LAKE ..	250	(No rate made)			" " "	11
8. ECHUCA NORTH ..	5,655	1 0	0 6	..	1st July, 1925, to 30th June, 1926	550
9. GANNAWARRA ..	18,086	2 0	1 0	..	" " "	575
10. KERANG ..	22,101	2 4	1 2	0 7	" " "	1,050
11. KOONDROOK ..	20,622	2 0	1 0	..	" " "	1,200
12. LEITCHVILLE ..	6,500	2 0	..	..	" " "	250
13. MERBEIN ..	25,807	1 0	..	..	" " "	3,500
14. MYSTIC PARK ..	4,607	1 0	..	..	" " "	125
15. NYAH ..	5,842	1 0	..	..	" " "	1,000
16. ROCHESTER ..	57,934	1 0	0 6	0 3	" " "	3,205
17. RODNEY ..	144,747	1 0	0 6	0 3	" " "	5,510
18. SHEPPARTON ..	34,295	1 0	..	..	" " "	2,170
19. SOUTH SHEPPARTON ..	6,379	1 0	..	..	" " "	150
20. STANHOPE ..	15,085	1 0	..	..	" " "	760
21. SWAN HILL ..	28,320	1 0	..	..	" " "	1,250
22. THIRD LAKE ..	2,586	2 0	..	..	" " "	150
23. TONGALA ..	24,755	1 0	..	..	" " "	2,100
24. TRAGOWEL PLAINS ..	38,335	1 0	0 6	..	" " "	1,550
25. WERRIBEE ..	17,401	1 0	..	..	" " "	650

A.—VALUATIONS, RATES, AND FLOOD PROTECTION CHARGES—*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 £1 made during year ended 30th June, 1926.			Period of Rate.	Estimated Number of Persons dwelling in District.
WATERWORKS DISTRICTS.						
	Valuation by Commission.	Divisions.				
		1st.	2nd.	3rd.		
		£	s. d.	s. d.		
26. AXE CREEK ..	1,628	2 0	..	..	1st July, 1925, to 30th June, 1926	240
27. BIRCHIP ..	40,419	2 4	1 2	0 7	" " "	2,590
28. CARWARP ..	9,397	3 10	1 11	0 11½	" " "	750
29. CARWARP CENTRAL ..	1,119	5 0	2 6	..	" " "	220
30. EUREKA ..	1,597	4 0	2 0	1 0	" " "	100
31. HARCOURT ..	7,043	1 6	..	..	" " "	600
32. KARKAROOC ..	115,265	2 2	1 1	0 6½	" " "	4,000
33. KERANG N.W. LAKES	6,004	0 6	..	..	" " "	550
34. LONG LAKE ..	67,190	2 10	1 5	0 8½	" " "	1,900
35. LOWER MILLEWA ..	12,680	2 6	1 3	0 7½	1st Jan., 1926, to 30th June, 1926	1,000
36. SEA LAKE ..	66,939	2 8	1 4	0 8	1st July, 1925, to 30th June, 1926	2,325
37. TYNTYNDER ..	54,247	3 4	1 8	0 10	" " "	3,200
38. TYRRELL ..	80,758	3 4	1 8	0 10	" " "	4,800
39. UPPER WEST'N WIMMERA	53,808	1 6	0 9	0 4½	" " "	1,650
40. UPPER WIMMERA UNITED	81,965	1 6	0 9	0 4½	" " "	2,200
41. WALPEUP EAST ..	26,826	0 9	0 4½	..	" " "	1,550
42. WALPEUP WEST ..	76,138	0 7	0 3½	..	" " "	3,600
43. WERRIBEE ..	6,747	2 0	..	..	" " "	140
44. WESTERN WIMMERA ..	268,434	1 2	0 7	0 3½	" " "	8,950
45. WIMMERA UNITED ..	245,382	1 2	0 7	0 3½	" " "	6,600
46. WYCHEPROOF ..	67,672	2 4	1 2	0 7	" " "	2,480
47. YELTA ..	2,402	3 4	..	..	" " "	130
URBAN DIVISIONS AND DISTRICTS.						
	Municipal Valuation.					
	£	s. d.	s. d.	s. d.		
48. BACCHUS MARSH ..	11,436	..	..	1 6	1st July, 1925, to 30th June, 1926	1,810
49. BERRIWILLOCK ..	1,303	..	..	3 6	" " "	155
50. BERWICK ..	3,721	..	..	2 0	" " "	620
51. BEULAH ..	4,171	..	..	2 3	" " "	575
52. BIRCHIP ..	5,543	..	..	2 0	" " "	950
53. BITTERN ..	263	..	..	3 0	" " "	65
54. BRIM ..	1,278	..	..	4 0	" " "	180
55. CARRUM ..	66,418	..	..	1 4	" " "	6,300
56. COHUNA ..	9,535	..	..	1 9	" " "	760
57. COROP ..	290	..	..	2 0	" " "	90
58. CRANBOURNE ..	2,019	..	..	2 0	" " "	220
59. CULGOA ..	811	..	..	4 0	" " "	150
60. DANDENONG ..	47,352	..	..	1 3	" " "	4,200
61. DIMBOOLA ..	12,594	..	..	1 6	" " "	1,500
62. DINGEE ..	287	..	..	4 0	" " "	90
63. FRANKSTON ..	37,820	..	..	1 4	" " "	4,360
64. HOPE TOWN ..	4,686	..	..	2 3	" " "	575
65. JEPARIT ..	7,211	..	..	1 9	" " "	800
66. JUNG JUNG ..	617	..	..	3 0	" " "	140
67. KOONDRICK ..	3,363	..	..	2 6	" " "	475
68. LAKE BOGA ..	2,170	..	..	3 0	" " "	335
69. LASCELLES ..	889	..	..	3 6	" " "	130
70. LEITCHVILLE ..	1,759	..	..	3 0	" " "	200
71. LOCKINGTON ..	1,261	..	..	3 6	" " "	160
72. MANANGATANG ..	2,104	..	..	3 6	" " "	120
73. MERBEIN ..	5,251	..	..	3 9	" " "	700
74. MINYIP ..	4,827	..	..	3 0	" " "	700
75. MORNINGTON ..	27,144	..	..	1 6	" " "	1,950
76. NATIMUK ..	3,442	..	..	1 6	" " "	560
77. NYAH ..	801	..	..	2 6	" " "	170
78. NYAH WEST ..	4,747	..	..	3 0	" " "	260
79. OUYEN ..	9,363	..	..	2 6	" " "	800
80. PIANGIL ..	1,864	..	..	4 0	" " "	185
81. PYRAMID HILL ..	2,276	..	..	1 6	1st Jan., 1926, to 30th June, 1926	500
82. RAINBOW ..	8,422	..	..	1 9	1st July, 1925, to 30th June, 1926	900
83. REDCLIFFS ..	4,599	..	..	4 0	" " "	700
84. RUPANYUP ..	4,304	..	..	3 0	" " "	700
85. SEA LAKE ..	5,116	..	..	2 6	" " "	590
86. SOMERVILLE ..	1,498	..	..	2 6	" " "	255
87. SOUTH FRANKSTON ..	7,684	..	..	3 0	" " "	295
88. SPRINGVALE ..	14,407	..	..	1 6	" " "	1,000
89. STANHOPE ..	757	..	..	4 0	" " "	230
90. ULTIMA ..	3,124	..	..	3 0	" " "	350
91. WATCHEM ..	2,101	..	..	3 0	" " "	200
92. WERRIBEE ..	16,752	..	..	1 6	" " "	1,450
93. WONTHAGGI ..	32,364	..	..	1 6	" " "	7,000
94. WOOMELANG ..	2,491	..	..	2 9	" " "	420
95. WYCHEPROOF ..	4,033	..	..	2 6	" " "	770



A.—VALUATIONS, RATES, AND FLOOD PROTECTION CHARGES—*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 £1 made during year ended 30th June, 1926.	Period of Rate.	Estimated Number of Persons dwelling in District.
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## COLIBAN SYSTEM.

	Municipal Valuation. £	s. d.		
96 COLIBAN .. ..	352,574	On Valuations	1st July, 1925, to 30th June, 1926	61,900
		up to £300 .. 1 6		
		(Minimum 20s.)		
		From £301 up		
		to £700 .. 1 3		
		From £701 on 1 0		
		Vacant lands .. 1 6		

## WATERWORKS TRUSTS.

	Municipal Valuation. £	s. d.		
97. AVOCA .. ..	40,012	.. .. 0 4½	1st January, 1926, to 31st December, 1926	1,340
98. MITIAMO (URBAN) ..	926	.. .. 4 0	" " "	185
99. QUAMBATOOK (URBAN)	3,311	.. .. 2 9	" " "	320
100 CARRUM .. ..	28,804	1st Division .. 3 8	" " "	1,500
		2nd Division .. 1 10		
		3rd Division .. 1 0		
		4th Division .. 0 10		
		5th Division .. 0 3		
	Valuation by Commission. £			
101. LODDON UNITED ..	117,660	1st Division .. 0 8	" " "	3,600
		2nd Division .. 0 4		
		3rd Division .. 0 2		

## FLOOD PROTECTION DISTRICTS.

	Valuation by Commission. £	s. d.		
102. ECHUCA (HIGH-ST.)	845	.. .. 3 0	1st July, 1925, to 30th June, 1926	75
103. CARDINIA ..	Acres. 35,299	1st Div. (p.ac.) 3 0	" " "	900
		2nd Div. (p.ac.) 1 6	" " "	
		3rd Div. (p.ac.) 0 9	" " "	
104. LOWER KOOWEERUP }	51,954	1st Div. (p.ac.) 2 0	" " "	2,400
		2nd Div. (p.ac.) 1 0	" " "	
		3rd Div. (p.ac.) 0 6	" " "	
105. KANYAPELLA ..	16,571	Per acre .. 0 6	" " "	68
106. LOCH GARRY ..	40,886	.. .. 0 6	" " "	220

## 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 of Charge.
1. BACCHUS MARSH ..	6,627	3,305	3,305	22s. 6d.	1st October, 1925, to 30th April, 1926
2. COHUNA .. ..	34,675	22,326	22,409	6s.	1st September, 1925, to 30th April, 1926
3. DINGEE .. ..	6,270	4,710	4,710	7s.	" " " "
4. ECHUCA NORTH ..	13,544	5,547	5,547	7s. 6d.	" " " "
5. GANNAWARRA ..	52,595	20,268	20,268	6s.	" " " "
6. KOONDROOK ..	61,110	18,659	18,659	6s.	" " " "
7. MERBEIN .. ..	8,274	7,739	19,247	24s.	1st August, 1925, to 30th April, 1926
				Min. 60s. per acre	
8. MYSTIC PARK ..	18,025	8,992	2,996	6s.	1st September, 1925, to 30th April, 1926
9. NYAH .. ..	3,678	3,059	7,589	20s.	1st August, 1925, to 30th April, 1926
				Min. 50s per acre	
10. ROCHESTER ..	143,793	39,769	39,869	6s.	1st September, 1925, to 30th April, 1926
11. RODNEY .. ..	267,511	188,808	51,705	6s.	" " " "
12. SHEPPARTON ..	24,754	20,753	20,753	6s.	" " " "
13. STANHOPE .. ..	26,030	18,937	17,344	6s.	" " " "
14. SWAN HILL .. ..	35,267	18,506	18,506	6s.	" " " "
15. TONGALA .. ..	36,212	26,780	23,481	6s.	" " " "
16. TRAGOWEL PLAINS	183,524	129,973	26,079	7s.	" " " "
17. TRESCO .. ..	3,882	2,683	6,744	16s.	1st January, 1925, to 31st Dec., 1925
				Min. 40s. per acre.	
18. WERRIBEE .. ..	9,983	7,895	7,917	12s.	1st October, 1925, to 30th April, 1926

## CONTRACTS.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1926.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
2256	G. F. Sewell Pty. Ltd.	300 Channel Meter Wheels	1,380	0	0
2257	L. C. Luxford	Timber for Bridges, Maffra District	731	13	4
2258	Hartney, M.	East Goulburn Main Channel Extension	696	11	3
2259	A. Rankin	East Goulburn Main Channel Extension	672	1	1
2260	Walker & Ashton	East Goulburn Main Channel Extension	869	17	7
2261	T. J. Dennis	Timber for Bridges, Maffra District	731	13	4
2262	W. E. Chatterton	Boring for Water, Walpeup West	350	0	0
2263	Australian Cement Ltd.	100,000 bags cement	26,041	13	4
2264	Australian Wood Pipe Co.	Wood Stave Pipes, Bendigo	2,785	5	10
2265	J. T. Robinson	Deakin Main Drainage Channel	762	6	3
2266	Orton & Burns	Pipe Scrapers, Bendigo	183	8	0
2267	J. Dorman	Firewood, Merbein	1,286	0	0
2268	W. Russell	Firewood, Merbein	1,314	13	0
2269	M. O'Halloran	Firewood, Merbein	318	15	4
2270	J. J. O'Halloran	Firewood, Merbein	673	15	4
2271	E. Horsfall	Firewood, Merbein	750	0	0
2272	Michael Cairns	Firewood, Merbein	1,617	6	0
2273	A. J. Bell	Firewood, Nyah	238	1	9
2274	J. L. Mannix	Firewood, Nyah	226	16	0
2275	F. W. McCredden	Firewood, Nyah	225	0	0
2276	Alex, Algie	Firewood, Nyah	222	18	4
2277	W. H. Duffy	Firewood, Nyah	231	15	0
2278	B. Harris	Firewood, Nyah	210	8	4
2279	P. Mannix	Firewood, Nyah	225	0	0
2280	G. R. Lacey	Firewood, Nyah	227	5	0
2281	Wm. Ball	Firewood, Nyah	229	1	0
2282	G. Wakefield	Firewood, Merbein	1,000	0	0
2283	I. J. Shields	Firewood, Merbein	1,650	0	0
2284	T. Riordan	Firewood, Merbein	842	1	0
2285	J. F. Considine	East Goulburn Main Channel Extension	530	19	5
2286	Hume Pipe Co.	Concrete Pipes, Castlemaine	586	5	0
2287	F. F. Heil	Tandarra-Calivil Channel	553	15	9
2288	Ketterer & O'Halloran	East Goulburn Main Channel Extension	706	4	0
2289	Ketterer & O'Halloran	East Goulburn Main Channel Extension	658	13	4
2290	Australian Wood Pipe Co.	Wood Stave Pipes, Charlton	5,794	4	4
2291	J. W. Beattie	Deakin Main Drainage Channel	297	0	10
2292	F. Campara	Deakin Main Drainage Channel	253	11	9
2293	F. Murphy	Deakin Main Drainage Channel	406	12	1
2294	A. Puls	Deakin Main Drainage Channel	227	18	1
2295	E. Connelly	Deakin Main Drainage Channel	651	3	6
2296	G. Campara	Deakin Main Drainage Channel	292	5	11
2297	W. H. Newton	Deakin Main Drainage Channel	258	19	0
2298	S. Fitch	Deakin Main Drainage Channel	308	14	9
2299	S. Fitch	Deakin Main Drainage Channel	240	15	3
2300	S. Fitch	Deakin Main Drainage Channel	257	13	1
2301	W. J. Pearse	Deakin Main Drainage Channel	720	10	0
2302	W. J. Pearse	Deakin Main Drainage Channel	727	16	11
2303	J. F. Considine	Deakin Main Drainage Channel	545	10	10
2304	J. F. Considine	Deakin Main Drainage Channel	705	17	1
2335	T. Perkins	Kaarimba Main Channel	563	13	4
2306	D. Friar	Kaarimba Main Channel	278	5	4
2307	J. Darlow	Kaarimba Main Channel	258	8	7
2308	Mooney & Abrahams	Kaarimba Main Channel	786	5	9
2309	Australian Cement Ltd.	75,000 bags Cement	19,531	5	0
2310	Kandos Cement Co.	25,000 bags Cement	6,354	3	4
2311	W. M. Bartels & Sons	Erection House, Pyramid Hill	92	7	6
2312	A. Hutchinson	Kyabram No. 3 Channel	205	6	8
2313	A. E. Pell	Kyabram No. 3 Channel	195	0	0
2314	C. Cameron	Kyabram No. 3 Channel	215	18	5
2315	D. Gemmill	Kyabram No. 3 Channel	228	19	9
2316	Dorman Long & Co. Ltd.	Steel Pump House Structure, Millewa	590	0	0
2317	Thompsons Engineering & Pipe Co.	Mild Steel Pipes, Millewa	4,674	7	1
2318	Mooney & Abrahams	East Goulburn Main Channel Extension	788	8	0
2319	Frazer & Horn	Erection Dwelling, Swan Hill	697	11	0
2320	Thos. Perkins	East Goulburn Main Channel Extension	784	8	0
2321	G. Cooke	East Goulburn Main Channel Extension	685	4	0
2322	T. Perkins	East Goulburn Main Channel Extension	377	16	5
2323	G. M. Billingham	East Goulburn Main Channel Extension	320	0	2
2324	Austral Otis Engineering Co. Ltd.	Hydraulic Lifters, Sugarloaf Reservoir	2,636	0	0
2325	Thompsons Engineering & Pipe Co.	Gate Stems, &c., Sugarloaf Reservoir	1,736	10	0
2326	Australian Cement Ltd.	100,000 bags Cement	26,041	13	4
2327	Thompsons Engineering & Pipe Co.	Water Tube Boiler, Millewa	3,463	19	0
2328	Thompsons Engineering & Pipe Co.	Steam Engine, Millewa	3,911	5	0
2329	M. Phylant	Tutchewop-Boga Main Channel	205	7	11
2330	Australian Wood Pipe Co.	Wood Stave Pipes, Wonthaggi	826	8	9
2331	Jones & Coughlan	Tutchewop-Boga Main Channel	952	8	1
2332	Australian Wood Pipe Co.	Wood Stave Pipes, Mornington Peninsula	10,554	10	0
2333	S. H. McLean	Charlton-Wycheproof Channel	224	19	6
Carried forward			149,598	6	11

## CONTRACTS—continued.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1926—continued.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
		Brought forward .. ..	149,598	6	11
2334	W. J. Smith .. ..	Tutchewop-Boga Main Channel, Fish Point ..	213	6	11
2335	J. A. Smith .. ..	Tutchewop-Boga Main Channel, Fish Point ..	104	15	6
2336	Coughlan & Sons .. ..	Kaarimba Main Channel .. ..	670	6	10
2337	Coughlan & Sons .. ..	Kaarimba Main Channel .. ..	582	11	0
2338	J. Vearing .. ..	Waranga-Kyabram Main Channel .. ..	548	8	2
2339	F. Thomas .. ..	Waranga-Kyabram Main Channel .. ..	242	8	8
2340	Hume Pipe Co. .. ..	Steel Pipes and Reinforced Concrete Pipes, Mornington ..	11,649	0	0
2341	Perry Engineering Co. .. ..	Two Steam Locomotives, Hume Reservoir ..	4,679	0	0
2342	George Burgess .. ..	Kaarimba Main Channel .. ..	264	16	8
2343	L. McCrohan .. ..	Kaarimba Main Channel .. ..	364	8	9
2344	W. McKay .. ..	Waranga-Kyabram Main Channel .. ..	749	13	3
2345	W. McKay .. ..	Waranga-Kyabram Main Channel .. ..	406	9	5
2346	A. Hutchinson .. ..	Waranga-Kyabram Main Channel .. ..	161	11	0
2347	J. Grant .. ..	Waranga-Kyabram Main Channel .. ..	279	6	5
2348	W. Fitzpatrick .. ..	Charlton-Wycheproof Main Channel .. ..	302	6	3
2349	W. Dole & Son .. ..	Charlton-Wycheproof Main Channel .. ..	277	12	1
2350	C. O. McLearn .. ..	Charlton-Wycheproof Main Channel .. ..	271	9	8
2351	D. Friar .. ..	Kaarimba Main Channel .. ..	286	8	8
2352	Mooney & Abrahams .. ..	Kaarimba Main Channel .. ..	395	19	6
2353	Harrison Bros. .. ..	Erection Residence, Red Cliffs .. ..	198	10	0
2354	O'Halloran Bros. .. ..	Congupna No. 2 Channel .. ..	186	13	2
2356	D. Friar .. ..	Congupna No. 2 Channel .. ..	436	1	0
2356	O'Halloran Bros. .. ..	Congupna No. 2 Channel .. ..	219	4	0
2357	J. H. Lyth .. ..	Erection House, Lancaster .. ..	54	10	0
2358	Australian Cement Ltd. .. ..	60,000 bags Cement .. ..	15,500	0	0
2359	G. Billingham .. ..	Congupna No. 2 Channel .. ..	181	5	9
2360	W. Archer .. ..	Kaarimba Main Channel .. ..	303	14	9
2361	Walter Walls .. ..	Culgoa Earthen Storage .. ..	485	1	8
2362	J. G. Stewart .. ..	Fish Point Main Channel .. ..	193	17	4
2363	A. J. Fisher .. ..	Embankment, Karadoc Swamp .. ..	910	17	6
2364	E. B. Kelly .. ..	Reinforced Concrete Standpipe, Wonthaggi ..	2,102	4	0
2365	E. J. Dunstan .. ..	Fish Point Main Channel .. ..	329	5	4
2366	C. Fraser .. ..	Fish Point Main Channel .. ..	346	14	0
2367	J. Powrie .. ..	Fish Point Main Channel .. ..	363	12	8
2368	W. Anderson & Sons .. ..	Dragline Excavator, Waranga Western Main Channel ..	4,450	0	0
2369	W. Ewart .. ..	Tutchewop-Boga Main Channel .. ..	495	1	4
2370	G. Billingham .. ..	Congupna No. 2 Channel .. ..	203	10	0
2371	A. Rankin .. ..	Congupna No. 2 Channel .. ..	359	14	0
2372	J. W. Baker, Junior .. ..	Fish Point No. 2 Channel .. ..	148	15	4
2373	Huddleston & Cloonan .. ..	Fish Point Main Channel .. ..	653	15	4
2374	Australian Cement Ltd. .. ..	85,000 bags Cement .. ..	21,958	6	8
2375	W. E. Chatterton .. ..	Boring for Water, Walpeup West .. ..	332	10	0
2376	L. W. Angus .. ..	Tutchewop-Boga Main Channel .. ..	136	0	6
2377	A. T. Harman .. ..	Dragline Excavator, Waranga Western Main Channel ..	5,952	0	3
2378	F. S. Blakeway .. ..	Restdown-Wharparilla Main Channel .. ..	179	0	0
	Sundry small contracts at piece-work rates .. ..	.. ..	208,635	0	0
	—Distributary Channels .. ..	.. ..			
		Total .. ..	£437,363	10	3

## DIRECT LABOUR.

The construction of the larger works is still being mainly carried out by "Direct Labour." The principal payments during the year were on the following works:—

Works.	Amount.
Goulburn Main Channels .. ..	£140,112
River Murray Storages (Hume Reservoir, Torrumbarry and Mildura Locks) .. ..	133,145
Wimmera Mallee System .. ..	98,742
Maffra District (Glenmaggie Reservoir) and Sale District .. ..	80,310
Sugarloaf Reservoir .. ..	76,436
Merbein, Millewa, Red Cliffs, Carwarp, and Walpeup Districts .. ..	70,479
Waranga Reservoir .. ..	49,600
Kooweerup, Cardinia, and other Flood Protection Districts .. ..	46,771
Mornington Peninsula Waterworks District .. ..	46,404
Coliban and Other Districts .. ..	15,174
Bacchus Marsh and Werribee Districts .. ..	6,668
Mallee Tanks, Clearing Roads (Mallee) .. ..	5,250
Total .. ..	£769,141

## WORKS CARRIED ON OR COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1926.

### COLIBAN DISTRICT.

The Upper Coliban Reservoir was filled to the new full supply level during the year, thus impounding 25,700 acre feet, or 3,200 acre feet over previous capacity.

The work of enlarging the Main Channel, more particularly in the Bendigo Section, has been pushed forward. Several old timber flumes and road bridges have been replaced by concrete structures of larger capacity. The concrete ground fluming at Sutton Grange has been extended, while portions of the Main Channel itself have been regraded and enlarged. These works will have a beneficial effect in distribution at the Bendigo end of the system. On the Main Channel, where the Bendigo Branch begins, new regulating works and measuring weir have been constructed.

A commencement has been made on enlarging the Huntly Channel, in the Bendigo District, with a view to meeting the increasing demand in the districts served from Spring Gully Reservoir; and the capacity of that reservoir is being increased to facilitate distribution of water throughout part of the system governed by it.

During the year an improvement to the reticulation system of Bendigo has been effected by laying a mile of 12-inch diameter pipe from High-street to Myrtle-street, Quarry Hill.

Two timber flumes in the Harcourt District have been replaced by concrete syphons of ample capacity, and a reinforced concrete structure has been built to replace the old timber bridge over the outlet channel from Harcourt Reservoir.

The improvements of the Castlemaine Town supply recently carried out have been thoroughly tested during the year, and have proved satisfactory under all conditions and of great benefit to the consumers. At Campbells Creek a large portion of the Diamond Gully Syphon, a spirally riveted steel pipe which carries important irrigation supplies, has been restored in reinforced concrete, and this restoration work will be continued as it becomes necessary.

### IRRIGATION AND WATER SUPPLY DISTRICTS.

#### RODNEY DISTRICT.

During the year the area irrigated in Rodney District was 52,527 acres, which included 30,000 acres of lucerne and 8,500 acres of orchards. These figures show increases of approximately 5,000 acres and 500 acres of lucerne and orchards respectively over the corresponding totals for the previous year and further plantings of lucerne and orchards are proceeding.

The construction of the new Waranga-Kyabram Main Channel is nearing completion, and will be sufficiently advanced next season not only to improve the service to the western portion of the district but also to ensure an ample and regular supply to Wyuna. This important channel, which takes off from the Waranga-Rodney Channel near the Waranga Reservoir, passes through the parishes of Girgarre East, Kyabram East, and Taripta, finally dividing into two branches which discharge into the Bray and Wyuna Channels respectively. When completed it will have a total length of about 20 miles, and will include some 40 concrete arch bridges, besides numerous checks, outlets, drainage syphons, and other structures. It is intended to construct a Loop Channel, taking off from the Waranga-Kyabram Channel, west of Merrigum, to connect with the Waranga-Deakin Main Channel and thus supplement the supply to Deakin and Tongala Districts.

In order to facilitate the delivery and regulation of the water, 13 new checks, 22 outlets, and 3 culverts have been provided on existing channels. Several syphons have also been provided to deal with surface drainage. One of the most important of these syphons is that under the Eastern Channel at Wyuna, which was carried out in conjunction with the Deakin Shire Council, and will prevent flooding of the main Shepparton-Echuca road. A new automatic flood gate was provided in the Goulburn Levee at the end of the No. 1 Wyuna Branch Channel to replace a like structure destroyed by floods.

Portions of existing channels, about 25 miles in all, were remodelled and enlarged to cope with the ever-increasing demand for water. Necessary repair works were carried out on existing channels—an important work of this nature being the trenching of the embankments of about 1 mile of the new Wilson Channel, which had shown signs of seepage. The head of the Wilson Channel for about 1 mile is also being lined with stone to prevent erosion of the banks.

An additional water bailiff's residence was erected during the year, and there are now ten of the water bailiffs of Rodney District occupying and renting residences provided by the Commission. These residences have been so located that greater efficiency will result. With a view of facilitating the distribution of water, further telephones have been installed at water bailiffs' residences, and of 27 head and ordinary bailiffs 18 are now connected by telephone either to local postal exchanges or by private line to the Commission's District Office at Tatura.

Wilson's, Harper's, and Maher's Estates, which were purchased for Closer Settlement, have been subdivided and supplied with water, and have provided holdings for 18 new families, who are now actively engaged in improving their blocks. There are now 162 Closer Settlement blocks, irrespective of Wyuna Closer Settlement area, in the district. Of this number, 123 are occupied by soldier settlers, 23 by civilians, and 16 by settlers from overseas. The property of 356 acres known as Crawford's, situate near Tatura, has been purchased for Closer Settlement, and will be subdivided and made available at an early date. The demand for settlers' blocks is good, there being no unoccupied Closer Settlement blocks in the district.

During the year the district, which contains 418 square miles, was extended by the addition of allotment 42, parish of Waranga, but was reduced by an equivalent area by the excision of Merrigum township, which was constituted a Waterworks Trust District. The constitution of this District is indicative and typical of the progress and prosperity of the towns in the Rodney District. The more important towns, such as Kyabram, Tatura, Merrigum, and Mooroopna show rapid and solid progress, and are all thriving business centres. The outlying townships, such as Toolamba, Wyuna, and Undera are also progressing rapidly, the latter, which is in an exclusively farming district, having a telephone exchange with 100 subscribers. With the additional areas being planted each year under lucerne and orchards general prosperity is apparent on all sides.

To deal with the fruit crops in the Ardmona and Tatura Districts a new Cannery was established at Mooroopna. This Cannery, together with that at Kyabram, which has been established for some years, processed, last year, fruit totalling 5,850 tons.

#### DISTRICTS ADMINISTERED FROM SHEPPARTON CENTRE.

In the Shepparton District the surface drainage scheme for Thomas's and Dennis's Estates, comprising 6 miles of drains, has been completed. A system of seepage drains was constructed in the No. 1 and No. 2 Estates involving the deepening of 3 miles of existing surface drains and the construction of 2 miles of new deep drains. These works provide for the drainage of twenty blocks. The surface drainage scheme was further extended by the construction of 2 miles of drains, and many minor improvements throughout the district have been carried out. A scheme has also been prepared for the drainage of Harper's and Gribben's Estates, and arrangements have been made for commencing the work.

Gribben's Estate, adjoining Harper's Estate, which was purchased for Closer Settlement, has been subdivided into ten blocks; houses have been erected thereon, the blocks allotted, and the supply channel for the subdivision will be brought into operation during the coming season.

Work has proceeded satisfactorily, during the year, on the extension of the channel system to the north of Shepparton. The Congupna No. 2 Channel, 14 miles in length, with all necessary structures, has been completed. The Kaarimba Main Channel, which will eventually serve lands to the south of Nathalia, has been carried out for a length of 20 miles, all structures have been built, and a further 6 miles, now under construction, will be completed at an early date.

In the South Shepparton District several improvements and extensions have been carried out, the chief of which was the construction of two pipe syphons under the railway line near Arcadia.

The Main Eastern Channel from the Goulburn Weir has been extended in a northerly direction from its original terminus (about 2 miles north of the Broken River) for a distance of 16 miles 35 chains through the parishes of Shepparton, Pine Lodge, and Katandra. The completion of this portion will provide for the supply to an area proposed to be constituted an Irrigation and Water Supply District. This area includes about 9,000 acres at Katandra purchased by the Commission for Closer Settlement. During the year  $7\frac{1}{2}$  miles of channel excavation were completed; three large syphons (two 12 feet and one 10 feet diameter), numerous bridges, and minor structures, all of reinforced concrete, were constructed. The permanent survey for the further extension of this channel through the parish of Dunbulbalane has been completed.

A commencement was made in April, 1926, with the construction of Distributary Channels for the supply of the land at Katandra previously referred to as purchased by the Commission for Closer Settlement. Work is being concentrated on the southern portion to enable some 4,000 acres to be made available during the forthcoming season. This work involves the construction of over 15 miles of concrete-lined channels and structures. Six and a half miles of channelling have already been excavated, 3 miles of which have been lined with concrete; and similar work on a further length of 4 miles is in progress. More than half of the structures are already built.



Notwithstanding that considerable difficulty was experienced in maintaining supplies of water for irrigation in the Shepparton Centre at the most critical period during the season 1925-26, the fruit-growers had a very profitable year, no less than 6,900 tons of fruit being handled by the Shepparton Cannery. The prosperity of the district is reflected by the manner in which the town of Shepparton is extending, no less than 61 houses being commenced and completed during the year 1925, and it is expected that there will be even a greater increase during 1926. At Lemnos, situated 6 miles north-east of Shepparton, which comprises principally soldier settlement, established six years ago and planted with fruit trees, a hall has been built and telephone facilities provided, a local exchange with 33 subscribers having been established.

#### SWAN HILL DISTRICT.

Over 4 miles of channel were remodelled and lined with cement concrete. The total length of lined channels in this district is now  $17\frac{1}{2}$  miles.

Three miles of drainage channel and 2 miles of distributary channel were constructed, while 2 miles of distributary channel were remodelled, channel cleaned out, and banks topped up.

Many new structures were built, including an escape into the River Murray near the Pumping Station, an extension of the wings and apron of the check and drop at the offtake to the Western Channel, establishment of 26 meter outlets, 9 checks, and 12 culverts; as well as  $4\frac{1}{2}$  chains of 18-inch pipe drain through the hill on the outfall to the drain from the estate known as Rangott's.

In view of the great strain on the gravitation supply owing to the low river flow it was found necessary to use the pumps which had been held in reserve, and in this way the Commission was enabled to supplement gravitation supplies by pumping, and irrigation was thus maintained throughout the season without serious loss to irrigators.

#### DISTRICTS ADMINISTERED FROM KERANG CENTRE.

In the districts administered from Kerang Centre irrigation commenced early in September, 1925. The absence of any useful rain during the following five months gave rise to a great demand for water. Full streams were available until the end of January, when, on account of the considerably diminished flow in the River Murray, it became necessary to apportion the available supplies to all districts depending on the Torrumbarry Weir. This apportionment was made at conferences of officers representing the districts drawing supplies from Torrumbarry. On 21st March, 1926, however, steady soaking rains fell throughout the district, causing a complete cessation of irrigation operations for the season.

During the year further improvements were effected to the Kerang District irrigation system. Modern reinforced concrete head checks and syphons, together with meter outlets and culverts to replace worn out timber structures, were built and sections of the principal distributary channels were remodelled to increase their discharging capacities. No. 11 Channel was extended to serve lands adjoining Foster's Swamp near Kerang. The work of installing meter outlets in the Wandella section is proceeding satisfactorily.

In the Koondrook District the work of removing sludge and water-weeds from main channels and distributaries was continued. In order to more effectively control the channel system between Myall and Benjeroop, escape works and a regulator were constructed at the extremity of the Murrabit Estate Irrigation System. A 30-inch diameter low-level pipe escape and concrete regulator were built into the old No. 2 gravitation inlet on the River Murray near Myall. Two new spur channels for the service of lands between the main road and Reedy Creek at Murrabit were completed.

New irrigation works designed to serve an area of upwards of 6,000 acres situated between the Murray and Loddon Rivers in the parish of Benjeroop were in full operation during the past season. This system was further extended to serve an area of 660 acres of River Murray frontage lands known as Flowerday's Estate, which land is now fully occupied, having been subdivided by the Commission into allotments suitable for citriculture and general farming.

The drainage works of Tye's Riverside Estate at Gonn Crossing, are now in full operation, and have been extended to serve adjoining closer settlement lands.

A commencement was also made with the construction of drainage works to serve the Murrabit Closer Settlement Estates, comprising a total area of 2,500 acres, situated along the River Murray between Gonn Crossing and Myall. Approximately 5 miles of drain, together with structures, have been completed. This scheme, which will eventually serve an area of about 5,000 acres, is divided into two systems, the high-level system being kept separate from that of the low level to avoid concentration during heavy storms. The main and branch drains will cover a length of approximately 18 miles, while the structures throughout will be of the permanent full-water-way type to provide for future deepening should this become necessary.

The irrigation works of the Third Lake District—an area of 13,000 acres—were completed and operated during the past season. No. 10 Spur Channel was extended a distance of 2 miles to command lands to the west of Benjeroop township, and the design provides for future extensions in this direction. The district was further extended, bringing under the influence of gravitation the lands situated between the Loddon River and Barr Creek. The works for this extension comprise a 36-inch reinforced concrete syphon 250 feet in length under the Loddon River, together with culverts, subways, and checks, and  $4\frac{1}{2}$  miles of main and distributary channels.

During the irrigation season the weir across the Little Murray River at Benjeroop was in operation heading up the water sent down from Torrumbarry Weir for the Swan Hill District when the River Murray at Benjeroop receded below the minimum draw-off level.

Works described in the last report for the supply of lands between the western boundary of Gannawarra District and the Loddon River were in use during the past season. Two additional checks were built in the main channel to enable further lands to be brought under gravitation supply. A new spur channel was constructed from the Cohuna Left Branch Channel to supply allotments recently included in the Gannawarra section.

#### DISTRICTS ADMINISTERED FROM COHUNA CENTRE.

The exceptionally dry weather from January onwards was reflected in a greatly diminished flow in the River Murray, causing anxiety in regard to districts drawing their supplies from Torrumbarry Weir. Weekly conferences of the District Officers concerned were held, which resulted in a fair and equitable distribution of the water, so that inconvenience was minimized until the position was relieved by copious rains in March.

In the Cohuna District important works in connexion with the conversion of the Barr Creek from an irrigation water-carrier to a drain have been continued, and are now practically completed. The Gannawarra District, hitherto supplied from the Barr Creek, is now served direct from the Gunbower Creek by a modification of certain portions of the works at the head of the Gannawarra system. A reinforced concrete syphon, 100 feet long and 6 ft. 6 in. diameter, was constructed alongside the Barr Creek near Gardens Dam, and on its completion the creek was diverted over it. Other channels and structures have been made, the most important of the latter being Grays Bridge at the north end of Cohuna township. An old bridge there was demolished, and in its place a new one erected—60 feet by 24 feet—at a level sufficiently high to allow of the uninterrupted flow of water for Gannawarra District.

The old pumping plant for Cohuna District, no longer required owing to the operation of the Torrumbarry system, was dismantled during the year and despatched to the Millewa District for use there, Cohuna District of course being credited with its value. The flume which formerly conveyed supplies from the pumps over the Gunbower Creek to the Cohuna system was, owing to its disrepair, blocked off by a regulator which, while allowing sufficient supply to those irrigators on Gunbower Island, can also be shut down if required to safeguard the Cohuna system at this point. The flume over the Barr Creek near Cohuna township, being no longer required, was also blocked off.

Maintenance and cleaning out of the drainage system in Cohuna District was continued, and there is no doubt that it is proving of great benefit to land-holders. Further beneficial effects are expected to result from the conversion of Barr Creek to a drainage outlet, instead of being as previously a supply channel.

The policy of replacing open outlets by Dethridge meters in Cohuna and Gannawarra Districts is being continued.

In the Cohuna Urban District several pipe extensions were made, and some old reinforced concrete pipe main was replaced by cast-iron pipes. In view of the demands on the pumping plant, due to increasing population, a new engine and pump of greater capacity were installed.

In the new Leitchville District works were completed and continuous supplies given during the season. Dethridge meters to record water used have been supplied to each holding.

Portion of the drainage works for the Leitchville District is completed, and it is anticipated that the balance will be finished during the ensuing year.

In the Leitchville Urban Division some remodelling was effected. The pump and engine were moved from their old position to a point adjacent to the reservoir, and are now giving much better results.

#### DISTRICTS ADMINISTERED FROM LODDON CENTRE.

The main features of last season were light winter rainfall followed by a hot dry summer and absence of the usual spring rains, with the result that a serious water famine would have occurred during the summer had the channel supplies not been available. Dam filling was commenced early in anticipation of a dry season, and this enabled a supply to be sent to many areas not usually supplied.

The construction of the Tandarra-Calivil Channel and subsidiary works to improve the supply to Tragowel Plains District, and thereby relieve the strain on the Waranga Western Channel, has been carried on satisfactorily.

A steam excavator has been at work on the Waranga Western Channel between the crossing of the Piccaninny Creek and the offtake of the Tandarra-Calivil Channel. The earthwork and structures of the latter channel are now nearly complete through to the No. 1 Tragowel Main, and the old No. 1A Distributary Channel is being cleaned out and extended to the No. 2 Tragowel Main. These works should be sufficiently advanced by the middle of the coming watering season to enable these two mains to be supplied through the new Tandarra-Calivil Channel, and as it supplies three-fourths of the district, a reduction of many miles, and a great saving of water and time should result, besides enabling the district to receive larger supplies at peak periods.

As a result of a better supply being provided, the work of remodelling the districts has been put in hand and is well advanced. Tragowel Plains and Boort Districts include many of the oldest irrigation works in the State, some being about forty years old. The old wooden stops and subways are in many cases past repair, and the work of replacing these by reinforced concrete is proceeding steadily. During the year, upwards of 50 bridges in Tragowel Plains District were replaced or repaired. About 60 miles of channel have been remodelled, deepened, or cleaned out.

The supply to the area of about 14,000 acres on the east side of the Tragowel Plains District, including the subdivision of the estate known as Gash's, is practically complete, and a much needed supply was sent down the channels last summer for domestic and stock use. The works for this area comprise some 23 miles of channel, involving about 120,000 cubic yards of earthwork; 35 concrete road and occupation bridges and culverts; 18 stops; 6 syphons of a total length of about 630 feet; and a number of gates and meter outlets.

Advantage was taken of the unusually dry condition to clear away nearly a mile of lignum scrub and rushes from the Pennyroyal Creek below its effluence from the Serpentine, with a view to facilitating the discharge of floodwaters in this locality and in the Nine Mile Creek.

An iron panelled residence was constructed at Pyramid Hill for the Assistant Engineer, and a house shifted and re-erected as quarters for a water bailiff.

In Boort District twenty bridges have been replaced with pipe culverts, and a dozen timber stops with concrete ones. Seven old wooden subways were replaced by pipe syphons, and three new pipe subways installed to deal with flood waters. A 3-foot syphon, 66 feet long, was built in the Wandella No. 2 Main Channel to relieve flood conditions in the Wandella Forest, and a 3-foot by 18-foot syphon with stop and flood escape combined was constructed in the Twelve Mile Channel. A commencement was also made with the installation of the meter outlets in the Appin portion of the district.

The Appin Channel, about 4 miles long, is complete, and will be ready to bring irrigation water to about 1,400 acres of new land next season.

The old North Boort Weir has been sheeted down for 6 feet and fitted for dropbars on the crest. About 5 miles of the North Boort Channel and 10 of the distributary channels have been cleaned out.

In Dingee District and Township general maintenance work has been carried out.

In the proposed Calivil District, the distributary channels to supply land purchased for closer settlement are being constructed, and should be completed by next season.

Repairs to the valve chamber of Laanecoorie Weir, to the offtake gate at Bridgewater, and to the old Kinypanial Weir have been carried out. Dropbars have been installed in the new Loddon Weir at the end of the recently completed extension of the Waranga Western Channel, and use was made of the weir to hold compensation water and to serve as a temporary storage. The outlet of the extension into the Loddon has been beached.

Repairs and alterations have been made to the Urban works. At Macorna three new 4,000 gallon tanks were erected to replace the old ones, and the stand was strengthened. At Mitiamo an 8 h.p. engine and pump were installed, the reservoir was relined with reinforced concrete to stop seepage, and the pipes were repaired. The Pyramid Hill Waterworks Trust District was taken over on 1st January, and became the Pyramid Hill Urban District under the control of the Commission. The pumping plant was overhauled, the reserve drained and swamp water banked off from entering the storage dam, a new concrete pipe inlet provided, and minor extensions of the reticulation were carried out.

In the Loddon United Trust Area, about 3 miles of the Mitiamo Channel have been cleaned out to prevent overflow. About 7 miles of the Catumnal Channel and branches have been cleaned out, and several concrete stops and culverts installed to replace worn-out structures.



## DISTRICTS ADMINISTERED FROM ROCHESTER CENTRE.

During the year the area of the Rochester District was increased from 125,636 acres to 143,793 acres by the addition of 18,157 acres west and north-west of the district. The distributary channel system, some 34 miles in length, to serve this area has been completed. The Restdown Channel,  $7\frac{1}{2}$  miles in length, was also completed, and  $1\frac{1}{4}$  miles of the old Campaspe Trust Channel were remodelled to serve as a connecting link with the Restdown-Wharparilla Main Channel.

A commencement has been made with the Restdown-Wharparilla Main Channel, starting at 43 miles on the Waranga Western Channel and running to a point on the River Murray north of Wharparilla. This channel, with a capacity of 100 cusecs, will be over 20 miles in length and will supply the Restdown Channel and the Wharparilla area, and will also furnish a better supply to the Echuca Estate and Bamawm Extension.

Provision has been made for the supply of irrigation water to a further area of some 16,800 acres adjoining the 18,157 acres added last year already referred to. About 28 miles of service channels are required, and these are nearing completion.

Concrete road and occupation crossings, checks, drops, meter outlets, drainage subways and special outlet structures from the Waranga Western Channel have been installed, and everything should be in readiness for the 1926-27 irrigation season.

Good progress has been made with drainage works and the Bamawm Drainage Channel No. 2, 6 miles 40 chains in length, is now operating successfully. The drainage channels have reduced the water table considerably in their immediate vicinity, and with the co-operation of land-holders, by means of private drains, excess water troubles can be reduced to a minimum on nearly all blocks in Bamawm.

The Nanneella Drainage Channel, having been extended from McCurrys Swamp for a distance of 2 miles 40 chains into an area of small closer settlement blocks, has materially improved conditions in this area. The Ballendella Drainage Channel was also extended 25 chains to drain a low-lying allotment not previously connected.

Following the private subdivision of a property in Bamawm known as Wright's, the necessary concrete structures were erected by the Commission, the cost being paid by the estate.

An old timber bridge on the Timmering-road was replaced by a concrete structure, and the usual maintenance works for the district were carried out.

Two houses, one for a water bailiff and one for an inspector, are being erected, and further housing will be provided for bailiffs who will control the channels in the areas to be added to the district.

In the Campaspe District further attention was paid to the preservation of the weir. The practice of filling the boxes with stone and grouting these in and covering with concrete was continued, while a section at the back of the weir was opened up and re-pugged.

In Echuca North District all necessary maintenance work was carried out.

The districts as a whole are showing increased prosperity and the areas sown to lucerne and other irrigable crops are extending rapidly.

## DISTRICTS ADMINISTERED FROM TONGALA CENTRE.

The Deakin Main Drainage Channel, which is of utmost importance to all the districts administered from this centre, has been pushed on throughout the year; 21 miles of channel excavation have been completed; and one 21-foot arch type, twelve 19-foot arch type, and six 17-foot arch type road and occupation bridges were constructed. Progress with the earthworks and structures was somewhat impeded owing to the difficulties experienced with surface drainage, but this is now overcome, and the channel is practically complete to the junction of the Nanneella Drainage Channel. Road crossings are now being put in to connect with Stanhope District. A draft scheme is also being prepared for the necessary lateral drains, and it is intended to proceed with the construction of these drains on completion of the Main Drain.

In the Tongala District all the outlets required in the channels to several new extensions mentioned in last Report have been completed. Owing to the severe wash on the face of channel banks caused by wind it was necessary to stone face 120 chains of banks and to beach several structures with heavy stone in the same way. Owing to constant scour during the watering season, it was necessary to beach 25 chains of spur channel. During the year investigations were carried out to trace as far as practicable the loss of water in the Main Channel, with the result that it was found that, by reducing the depth of water, the loss could be considerably lessened.

There was an increase of 1,425 acre feet in the water rights allotted in this district for the year, brought about by the graduated increases of water rights.

The formation of a District Herd Testing Association has given an impetus to dairying, and is being well-supported by the overseas settlers, of whom there are now 50 in the district. These overseas settlers are rapidly adapting themselves to the work, and the general development of their holdings indicates every prospect of their turning out successful settlers.

Four iron panelled houses for settlers have been erected in the district.

In the Stanhope District, owing to the graduation of the water rights, there has been an increase in the total water rights to the district of 418 acre feet. The lack of an effective outfall to the channel system of this district has caused the channels to be damaged by wind wash, necessitating facing 200 chains of banks during the past year, but this work will be reduced to a minimum by the drainage system now under construction.

In the Stanhope Urban Division the increased population of the township has rendered it necessary to install an oil engine in addition to the windmill to amplify the supply.

In the Deakin District the construction of 9 miles of channels to supply estates known as Pell's and Colbert's, now subdivided and settled by nine settlers, has been completed. These lessees are making good progress with their subdivision fencing and outbuildings, while nine iron panelled houses have been erected by the Commission. General maintenance and repair works carried out in this district consisted of cleaning out 4 miles of channel and topping up the banks of same.

In the portion of the Echuca North District administered from Tongala an additional length of 40 feet of flood syphon was constructed on the Main Channel, bringing the total width of floodway to 80 feet. Minor works consisted of repairs to the river outlet.

The whole district is showing first class development, with a large increase in the area under graded lucerne.

In Kanyapella Flood Protection District, necessary repairs and maintenance works were carried out, while on the Goulburn the whole of the waterway between the levee banks at McCoy's Bridge has been cleared of gum suckers to give a clear flow through the bridge to any flood waters.

#### BACCHUS MARSH AND WERRIBEE DISTRICTS.

In Bacchus Marsh Irrigation District the channel to supply soldier settlement blocks in the area known as Hopetoun has been lined with concrete for a distance of 16 chains. This work includes outlets, checks, and one occupation crossing.

For the disposal of storm, as well as excess, waters in the Main Supply and Darley Channels, two concrete overflow channels, in all 4 chains in length, have been constructed on the Werribee and Lerderderg rivers. A new regulating gate was installed in the Darley Channel. A 12-inch diameter pipe syphon was laid under Masons Lane, and two concrete wells have been enlarged on the channel at Maddingley Bridge, while, to improve supplies in the Darley Township channels, 10 chains of concrete lining were completed—the channel itself being cleared of heavy growths of weeds over a length of  $2\frac{1}{2}$  miles, so as to maintain its full capacity for the delivery of irrigation supplies.

Owing to the erosion of river banks it was necessary to strengthen the Lerderderg West Channel by the construction of three concrete piers under the box channel.

On the eastern slopes of Pykes Creek Reservoir 10 acres of the Commission's reserve were planted with *Pinus insignis*, and an additional area of 10 acres was similarly planted on the western slopes. These trees are now in a healthy condition and making excellent growth. Trees planted last year have reached to an average height of 2 ft. 6 in. An additional area of 25 acres has been fenced with wire netting, cleared of timber, and prepared for the further planting of trees. All suitable timber was split into fencing posts, and many hundreds of billets were used in connexion with the Werribee and Lerderderg river erosion works.

Owing to erosion of banks of the Werribee and Lerderderg rivers several river protective works were carried out. They consist of 80 timber and stone cribs, battering down of 13 chains of river banks and the planting of willows. All the protective works carried out by the Commission on the Werribee and Lerderderg rivers are in good condition, and improving each year. At Fiskens-street Bridge the concrete channel was undermined, and a deviation had to be made and the channel had to be reconstructed.

In connexion with the proposed "Gorge to Gorge" scheme for the supply of an additional area of 1,000 acres not commanded by the existing works a permanent survey and plans plotted for 5 miles of channel line were completed, and 20 chains of exploratory work have been carried out. This consists of a side cutting through rocky material in order to prepare foundations for the construction of a concrete bench flume.

Six hundred and fifty channel measuring wheels were completed during the year, each wheel was tarred, cement coated and despatched to other districts of the Commission.

In the Werribee Irrigation District 2 miles of channels were remodelled to improve the supply to settlers; 65 chains of channels were lined with 2-inch concrete to check seepage in porous sections; nine new meter wheel outlets were installed; and seven concrete pipe culverts on irrigation and drainage channels were constructed.

Five miles of drainage channels were cleared of silt ; 40 chains of new drain were constructed to prevent seepage ; and 45 chains of surface drains in the south-eastern section of the District were cleaned out and deepened.

During the year the closer settlers have further improved their holdings. Progress generally continues, and it is satisfactory to note that dairying, which received a severe setback three years ago, is again claiming increasing attention. The production of market garden crops is also developing, but lucerne is still the main crop in the District.

In the Werribee Urban District further experiments in the clarification of the water supplied were carried out, good results being obtained. Tests in the treatment of water with chlorine as a preventive against bacteria were also carried out for general experimental purposes.

Further extensions of the Urban Mains were carried out during the year—a total length of 2,000 feet of 2-inch main being laid.

In the Werribee Waterworks District a good supply of water for domestic and stock supplies was maintained, and land-owners availed themselves of the concession granted by the Commission which enables them to irrigate one acre of land for every £3 paid in water rates.

The roads in the District received further attention during the year. The Commission assisted the Shire Council in the formation of 80 chains of road on Section H, while work is now being carried out on an additional length of 3 miles of formation on Section K.

New offices for the Commission were erected near the Urban water tower in the northern part of Werribee township during the year, and the Commission's work is now transferred from the old office in the Shire Hall to the new site. The new offices are proving a great advantage in the administration of the District.

#### MERBEIN DISTRICT.

In the Merbein District, 58 chains of channels have been lined with cement concrete during the year and 20 chains of new earthen ditching have been constructed. In order to increase the carrying capacity of the main channel, a considerable amount of work was carried out in raising its banks along a length of 160 chains by an average height of 5 inches. Similar work was effected along 15 chains of minor channels. The efficiency of the Birdwood outfall drain has been increased by the installation of 44 chains of 9-inch agricultural drain pipes, replacing 33 chains of open cut where maintenance was heavy and 11 chains of 6-inch pipe whose carrying capacity was overtaxed. In addition, 8 chains of pipe line, which had become affected by roots from wattle trees growing within 10 feet of the line, were cleaned out and the trees removed. During the year five complete waterings were given to irrigators, the first pumping commencing as early as August owing to the exceptionally dry winter which preceded the watering.

In the Merbein Urban District general repair work was carried out.

#### RED CLIFFS DISTRICT.

The lining of channels with cement concrete has been continued, and is still proceeding. Of a total length of 124 miles of constructed channels, 106½ miles have been lined, of which 11¼ miles, representing a superficial area of 54,500 square yards of lining, have been completed during the year. The concrete lining has had the effect of protecting from channel seepage 665 blocks, or 92 per cent. of the total number of blocks in the settlement.

Numerous concrete structures—outlets, regulators and culverts—were completed during the year.

The irrigation of the settlement this season was quite satisfactory, notwithstanding the drought conditions experienced. All occupied blocks (700) received the necessary waterings. Of a total of 33,500 acre feet pumped during the season, over 77 per cent. of the water pumped has been accounted for.

The total area now planted to vines and citrus is 8,600 acres. A large additional area came into bearing this year, and practically the whole of the planted area will be in bearing next season. The total yield of dried fruit for the 1926 season was 5,444 tons. Two new packing sheds have been established in the settlement.

The Commission again arranged for the bulk purchase and distribution of harvesting and other requisites for settlers, including chaff and spraying material, as well as timber and other materials for 870 drying racks, 62,640 dip tins, 3,070 bolts of hessian, 13,640 sweat-boxes, 632 tons of galvanized iron, and 106,000 bricks. By this means a considerable saving to the settlers was effected.

The fact that 71 per cent. of the total planted area consisted of sultanas, and that the good prices realized for this fruit on the overseas markets for the season 1924-25 appears likely to be maintained this season, and also that the settlement has just produced its first main crop amounting to over 5,400 tons of dried fruit, has resulted in settlers generally feeling optimistic regarding future prospects.

Returns from current season's fruit sales to 30th June, 1926, have already enabled settlers to pay over £12,000 on account of water rates, and £23,000 on account of advances made by the Commission to produce and harvest the crops.

Two additional overseers were appointed to supervise the settlers' work on the blocks and instruct them in the various operations. Demonstrations in dipping fruit and pruning were arranged to impart the necessary instruction; and frequent personal visits to the blocks were made by the Commission's staff.

Improved prospects have created a keen demand for blocks at Red Cliffs, and several have already changed hands at prices returning a very considerable profit to the original settler.

The township of Red Cliffs has grown considerably since last Report; and at the present time eight new shops are in course of erection in the business area. This town, which five years ago was but a construction camp of tents and huts, has developed with the settlement into a busy centre with substantially constructed shops and dwellings.

Extensions of the reticulation system to several streets are now under consideration.

The revenue from Red Cliffs Urban District is steadily increasing as a result of the development of the town.

#### NYAH DISTRICT.

The lining of supply channels with cement concrete was continued during the year. Thirty-three chains of this work were completed making a total of 33 miles of lined channels in the district. Progress has been made with drainage works, and the work of deepening the Tyntynder North Main Drain is nearing completion. Several windmills have been installed in connexion with the drainage of individual low-lying blocks. It is confidently expected that many acres of vines will benefit from the improvements made in the drainage system.

The improved overseas dried fruit market has resulted in record revenue receipts in the Nyah District. The settlement generally has become more stable, and the comparatively new township of Nyah West has made good progress. A number of new shops and houses has been erected, and a new brick Post Office is under construction. The new offices of the Commission at Nyah West have been completed, and are now occupied by the Commission's staff.

#### MYSTIC PARK DISTRICT.

During the year considerable improvements have been effected to the channel system. Three reinforced concrete channel regulators have been completed, and a length of 2 miles of main channel has been cleared of silt, thus giving an improved supply to irrigators. Fifty-six chains of new channel have been constructed. For the greater part of the year irrigation supplies to this district have been delivered by gravitation; but, owing to the exigencies of the dry period experienced during the latter half of last season, it was found necessary to pump supplies for several weeks.

#### TRESCO DISTRICT.

In continuing channel remodelling works in this district a further length of 4 miles 60 chains of channel has been lined with cement concrete, bringing the total length of lined channels to 10 miles. Since the carrying out of this work, indications show that seepage on the low-lying lands has been greatly reduced. In addition to the channel lining works, 21 chains of earth channel have been remodelled, 36 chains of drains regraded and cleaned out, and fifteen concrete outlets and four regulators have been completed during the year. Owing to the dry weather experienced five complete waterings were given to irrigators during the last irrigation season.

#### MAFFRA-SALE IRRIGATION DISTRICT.

Such satisfactory progress has now been made with the works of supply that, during the coming year, the main and tributary channel systems will directly command some 25,000 acres of the full area of 80,000 acres of valuable lands in the Maffra-Sale Districts and vicinity proposed to be ultimately served. A large portion of the commanded area in the Newry, Maffra, Boisdale and Sale Districts will receive regular watering during the coming irrigation season.

The concrete dam on the Macalister River, below Glenmaggie, which will create a storage of 150,000 acre feet, has been so nearly completed that the total volume can be stored during the coming year if required.



The special concrete lined channel system distributing supplies in the Boisdale area and vicinity was completed in time for watering during last summer. About 3,000 acres received some supply with gratifying results to those who took advantage of the available water. The increases in the yields obtained, even with partial supply, were so marked that it is evident full use will be made of the whole of next season's run.

The main and distributary channels system giving supply to Airly, Cobain's and other estates in and around Sale totalling over 6,000 acres, purchased by the Commission for Closer Settlement purposes, were completed during the year and a full supply for irrigation requirements will be available for next season. Nearly the whole of these areas were subdivided into blocks ranging from 39 acres to 100 acres, and most of them have already been allocated.

On account of the specially suitable conditions for the successful placing of Australian and Oversea settlers on small irrigated areas around such a prosperous old established centre as Sale, the Commission's proposal to establish in this vicinity a settlement under the terms of the Migration Agreement with Great Britain was approved by the authorities, and the necessary steps are being taken to give effect to the proposal.

#### INVESTIGATION OF NEW IRRIGATION AND WATER SUPPLY PROPOSALS.

During the year land-holders between Lake Tutchewop and the Little Murray, but outside the new Fish Point District, have requested that their lands at present served by private channels be brought under a scheme to be controlled by the Commission, and an investigation is now proceeding.

At the request of land-holders further investigations are being made to determine the practicability of irrigating the Piangil Flats by pumping direct from the Murray. It is believed that this might be a more economical scheme than the extension of the gravitation scheme from the Swan Hill District.

A proposal to supply an area lying between Marmal and Normanville, including the high lands at the latter centre, partly by gravitation and partly by pumping from an extension of the Charlton Channel carried north-easterly across the Avoca River was formulated, and is now being submitted for the consideration of the land-owners concerned. This proposal would fit in with any scheme of extension of the Waranga-Western Main Channel if required.

Surveys to enable the preparation of a domestic and stock supply scheme for settlers on an area in the new parishes of Annuello, Geera, Wemen and Liparoo, which is too high to be served by gravitation from the Wimmera-Mallee Scheme, have been completed.

The scheme involving pumping from the River Murray at Coreena has been prepared and forwarded to the Shire Council for submission to, and consideration of, land-holders concerned.

An area of Mallee Lands suitable for wheat-growing lying between the Millewa, Mildura and Murrayville Railway Lines still remains to be settled. In the Southern Millewa portion of this area surveys are sufficiently advanced to enable a scheme of water supply to be carried out as soon as the lands are ready for settlement. In the area known as Sunset, investigations to discover the best means of supply are still proceeding. It would appear that the greater part of this area will have to be served by extensions of the Millewa-Pumping System, as only a portion can be served by an extension of the Wimmera-Mallee Gravitation Scheme. In other parts of the area, principally known as "The Raak," a system of channel supply is not practicable, and proposals to obtain water by the construction of artificial catchments are being considered.

In view of the great success of the water supply scheme in the Mornington Peninsula, representative land-holders have waited on the Government and urged that the feasibility of introducing a similar scheme in the Bellarine-Geelong Peninsula should be considered, and the Water Commission is now investigating the subject as well as the possibility of a scheme to also supply a number of Western District towns, particularly those in the Hampden Shire.

At the request of a very large number of land-holders, the Commission intends investigating the possibilities of providing additional storage on the Upper Loddon. The land-owners believe that by means of storages a considerable area could be irrigated and thus lead to greatly increased productivity in the whole Loddon Valley.

#### WATERWORKS DISTRICTS.

##### CARWARP DISTRICT.

To secure a more effective and economical distribution of water, a further length of 15½ miles of remodelling the Carwarp East Branch Channel was carried out during the year, bringing the total length of this work to 28 miles. In the parishes of Carwarp and Colignan, the balance of 10 miles of the new Colignan and McKenzie Branch Channels has been completed, and water was, during the last watering, supplied through these channels to settlers in some 50 square miles of new country. The work of constructing the Nurnurnemal Channel to serve new lands in that and adjoining parishes has been put in hand and 1½ miles of earthwork have been completed.

## CARWARP CENTRAL DISTRICT.

The pumping works for the domestic and stock supply to the high area embraced in this District have been effective and a complete watering was carried out during the year.

## WIMMERA-MALLEE WATER SUPPLY.

Though the conditions during the season generally were not favorable for the running of water, owing to the extremely dry spring and early summer, the whole of the districts comprising the Wimmera-Mallee Domestic and Stock Supply System, embracing over 11,000 square miles, received full supplies of water in rotation during the year, 5,070 miles of the Commission's main and branch channels being run. Under these circumstances the successful operation of the system has more than ever emphasized its great value. In localities not commanded by this scheme, but dependent on local catchments, water supplies for domestic and stock use had to be conveyed by train and other means for a considerably long period, causing in a single year financial loss to the landholders far in excess of the total amount of general water rates paid by landholders during several years within the Districts commanded by the Wimmera-Mallee System.

Full supplies were also furnished to several towns controlled by local Waterworks Trusts within the Wimmera-Mallee areas, in addition to the reticulated systems of the following 29 townships directly controlled by the Commission within the area, viz. :—

Berriwillock	Dimboola	Lascelles	Nyah West	Ultima
Beulah	Dooen	Manangatang	Ouyen	Waitchie
Birchip	Hopetoun	Marnoo	Quambatook	Watchem
Brim	Jeparit	Minyip	Rainbow	Woomelang
Chillingollah	Jung Jung	Nandaly	Rupanyup	Wycheproof.
Culgoa	Lalbert	Natimuk	Sea Lake	

WESTERN WIMMERA, UPPER WESTERN WIMMERA, WIMMERA UNITED,  
UPPER WIMMERA UNITED, AND KARKAROOC DISTRICTS.

The final section of the Main Taylors Lake Outlet Channel, connecting with East Karkarooc Main Channel, was completed and put into use during the year. A section of the Main Eastern Channel was also enlarged to cope with the increasing demand upon it, and a main channel connecting the outlets of Pine Lake and Taylors Lake Reservoirs was also constructed. Some 25 miles of new distributary channels were constructed, the principal extensions being in the parishes of Vectis, Quantong, Corack East, and Warmur, and the remodelling of many channels was also undertaken to provide more efficient services.

Considerable extensions of pipe mains and improvements in the reticulation systems of Dimboola, Rupanyup, Hopetoun, Natimuk, Watchem, and Minyip have been carried out, and a reticulation system for the new Urban District of Marnoo was completed and put into operation. For Hopetoun Town Supply, an artificial earthen storage of 60,000 cubic yards capacity is in course of construction. This will take the place of the shallow and wasteful Lake Lascelles Storage. The supply to the township of Jung Jung was remodelled, a windmill being installed to lessen the cost of pumping by engine; and a new 6-inch rising main was laid.

It is proposed to extend the Wimmera United, Upper Wimmera United, and other adjacent Districts so as to include the areas commanded by the new Charlton System, the main channels of which are now in operation.

## BIRCHIP, WYCHEPROOF, SEA LAKE, TYRRELL AND EUREKA DISTRICTS.

Seventy-one miles of new channels have been constructed during the year to serve areas not previously supplied, chiefly in the Northern and Western portions of Tyrrell District. Steady progress has also been made with the Denning-Walpeup Main Channel, on which 8 miles of special clay lining through the sandy areas south of Walpeup are now being carried out. That portion of this channel which supplies the parishes of Wathe, Denning, and Dering, will, for the first time, be run during the present season's watering.

The construction of necessary channels in the new high level Eureka District, which was formerly part of Tyrrell District, was completed, and the first watering of this area by the new pumping plant, installed for the purpose, was satisfactorily effected.

Steps are being taken to form from the Tyrrell District another new high level district, to be known as Dering District, the supply for which will be pumped from the new Denning-Walpeup Channel. This District will embrace about 36 square miles, and will be extended as necessary. Works of construction are now in hand, and it is expected that a supply will be pumped for the first time during the present season's watering.

Extensions and improvements of the reticulation systems of Ouyen, Birchip, Sea Lake, Woomelang, and Culgoa have been carried out. A new additional storage is being constructed at Culgoa, and an extra windmill with auxiliary engine is being installed to provide a supply for railway requirements.

Works for the installation of a reticulated supply for the township of Nullawil is in progress, and will shortly be in operation, while a new storage of 17,000 cubic yards has been constructed for the supply of the township of Patchewollock. This storage is suitably located for extension in the event of a reticulated supply for Patchewollock being required in the future.

#### SUPPLY TO MARNOO AND CHARLTON DISTRICTS.

The Main Channel, some 105 miles in length, to supply Charlton District and Charlton Township, together with a short branch to Marnoo Township, was completed during the year. The new Charlton Town Storage of 260,000 cubic yards capacity built by the Commission was filled and connected with the existing town reticulation. Supplies were also sent to the Marnoo storage of 60,000 cubic yards capacity, which is connected with the new Marnoo Urban reticulation by an 8-inch main.

Coming in the midst of an extremely dry period, the supply to these townships was highly appreciated, particularly at Charlton, which hitherto had to depend upon a scanty supply of water of indifferent quality, pumped from a storage on the Avoca River. The supplies to both Charlton and Marnoo are now most effectively furnished entirely by gravitation.

The construction of the Charlton-Wycheproof Main Channel is well in hand and will be ready for use before the present watering season terminates. This channel will also enable large supplies to be sent direct from Lake Lonsdale and Fyans Lake Storages to the extensive districts of Tyntynder and Long Lake, as well as to portions of Sea Lake and Wycheproof Districts, thus enabling watering to be materially expedited.

Surveys are being continued for main distributary channels and branches, the construction of which will be undertaken during the coming year.

#### LONG LAKE AND TYNTYNDER DISTRICTS.

An extension of about 8 miles of Yungera Channel was carried out during the year. A further extension of this channel is now in progress to supply the recently settled area in the parish of that name.

New reticulated supplies for the townships of Lalbert and Chillingollah were put into operation. The existing supply for Waitchie is also being remodelled and will shortly be completed.

Proposals for a reticulated supply to the township of Woorinen have been accepted by the residents concerned, and the construction of the necessary works will be commenced forthwith.

Extensions of mains in the reticulation systems of Nyah West, Piangil, Manangatang, Ultima, Lake Boga and Quambatook have been effected. An auxiliary engine and an additional windmill were installed at Nyah West to cope with increasing demands on the reticulation of that township.

#### PLAN OF WIMMERA-MALLEE GRAVITATION WATER SUPPLY SCHEME.

A general plan of this important Gravitation Scheme of domestic and stock supply, showing its development to date, is inserted. On the plan are shown to scale the positions of the Main Sources of supply, the Wimmera River and tributaries, and all adjacent storage reservoirs, together with details of all main and distributary channels at present constructed, and chief extensions to be carried out forthwith. All towns with reticulated supplies and chief local storages connected to, and supplied from, the System are also shown.

#### MORNINGTON PENINSULA DISTRICTS.

The operations of the Mornington Peninsula Water Scheme, giving reticulated supplies to a very wide area of country including the Naval Base, Berwick, Cranbourne, Dandenong, Noble Park, Spring Vale and the bayside towns from Aspendale to Frankston and Mornington, have been so highly successful that not only are these centres rapidly expanding but continuous extensions of services in all directions are demanded.

Up to this year supply has been drawn temporarily from the headwaters of Toomuc Creek, but it has been evident that in order to satisfactorily meet the steady increase in calls upon the scheme it would be necessary in the very near future to materially augment supplies by carrying on the main supply race to tap the Bunyip River in accordance with the original scheme. The unusually dry conditions which prevailed last spring and summer showed clearly that this extension would shortly become imperative. It was decided therefore to take full advantage of the exceptionally favourable conditions for carrying out the work which were created by these dry conditions. As there was involved the construction of fully  $25\frac{1}{2}$  miles of open race and at least 8 miles of 2 feet diameter main, every endeavour was required to complete the work before winter set in. Operations were so successful that this was accomplished by June, and a full supply of water of excellent quality, ample to meet all demands, is now available and is being run into the district storages.

The completion of this work will enable the Commission to proceed with many extensions of reticulation not only in existing districts but also in new urban districts such as Hastings and Pakenham. Arrangements have therefore been made to carry out these reticulations forthwith, and further consideration will be also given to such proposed urban supplies as those to Dromana, Rosebud, Rye, Sorrento and Portsea, to Garfield and Bunyip and later to Kooweerup.

In connexion with the Commission's scheme of providing irrigation for small well-situated blocks in semi-rural areas, a full supply of water under pressure for all forms of intense culture is now available to those areas purchased by the Commission for Closer Settlement in the vicinity of Narre Warren and Hallam, and to other adjacent lands.

Considerable progress was made with the Closer Settlement of the 580 acres known as Troup's, Killen's and Crawley's lands at Narre Warren North. The whole area was subdivided into 32 blocks, houses were built thereon for settlers, and practically the whole of the blocks have been taken up. The settlers have already obtained good crops of market garden produce. A full supply of water under pressure from the Mornington Peninsula main was made available to all settlers at specially low rates and proved very useful during the dry months of last summer.

The extensive works for the systematic drainage and reclamation of the 2,700 acres of well-situated valuable lands purchased by the Commission for intense cultivation under Closer Settlement conditions in the Hallam Valley between Berwick and Dandenong were so well advanced during the year that all the upper areas known as Wilson's, Sweeney's, Phillips's, and Moran's, about 1,800 acres in all, have been cleared of the dense growth of ti-tree, and the greater portion of these lands has been ploughed at least twice with special tractor plants. This area extends right along the south side of the Main Gippsland Railway Line from Berwick to Dandenong, and it is proposed to make it available for settlement during the coming year.

#### WONTHAGGI DISTRICT.

In order to provide an uninterrupted and increased supply of water to the State Coal Mine, a new 6 inch main was laid during the year from the service basin to the power house. By reducing the drain on the other service mains this work has also had the effect of considerably improving the supply to the town during periods of maximum demand. An improved supply to the high levels of the town is to be provided by the erection of a reinforced concrete tank of 130,000 gallons capacity, which will be supplied from the service basin by an electrically driven pump, on the completion of which a commencement will be made with the reticulation of North Wonthaggi.

#### NORTHERN MALLEE WATER SUPPLY.

In that area of 1,250,000 acres adjoining the area served by the Wimmera-Mallee Scheme but above its channel levels a considerable amount of work has been done during the year in the clearing and grubbing of roads and the provision of additional bores and catchment tanks.

#### BORES.

An additional bore was completed during the year in the parish of Walpa. Fair water was struck at 568 feet and rose to within 68 feet of the surface. Boring was continued to 705 feet. Having at this depth passed through the water-bearing beds into the marine beds without obtaining better quality water the casing was slotted at 568 feet and the bore filled back and pugged to 600 feet. The total number of successful public bores in the Northern Mallee is now 98.

#### TANKS.

Two new tanks of total capacity 7,828 cubic yards were constructed during the year, bringing the total number of tanks in this area to 195 with a storage capacity of 1,040,298 cubic yards, equal to 175,810,000 gallons.



## WINDMILLS.

The windmills and hand pumps erected on the bank of the River Murray to supply Soldier Settlers on the Murray Frontage have operated satisfactorily during the year.

## ROADS.

During the year 312 miles of roads have been grubbed, bringing the total length of roads grubbed and cleared by the Commission in this area to 4,565 miles. One hundred and sixty-one sandhills of total length 18 miles have also been rendered passable for heavy waggons by rubbing with local limestone.

In order to provide access during periods of high river to settled areas between Karadoc Swamp and the River Murray, road embankments are being constructed across the inlet and outlet of that Swamp. These works, which are nearing completion, will also minimize the flooding of the Swamp lands and will increase their grazing value.

## WATER SUPPLY, MILLEWA.

This extensive scheme for the reticulation by channel system of some 1,000,000 acres west of Mildura Railway Line, and its supply by pumping from the River Murray, was well advanced during the year. One large portion has been constituted a Waterworks District under the name of Lower Millewa.

In addition to the permanent water supply works, much work has been carried out in grubbing roads, rubbing sandhills and constructing catchment tanks for use of contractors and settlers. Some 28 miles of tracks have been cut, 316 miles of roads grubbed, and 164 sandhills have been rubbed. Nearly 600 miles of roads have been grubbed in the County of Millewa, while twelve large tanks of total capacity of 34,000 cubic yards have been completed, bringing the number of tanks up to 32, with an aggregate capacity of 144,700 cubic yards.

## LOWER MILLEWA WATERWORKS DISTRICT.

The area contained in the Lower Millewa District received its second annual watering in rotation during the year. Many new settlers have completed storages, and all, ready at time of watering have been filled. The third annual watering is now beginning. Three new public storages, totalling 30,000 cubic yards, have been provided, and further channel extensions of some 28 miles westward have been constructed, making a total of approximately 350 miles of channels now in operation in the District. Further extensions will be made to supply recently allotted areas during the present watering.

Six hundred and thirty-eight allotments have now been taken up along the new Red Cliffs to Meringur Railway, and the whole of these allotments will eventually be included in extensions of the Lower Millewa District.

As portion of this area chiefly south of the railway line is too high to be commanded directly from the Lower Millewa System of channels, a commencement has been made with what is known as the "high lift" system, from which this particular area will receive its supply, and the necessary pumping machinery, which will lift the water to a further height of 135 feet through 1 mile 60 chains of 30-inch diameter steel rising main, is being installed. This "high lift" system is expected to be watered during the next watering season.

The water storages provided for townships and public purposes within and adjacent to the Millewa district are 25 in number, and have a total holding capacity of 220,000 cubic yards. These storages, together with Lake Cullulleraine, itself of 2,000 acre feet capacity, on which the main pumps are situated, serve to provide water for carting by settlers until they are able to construct storages on their own holdings.

As provided in the original scheme, further units have been installed at all pumping stations in the Lower Millewa District in order to cope with the increasing demand for supply, due to extension of settlement.

A permanent district office for administration purposes will be erected in the township of Werrimull. This township already shows promise of developing into an important town, and is situated centrally in the area which will comprise the present waterworks district, and its future extensions.

A special feature in the development of the Millewa Supply Scheme, which is particularly gratifying to the Commission, is the continued construction, by settlers, of tanks on their holdings. The sites of these tanks have been specially selected by this Commission so as to permit of water being stored well above ground level, thus enabling very considerable increases in capacity being obtained without extra expense. The result has been that the average capacity of settlers' tanks is well above 4,000 cubic yards, which is a most important factor when water is supplied from a costly pumping scheme.

## DRAINAGE AND FLOOD PROTECTION SCHEMES.

## KOOWEERUP AND CARDINIA.

Satisfactory progress has been made during the year with the flood protection and drainage works throughout the Kooweerup and Cardinia Districts. The results achieved have fully demonstrated the utility of mechanical excavators, of which there are now operating in the two districts one bucket dredger and six machines of the dragline type.

In the Kooweerup District the work of enlarging the Main Yallock System in accordance with the approved scheme has been steadily proceeded with so as to provide for full discharge of flood flows before carrying out extensions of existing drains in the eastern part of the Swamp area. A new Yallock Outlet has been cut and has now been so far advanced that early in the coming year the new outlet will be connected with the existing No. 6 Yallock Drain. The extension of the new No. 6 Main Drain, eastward to intercept the flows from King Parrot Creek and other watercourses in the vicinity will then be put in hand.

With a view of intercepting the overflow from the Main Canal and diverting it to the new Yallock Cut, 22 chains of the No. 4 Yallock Drain above the outlet of the No. 7 Drain have been enlarged and the drain extended 42 chains further towards Cora Lynn. The projected work includes the further enlargement of this section of the No. 4 Drain to a width of 50 feet; the construction of an eastern branch for about 2 miles; and the diversion of the No. 7 Yallock Drain for  $1\frac{3}{4}$  miles to discharge separately into the Main Yallock Outlet at Bayles, leaving the No. 4 Drain free to carry only its own flows into that outlet.

In order to relieve the Northern Boundary Drain in periods of excessive flooding such as occurred in 1923 and 1924, it has been decided to enlarge the 10 Mile or Ararat Creek Drain from its junction with the Northern Boundary Drain to Cora Lynn so as to convey part of the Ararat Creek flood flows to the North-Western Main Catch Drain. This work has been well advanced and should be completed early in the coming year.

During the year special attention was paid to the expediting of works to prevent these continuous overflows from the Lang Lang River into the Kooweerup area which have caused so much loss.

The straight cut across the bend in the Lang Lang River at Heath Hill has been completed for its entire length of 100 chains, and the work of enlarging the river section from this cut to the junction of the already enlarged river near Mr. Patullo's is so well advanced that the complete enlarged river section with its protective embankment on the Swamp side will be available this coming year. Along the lower reaches of the river the stream has been enlarged for a length of 66 chains below the Main Coast Road. The embankment of this cut is now being extended for 28 chains to the railway line, and the finished work should afford substantial benefit to a large area controlled by the Council of Agricultural Education.

In the Cardinia District, the enlargement and deepening of the Tooradin Inlet Drain has been extended 160 chains. This channel now provides a much improved outlet for the drainage from this locality, including a large area of Soldier Settlement, which in turn is also benefited by the reconstruction and extension of Rutters Drain for a total distance of 160 chains along the Tooradin-road, and by the completion of Adams Drain for 72 chains on the east side of the Tooradin Inlet Drain.

Near Dalmore the Toomuc Catch Drain for a length of 70 chains from the outlet below the railway line has been considerably enlarged. Construction has been somewhat retarded by the influx of tidal waters, but the work will, when further extended and connected to McGregors Drain, very effectively serve the whole of the intervening area.

On the estate known as McGregors the intercepting drains along Bullarto and Island Roads have been completed for the full lengths of 160 chains and 100 chains, respectively, whilst McGregors Catch Drain has been improved for 50 chains north of Manks-road.

A commencement has been made with the work of constructing the Tooradin Channel or Contour Drain along the western edge of the Swamp. This work will be continued so as to intercept Clyde Creek and watercourses in that vicinity and will form a very great protection to the whole western part of the district.

## ECHUCA.

The works designed and constructed for the protection of the properties embraced within the Echuca (High-street) District have successfully served their purpose during the year.

## LOCH GARRY.

The flood protection works mentioned in last Annual Report have proved effective for the purpose for which they were designed and constructed. These works, for the protection from flooding of lands bordering the Bunbartha and Deep Creeks on the right bank of the River

Goulburn, consist of 5 miles 51 chains of earthen levee bank around Loch Garry, and a concrete regulator and spillway 400 feet in length to control overflows from the Loch. The purpose of the scheme is to protect Bunbartha Creek and the lands flooded by it from overflow through Loch Garry until the river reaches a height equal to 34 feet on the gauge at Shepparton, and, when that height is reached, to allow only the same proportion to flow out of the Loch as flowed into it prior to the inception of the original Goulburn Levee works. A district known as the Loch Garry Flood Protection District has been constituted embracing some 40,000 acres of land benefiting by the works.

#### KANYAPELLA.

The works carried out in this District for the conservation of a domestic and stock supply in Warrigal Creek and the exclusion, to a certain extent, of floodwaters from that Creek have proved successful for the purpose for which they were designed and constructed; and during the whole of the dry season experienced last year water supplies were maintained in this creek for the use of land-owners. Matters concerning district boundaries of the specially constituted Kanyapella Flood Protection District have been dealt with and satisfactorily adjusted.

#### CARRUM.

Settlers in the Carrum Waterworks Trust District, especially those to the North of the existing Eumemmerring Main Drain, have suffered from the abnormally wet periods which have occurred during the last few years on account of the Eumemmerring Creek waters frequently overflowing the protective embankment known as McDonalds. In consequence of the severe floodings, especially during 1923 and 1924, strong representations have been made at various times by these settlers for an improvement of the conditions, and last year a special amount of £30,000 was made available in order that a more comprehensive scheme to give a substantial measure of relief could be put in hand. In this connection the existing Dandenong-Mordialloc Main Drain, in the vicinity of Pillars Bridge, is so silted that this portion of the drain is not effective as a flood water carrier. In addition, therefore, to providing full waterway for all Eumemmerring Creek flows discharging into the Paterson River Outlet at Carrum, provision had to be made so that, later on, a large portion of the Dandenong Creek flood flows which formerly entered the Dandenong-Mordialloc Main Drain can be received, near "Elliot's Lookout," into the lower part of this reconstructed Eumemmerring Main Drain and Outlet, and discharged into the sea at Carrum.

From "Elliot's Lookout" to the Cranbourne-road, a substantially enlarged waterway will be cut for the Eumemmerring Creek water course so as to carry all flood flows, not only from the main creek, but also from the new drains cut along the Hallam Valley.

A double embankment from Wells-road to the Kananook Creek has been constructed, approximately 2 miles long, involving about 100,000 cubic yards of earthwork, varying in height from 7 to 10 feet. This provides a waterway of at least 7 chains wide, 6 feet deep, and has ample capacity to carry the flood waters of both the Dandenong and Eumemmerring Creeks together.

The bucket dredge from Hallam commenced work at Elliot's Lookout, and approximately 1 mile of main canal has been cut.

The dredge should reach Wells-road at an early date, when sufficient waterway will then be available to carry the flood waters of the Eumemmerring Creek, affording a substantial protection to the Carrum settlers pending the completion of the whole scheme.

#### MURRAY LEVEES.

The members of the Interstate Committee of Representatives on Murray Levee Proposals, comprising officers of the New South Wales Water Conservation and Irrigation Commission and the State Rivers and Water Supply Commission met during the year at Melbourne and at various points along the River Murray where levee banks were proposed. Several applications for permission to erect levee banks were received from both States and were dealt with by the Committee.

#### RIVER EROSION, DRAINAGE, AND GENERAL.

Owing to the dry season there has been a reduction in the number of applications for permission to carry out flood protection, drainage, and other works. Several applications, however, were received and investigated, and in many cases permission has been given as provided by the *Water Act* 1915 to carry out approved works at the cost of the applicants.

The preparation of plans from the surveys of the Tarwin and Latrobe River flats has been continued, and investigations to determine the practicability of proposed flood protection and drainage schemes serving these areas have been put in hand.

## RIVER GAUGING.

As provided by Section 32 of the *Water Act* 1915, the work of gauging and recording the flows of the principal rivers and streams of the State has been continued. The returns of volumes stored in reservoirs have been made available weekly for publication.

During the year, gauging stations have been established on the Broken River at Lima South below the junction with Back Creek; Goulburn River at Trawool; and Loddon River at Vaughan. The establishment of the station at Lima South has permitted the abandonment of the station at Nillahcootie.

The number of gauging stations in the State is now 59.

## DIVERSION OF WATER.

In the exercise of the right of the State to the use and flow, and to the control of water in rivers, creeks, streams and watercourses, lakes, lagoons, swamps and marshes, supervision has been maintained over all such waters.

Though weather conditions were very favorable to the artificial application of water for irrigation, for various reasons the use of water outside irrigation districts was much below that diverted in previous dry years. Notwithstanding this applications to divert water under annual permits have been well maintained.

Owing to the very dry summer and consequently low flow in various streams it was found necessary during January, February and March to restrict and regulate private diversions from the River Murray between Yarrawonga and Piangil, the Goulburn River between Sugarloaf Reservoir and the Goulburn Weir, Creightons Creek, Seven Creeks, Broken River, Ovens River, King River and Maribyrnong River. These restrictions and regulation of diversions were carried out with little inconvenience to the diverters, and satisfactory results were obtained.

The authorized diversions now in force are :—

Yearly permits	..	..	..	1,641
Flood permit	..	..	..	1
Licences	..	..	..	18
				<hr/>
				1,660
				<hr/>

## GOULBURN HEADWORKS AND MAIN CHANNELS.

These works comprise the Goulburn Weir; the Goulburn-Waranga Channel, extending from the Weir to Waranga Reservoir, a distance of  $23\frac{1}{2}$  miles; the Waranga Reservoir; the Waranga-Rodney Channel, a distance of  $4\frac{1}{2}$  miles; the Main Channel, extending westerly from the Waranga Reservoir to the Loddon River, a distance of 98 miles; and the Main Eastern Channel, which extends from the Goulburn Weir to the Shepparton District, a distance of 48 miles. The total length of main channels, including Tandarra-Calivil Channel, a distance of 26 miles, is 200 miles. The irrigation districts supplied are South Shepparton, Shepparton, Rodney, Deakin, Tongala, Stanhope, Rochester, Echuca North, Dingee, and Tragowel Plains.

The construction of the Tandarra-Calivil Main Channel from the existing Main Waranga Western Channel at Tandarra has been continued. The works have been practically completed, and the channel is now ready for connexion with the Tragowel Plains District. During the year  $4\frac{1}{2}$  miles of channel were excavated; and three large syphons (one at Myers Creek 12 feet diameter, one at Bullock Creek and one at Calivil Creek, 12 feet and 10 feet diameter, respectively) together with a large number of bridges, regulators and minor structures, all of reinforced concrete, were constructed. The capacity of this channel is 300 cubic feet per second from the Waranga Western Channel to the Calivil 1<sup>B</sup> Channel offtake (at 21 miles 30 chains 25 links) thence 240 cubic feet per second to its junction with the existing Tragowel Plains No. 1 Channel (26 miles 5 chains 78 links.)

The remodelling of the portions of the Waranga Western Channel, between the Moora and Cornella Creeks, and the enlargement by a Dragline Excavator of the section between the Piccaninny Creek and the Tandarra-Calivil Channel Offtake, a length of 1 mile 16 chains, have been satisfactorily completed. This work will make available a discharge equal to that on the eastern side of the Piccaninny Creek, and an ample supply for the area served by the Tandarra-Calivil Main Channel.

The enlargement of the first portion of the existing Main Eastern Channel from the Goulburn Weir to the north side of the Broken River has proceeded steadily throughout the year. In addition to the Bucket Dredge employed on the work, a Dragline Excavator was put into operation in December, 1925. Two and three-quarter miles were completed by this dredge, making a total of  $4\frac{1}{4}$  miles completed to date. For the six months during which the excavator

has been working this machine has cut about 1 mile of half section of channel. It is proposed to transfer to this channel, at an early date, the Dragline Excavator which has been working on a section of the Waranga Western Main Channel. Irrigation supplies were delivered to the several districts throughout the year without interruption.

## NEW STORAGES.

### SUGARLOAF RESERVOIR.

The dam for this reservoir is situated on the Goulburn River below the junction of the Delatite River, about 18 miles from Alexandra. The bed of the river at the site is at an elevation of about 700 feet, the datum being low water Hobsons Bay. The design now being carried out with the slightly increased height recently adopted, will store water to a height of 823 feet above the same datum, and will have a capacity of 306,000 acre feet. Surveys made show that a storage basin to the elevation of 875 feet above datum with a capacity of 918,000 acre feet, could be constructed, and, when necessary, such increased capacity could be attained by progressive stages.

The dam being constructed consists of a diaphragm wall of reinforced concrete, built from bed rock (which in places is 75 feet below ground surface) to crest level, a wall of clayey material on the upstream side of the diaphragm, and supporting masses of rock quarried from the adjacent hills. The diaphragm has now been built up to a height 139.75 feet above the river bed for its entire length, thus completing this portion of the work up to the level of the first stage. The wing and approach walls at the Sugarloaf end of the diaphragm have been built to a height of 128 feet above the river bed. The clay filling on the upstream side of diaphragm has now been built to its full height and cross section, with the exception of a length of 500 feet at the Sugarloaf end, which requires about 1,000 cubic yards to complete. The placing of this remaining clay is now in progress. For half the length of the bank, the rockfill on either side of the diaphragm has been built up its full height of 140 feet above the river bed, and, for the remaining portion, the rockfill has been built up to a minimum height of 130 feet.

The hydraulic lifters operating the gates in the completed valve tower have been used for the regulation of water throughout the past season, and acted satisfactorily.

The cast-iron gates and pipes for the second (emergency or power) outlet were delivered and have been installed. The construction of stems and hydraulic lifters for these gates is in progress, and it is anticipated that these will be delivered and placed in position during the coming year.

During the year upwards of 22,500 cubic yards of concrete were placed in the diaphragm, the wing, and approach walls and spillway. The spillway concrete forming the overflow for flood waters has now been built to a minimum height of 96 feet above the river bed affording, at the present time, a storage of 135,000 acre feet.

### WARANGA RESERVOIR ENLARGEMENT.

The construction of the reinforced concrete core wall—some  $4\frac{1}{2}$  miles in length—to strengthen the Waranga Reservoir embankment has been completed. All trenches have been refilled, the banquettes have been brought up to section, and the slopes have been trimmed. The reservoir has now a capacity of 333,400 acre feet, as against the old capacity of 201,300 acre feet.

It is proposed, during the coming year, to fence the whole embankment and to erect at the inner edge of its crest a loose stone wall as a protection against damage by wave action.

Deposits of silt have been removed from the offtakes to the Waranga-Rodney and Waranga-Western Channels.

### WIMMERA STORAGES.

The great value of the new Taylors Lake Storage of 30,000 acre feet capacity, which is filled from the Wimmera River by a connecting channel carrying 1,000 acre feet per day, was fully demonstrated during the recent dry period. This reservoir stood the full strain of the season's watering in the Wimmera Mallee Districts, and is now again filled notwithstanding the comparatively low flows in the river this winter.

The work of beaching that portion of the main embankment forming the first stage of the Pine Lake Reservoir, is now being carried out, and the construction of the second stage of main embankment has been commenced. This work, involving the placing of some 200,000 cubic yards, will increase the available capacity of Pine Lake Storage from 22,000 acre feet to 48,000 acre feet, and later it will be practicable to further increase the capacity of this Storage to its maximum of 62,000 acre feet.

With the completion of this Reservoir the full storage provision for the Wimmera Mallee Scheme will be increased to no less than 212,690 acre feet, as against some 69,000 acre feet of a few years ago.





## RIVER MURRAY WATERS AGREEMENT WORKS.

### GENERAL OUTLINE.

The scheme of works provided in the River Murray Waters Acts, passed by the Governments of the Commonwealth and of the States of New South Wales, Victoria, and South Australia, comprises storages on the Upper River Murray and at Lake Victoria, locks and weirs in the course of the River Murray from its mouth to Echuca, and also locks and weirs on the lower part of the River Murrumbidgee. The Acts also provide that, for purposes of construction, the Minister of Public Works of New South Wales shall be the Constructing Authority for that State; that, for South Australia, the Commissioner of Public Works shall be the Constructing Authority; and that the State Rivers and Water Supply Commission shall be the Constructing Authority for Victoria.

During the year the Constructing Authority for New South Wales has been engaged on the section of the Hume Reservoir works within its territory. Concrete has been placed in the foundations of the spillway and the north wing wall; and the coffer-dam enclosing the natural bed of the river channel has been completed and the river diverted into a prepared channel through the concrete foundations on the north side.

The first coffer-dam has also been constructed by the New South Wales Authority in the river for Weir-Lock No. 10 at Wentworth, and work is proceeding inside this coffer-dam.

The Constructing Authority for South Australia has been engaged on works at various sites from Blanchetown to Lake Victoria. Weirs and Locks Nos. 1 and 3 have been completed and brought into operation; No. 9 has been practically completed; Nos. 2 and 5 are approaching completion; No. 4 has been commenced; and the storage works at Lake Victoria have been completed with the exception of the improvement of the inlet and outlet channels.

The State Rivers and Water Supply Commission, the Constructing Authority for Victoria, has finished the weir-lock at Torrumbarry, and is now carrying out the following works under the Agreement.

### HUME RESERVOIR.

During the year, the construction of the main embankment on the Victorian side was continued and one of the extension embankments commenced. 386,000 cubic yards of earthwork were placed over a length of about 1,500 feet, the average height of the main embankment over this length being now approximately 33 feet above the level of the river flats; 5,900 cubic yards of earth and rock were excavated from the core trenches of these embankments; 5,800 cubic yards of concrete and 85 tons of steel were placed in the core wall; and 15,100 cubic yards of gravel were transported from Chiltern to the works.

A steam shovel, a welding plant, a concrete mixer, a large lathe, a steam hammer, a pneumatic drill, a pneumatic spade, a quantity of steel rails and a motor car were added to the plant.

Further investigations were made in respect to the proposed bridge for the Bethanga District. Surveys and borings were made at four sites on the River Murray between the dam and Hawksview Bridge, and at two sites on the River Mitta above the junction of Spring Creek. A satisfactory site on the River Murray about 5 miles above the dam was chosen by the Victorian Constructing Authority, and agreed to by the municipalities of Hume, Towong, Albury, and Wodonga, and by the residents concerned. Proposals for the erection of the bridge at this site have been forwarded to the New South Wales Constructing Authority for consideration.

Investigation work to determine the best location for a new diverting weir on the Upper Murray to supply new irrigable areas from the new storage is being continued.

### TORRUMBARRY WEIR AND LOCK.

This weir and lock has been in successful operation, and water was diverted for the irrigation of the extensive areas in Cohuna, Gannawarra, Kerang, Koondrook, Leitchville, Swan Hill, and Third Lake irrigation districts. The railway siding between Gunbower and Patho was dismantled during the year, the sleepers were sold, and the rails and remaining items of plant transferred to other works.

### NO. 11 WEIR AND LOCK, MILDURA.

During the year the construction of the lock and gates, the placing in position of valves and operating gear, and the excavation of the lock canal, with the exception of a small quantity at each end, were completed; and good progress was made with the beaching of the slopes of this canal.

In the navigation pass, the first coffer-dam, on the Victorian side of the river, and all the permanent work within this coffer-dam were completed. Before the first coffer-dam was flooded the steel sheeting for the concrete arm of the second coffer-dam, which will embrace the New South Wales bank of the river, was placed.

The quantities of further work carried out include—131,000 cubic yards of earthwork in the lock canal; 9,740 cubic yards of concrete; 148 tons of steel reinforcement; 13,060 square yards of stone beaching; 1,450 lineal feet of bearing piles; and 46,600 square feet of steel sheet piling; and 59,700 tons of materials were transported to the works.

The main additional items of plant put into operation during the year were one 5-ton cableway, 958 feet span, one grab bucket, one 90-foot bin barge, one 40-foot oregon barge, one floating pile-driving plant, and several electric motors and pumps.

## WORKS CONTROLLED BY OTHER AUTHORITIES.

(Under general supervision of the Commission.)

### SEWERAGE IN COUNTRY DISTRICTS.

In December last the Sewerage Districts Acts, under the provisions of which sewerage works are constructed and maintained in country towns, were amended by the passing of the *Sewerage Districts Act 1925*, in which provision is made for general supervision by the Commission of the constructional activities of Sewerage Authorities who are also now required, before commencing construction of any principal works, to obtain Ministerial approval.

The Bendigo Sewerage Authority, having practically completed the reticulation of the No. 1 or City Area, is now preparing plans for the extension of its sewer system to drain the No. 2 or Quarry Hill Area. It is intended at an early date to commence the construction of these works. Plans are also in course of preparation for improved treatment works to purify the sewage before disposing of it on the land.

The Ballarat Sewerage Authority is making good progress with the construction of its works—several hundred tenements being now connected to the sewer system—the first unit of the treatment works being in satisfactory operation.

The Colac Sewerage Authority has completed the preparation of detailed plans of the proposed works, and on approval of same will invite tenders for the construction of the sewers, pumping station, and treatment works.

A Sewerage Authority has been constituted at Horsham, and will commence the necessary detailed survey of the town at an early date.

Applications for the constitution of Authorities at Lorne, Mildura, and Swan Hill are being considered.

Among the country centres contemplating the installation of sewerage systems are Ararat, Benalla, Euroa, Echuca, Kyneton, and Wangaratta.

### COUNTRY WATER SUPPLIES.

Under the general supervision of the Commission many important works were carried out by waterworks trusts and local governing bodies, of which there are now 106 and 18 respectively.

The Avoca Township Waterworks Trust has constructed a concrete reservoir of 200,000 gallons capacity to improve the supply to the high levels of the town.

The Bairnsdale Waterworks Trust has arranged for the erection of a concrete water tower, installation of new pumping plant, and adaption of the old storage tanks to settling basins, in order to afford a supply improved both in quality and pressure.

The Cobram Waterworks Trust constructed, during the year, a reinforced concrete stand-pipe, 70 feet in height, to provide additional storage for the town.

The Coleraine and Casterton Waterworks Trust made good progress with the construction of the storage reservoir at Konongwootong, and the laying of the main pipe lines; and is now engaged on the reticulation of Coleraine township.

The Leongatha Waterworks Trust is enlarging the main pipe line from the service basin on Bowlers Hill to the town to afford an improved supply to the high levels.

The Macedon Waterworks Trust has submitted, and received approval to, proposals to improve its supply by means of works to utilize the Willimigongon Creek.

The Merrigum Waterworks Trust District was constituted, the existing works being taken over from the Rodney Shire Council.

The Murchison Waterworks Trust is carrying out extensive improvements to the reticulation of the town, and also providing an improved supply to the railways at Murchison East.

The Nhill Waterworks Trust has completed the new well, pumping plant, and rising main.

The Rutherglen Waterworks Trust has installed a crude oil driven pumping unit, and is providing an improved supply of water.

The Shepparton Urban Waterworks Trust has entered into a contract for an electrically driven pumping set to replace the old obsolete plant, and is also carrying out extensive improvements to the reticulation system.

The Toora, Trafalgar, and Yarra Junction Waterworks Trusts, having completed their works, are supplying water to the respective towns.

The Traralgon Waterworks Trust has enlarged the greater portion of the pipe line from the headworks on the Tyers River to the town, and has also carried out improvements to the reticulation system.

Pipe extensions and other works have been carried out at Charlton, Donald, Euroa, Hamilton, Kyneton, Horsham, Maryborough, Mooroopna, St. Arnaud, Warracknabeal, and Wodonga.

Proposed water supply schemes for Edenhope, Portland, Port Fairy, Smythesdale, and Tallarook were investigated.

The Ararat Borough Council has let a contract for the raising of the arch dam at Mount Cole to increase the storage by 70,000,000 gallons to assure a supply to the town in dry seasons.

The First Mildura Irrigation Trust has installed a new steam pumping plant at the Nicholls Point Station to replace the old plant which was no longer serviceable.



## GENERAL.

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### LANDS UNDER CLOSER SETTLEMENT IN IRRIGATION DISTRICTS.

Following the adoption of the new Migration Agreement between the Imperial, the Commonwealth, and the State Governments, the Commission has, with the concurrence of the Government, submitted for approval two schemes of land settlement in irrigation districts—one at Maffra-Sale District, and one at Katandra District, north of Shepparton. The Imperial and Commonwealth Governments have already approved of the Maffra-Sale scheme, and are now investigating the Katandra scheme. Under the agreement provision is made for the settlement of both Australian and Oversea settlers on favorable terms, and it should lead to great development in Closer Settlement.

During the past year 177 applications for Closer Settlement blocks in irrigation districts were granted by the Commission. The successful applicants included 12 discharged soldiers, 119 local civilians, and 56 approved land-seekers from overseas. In addition to this, 217 new settlers have been placed on lands made available for settlement by further extensions, by the Commission, of channels in domestic and stock areas.

An important development in irrigated Closer Settlement was the change over to irrigation conditions, at the request of the settlers, of the dry farming area known as Gash's Estate and other lands adjacent to the Tragowel Plains Irrigation District, the irrigation channel system of which was extended to command such lands. The area so benefited includes the holdings of nine soldiers and two oversea settlers, and sixteen other settlers and land-holders.

The lands subdivided for irrigation settlement totalled 4,764 acres, which, with the exception of 806 acres purchased during the year, were taken from lands held in reserve in readiness to meet demands as they arise in the various districts. During the past year the demand was greatest in the new Maffra-Sale District, where 1,106 acres of the estate known as "Cobain's" was subdivided into nineteen holdings, averaging 52 acres each, while that known as "Taylor's, John's and Lee's," containing 941 acres, was cut up into eighteen lots, averaging 49 acres, and "Templeton's Estate," of 225 acres, into four blocks of 56 acres. The subdivision of these properties which, prior to purchase, supported only eight families, has thus provided for five times that number.

In the Goulburn districts 2,246 acres were subdivided, of which 783 acres, known as "Gribben's Estate," situated east of the Goulburn River, and previously supporting only one family, has been subdivided into ten holdings, which were immediately settled. In the older district west of the river the estates known as "Colbert's and Pell's," of 1,376 acres, provided twelve blocks, averaging 113 acres. Before subdivision only two families resided on these estates.

The new Closer Settlement area opened up by the Commission at Hallam—as described in last year's Report—was extended by the provision of fifteen additional blocks, averaging 16 acres each, which were at once taken up under Conditional Purchase Lease. The majority of the successful applicants have had considerable experience in the special forms of intense culture for which these lands were acquired and subdivided.

The lands held in reserve for future subdivision have been added to during the year by the purchase of 2,240 acres, of which 1,624 acres are in the Katandra District, now being supplied by the extension of the East Goulburn Main Channel. After deducting the 783 acres made available and settled during the year, the Commission will have in reserve, to meet local requirements and to provide for settlers expected from overseas under the Migration Agreement, a total area in this part of the State of 11,660 acres.

Provision for new settlers has been made also in other parts of the State, the lands available for this purpose including 3,300 acres at Calivil and 600 acres at Rodney and Kyabram, in the western portion of the area served by the Goulburn Irrigation System, 10,000 acres of the irrigable portion of Red Cliffs Soldier Settlement in the extreme north-west, supplied from the River Murray, about 1,500 acres at Maffra, and 2,800 acres at Hallam and Narre Warren, making, with the Katandra lands referred to above, a grand total of about 30,000 acres. The construction of the works for the areas to be first supplied are well forward, and subdivision will proceed according to requirements.

The following statement shows the lands purchased and subdivided by the State and the extent of settlement on each estate. The subdivided portions of these estates are already supporting over nineteen times as many families as were living on them prior to their subdivision for Closer Settlement.

The statement shows also particulars of settlement effected under section 20 of the *Closer Settlement Act* 1915, outside the large estates subdivided by the Commission :—

Closer Settlement Estates.	Area of Lands purchased by the State in Acres.	Properties Subdivided.						
		Area in Acres.	Number.	Number of Families thereon when Purchased.	Subdivided into—		Number of Closer Settlement Blocks now occupied.	Present Increase in Number of Families.
					Number of Closer Settlement Blocks.	Average Area in Acres.		
Shepparton .. .. .	14,170	14,170	33	29	389	34	376	347
East Goulburn .. .. .	13,400	1,740	2	2	23	72	23	21
Rodney .. .. .	3,230	2,800	6	4	49	56	44	40
Stanhope .. .. .	21,500	21,500	7	13	290	63	256	243
Kyabram .. .. .	4,600	4,420	9	12	69	62	65	53
Tongala .. .. .	18,820	18,820	40	35	314	58	296	261
Koyuga .. .. .	4,200	4,200	40	35	54	73	48	48
Cornelia Creek .. .. .	2,500	2,500			19	161	17	17
Nanneella .. .. .	9,040	9,040	18	8	125	70	118	110
Echuca .. .. .	3,600	3,600	8	4	30	105	30	26
Bamawm .. .. .	13,400	13,400	28	21	192	65	188	167
Dingee .. .. .	500	500	3	1	20	23	14	13
Calivil .. .. .	3,300	..	..	..	..	..	..	..
Cohuna .. .. .	12,000	12,000	29	10	142	80	116	106
Koondrook .. .. .	9,060	9,060	14	10	132	63	120	110
Swan Hill .. .. .	12,500	12,500	34	16	329	36	309	293
Nyah .. .. .	3,800	3,800	8	1	237	15	237	236
Merbein (Crown) .. .. .	8,300	8,300	..	..	423	20	420	420
Red Cliffs .. .. .	33,000	18,000	1	3	706	17	686	683
Bacchus Marsh .. .. .	70	70	1	..	2	36	2	2
Werribee .. .. .	10,000	10,000	1	11	233	36	229	218
Hallam .. .. .	3,300	520	3	2	31	17	31	29
Maffra .. .. .	8,070	6,550	13	12	133	45	87	75
Properties purchased under Sec. 20, C.S. Act 1915, outside above Estates ..	212,360	177,490	259	194	3,942	44	3,712	3,518
	19,540	..	..	..	..	..	200	..
	231,900							

#### PROGRESS OF IRRIGATED CLOSER SETTLED DISTRICTS.

During the past year the development of the holdings in the irrigated areas noted in earlier reports has been steadily continued and a considerable increase in value of stock, implements, and permanent improvements has been reported.

In the dried fruit areas there was a considerable increase in yield and as February was very dry as compared with the previous year, a very fine grade of currants was processed, and the prices being realized therefor are ahead of last season's. Heavy rains at the end of April, however, delayed the harvesting of the sultanas and lexias crops and considerable quantities of the latter were subsequently distilled. Owing, however, to the vastly improved market for fortified wines there is a considerable demand for spirit, and the return from the distilled fruit will probably be equal to the amount received for that placed on the export market. Owing to the demand for spirit there was also a better demand for doradillos, which sold at considerably higher prices than a few years ago.

The development which has taken place in this industry in the Mildura area and its effect on the general prosperity of the State may be shown in many ways, but one of the most significant is the effect on the railway revenue; thus in 1909 the revenue from this area was only £25,000 whilst in 1925 it was £125,000, an increase of 400 per cent.

The cannery at Shepparton again had a most successful season and, together with the Kyabram cannery and the new one at Mooroopna which was opened last year, processed the largest pack of canned fruit yet produced in Victoria, the aggregate of the three canneries being twelve million tins, most of which has been already sold. During the winter, extensions have been made to the canneries at both Shepparton and Mooroopna, in order to cope with the greater quantity of fruit which will be processed next season.

The suitability of the irrigation districts for dairying has been most markedly shown in the results of the State Herd Testing Competition (pure bred cows) during the past twelve months. In competition with herds all over the State, some of them imported at high prices, second and third places were secured by herds on irrigated holdings at Tongala and at Wyuna. The two highest yielding cows in the State are also in the Wyuna herd, showing that, with good cows, the luscious feed of the irrigation districts will produce maximum quantities of milk and butterfat. The results of the Herd Testing Associations' (grade cows) Competitions are not yet available, but from progress reports published during the year it would appear that the best herds and highest yielding cows are to be found in the irrigation areas where the continuous supply of green feed enables the cows to keep at their top over a long period.

The benefits of the part irrigation supply on the Boisdale Flats in the Maffra-Sale district were shown by the last season's beet crop, which owing to poor germination and low rainfall appeared to be well below the average; as a result, however, of the effect of application of water on those crops for which it was available, a crop over average was produced. During the coming season when a full supply of water will be available for a much larger area the results will be still more marked.

Until the last few years vegetable growing in the irrigation areas has been confined to tomatoes mainly in the vicinity of Bendigo and Koondrook; but, as the market gardening areas in the suburban districts of Brighton and Cheltenham have been subdivided into building allotments and as the population of Melbourne has increased, a demand has arisen for new areas for this purpose. This demand has been met to a large extent in the Werribee district, which was originally devoted to lucerne growing and dairying, but where each year a larger area is being devoted to vegetables, especially peas, beans, and potatoes, old lucerne land having shown by the yields obtained that it is specially adapted for potatoes. In addition to the development of vegetable growing at Werribee the establishment of a condensery by the Federal Milk Company Limited has led to a revival of the dairying industry, and the district is now on a very sound basis.

The development in the Narre Warren district, mentioned in the last Report, has continued, and the settlers there marketed their first crop of vegetables during the past few months. Although the nature of last year's season was such that the maximum advantage could not be obtained from the water supply, the results obtained indicated that this district will ultimately become one of the chief areas for the production of vegetables for the Melbourne market.

Bacchus Marsh, where the fertility of the soil has always been well known, is also developing as a market gardening centre, although dairying still remains the mainstay.

Poultry raising, the spread of which has been mentioned in previous reports, is still being further developed, and Stanhope and Werribee are now beginning to rival Rochester for the title of the Commission's premier poultry district. At Werribee there is probably the largest poultry farm in the Southern Hemisphere, the total number of birds thereon being in the vicinity of 15,000. The opening of a profitable export market, which now seems more assured, will pave the way to an even larger development in this industry.

The suitability of lucerne as a fodder for growing pigs is gradually becoming generally realized and the main breeders of stud stock of various breeds of swine are to be found in the irrigation districts. Thus the prizes in Middle Yorks, Berkshires, Large British Blacks, and Gloucester Old Spots at the main agricultural shows are usually won by pigs from the irrigation districts.

The Irrigation Research Committee, comprising representatives of the Department of Agriculture and the Commission, has continued the experiments described in the last Report. Additional plots are this year being laid out at Cohuna and in addition a comprehensive investigation is being made into the salt question at Tresco especially with a view to determining the best system of drainage for that class of irrigated land. The Commission is also co-operating with the Council of Scientific and Industrial Research in an investigation of the problems of the Murray Valley.

## ADMINISTRATION.

### EXTENSIONS AND EXCISIONS.

The Rochester Irrigation and Water Supply District has been extended by an additional area of some 35,000 acres.

The Tongala Irrigation District has been extended by the inclusion of the adjacent Closer Settlement Estates, known as "Colbert's" and "Pell's," comprising some 1,400 acres, formerly in the Deakin District. Similarly the Closer Settlement Estate, known as "Gash's," in the Parishes of Mincha and Mincha West, previously settled under dry farming conditions, and other lands in the vicinity with a total area of 5,730 acres, have now been connected to the channel system of the Tragowel Plains Irrigation District, and have been included in that District. These lands previously formed part of the Loddon United Waterworks Trust District.

The improved supply of water made available by the Torrumbarry Lock-Weir on the River Murray, has enabled the Commission to extend the Gannawarra Irrigation District by 8,400 acres, Koondrook Irrigation District by 4,730 acres, Mystic Park Irrigation District by 160 acres, and Kerang Irrigation District by 320 acres, none of these lands having previously been in any Irrigation District.

As an area of 130 acres of the Mildura Trust District, adjoining Merbein Irrigation Area, can be supplied more satisfactorily by the Commission than by the Trust, it has been excised from Mildura Trust District and transferred to Merbein District with the necessary financial adjustment.

The Tyntynder Waterworks District was extended by the inclusion of 32,000 acres of newly settled Mallee lands, and the Carwarp Waterworks District was similarly extended by the addition of 28,000 acres of lands not previously in any District. Lower Millewa Waterworks District was also extended by the addition of 2,200 acres, excised from Yelta District.

An area of 6,400 acres was excised from Kerang North West Lakes District, and included in the Third Lake Irrigation District.

The new Charlton Main Channel from the Wimmera Mallee System having been completed, areas of about 370 square miles now in the Avoca, West Charlton, Shire of Donald, and Shire of Kara Kara Waterworks Trust Districts will be brought under the control of the Commission.

### NEW AND PROPOSED DISTRICTS.

The Leitchville Irrigation District of 10,300 acres, and Third Lake Irrigation District of 14,800 acres, were constituted during the year.

An area of about 5,500 acres, situate between Lake Tutchewop and the Little Murray River having been supplied from Torrumbarry Works, it is proposed to constitute the area a district under the name of the Fish Point Irrigation and Water Supply District.

As water can now be delivered to many portions of the Maffra District, steps are being taken to constitute the Maffra Irrigation and Water Supply District, covering in the first place an area of about 8,000 acres, but which will be increased as further distributary works are constructed.

About 40 square miles of high lands in the Parish of Dering, within Tyrrell Waterworks District, having been supplied by pumping, this high area will be excised and constituted the Dering Waterworks District.

The township of Marnoo, having been reticulated, was proclaimed an Urban District, while an Urban District was also proclaimed in respect of the newly reticulated Lalbert township within the Long Lake Waterworks District. As reticulation works are nearing completion in the townships of Waitchie and Chillingollah, within Tyntynder District, and Nandaly, within Tyrrell District, Urban Districts will accordingly be proclaimed at an early date. Works are also in progress for the reticulation of the township of Hastings, within the Mornington Peninsula Waterworks District, with a view to the early proclamation of that township as an Urban District.

### STAFF.

During the year Mr. H. C. Kermode, Assistant Engineer, was transferred from the Waranga Reservoir Enlargement Works to No. 11 Weir and Lock on the River Murray, at Mildura. Mr. E. M. Hopkins was appointed District Secretary and Collector at Nyah, while Mr. Champion has been transferred from Nyah to the position of Head Water Bailiff at Tresco.

Mr. A. A. Douglas, District Collector at Ouyen, was transferred to Horsham in place of Mr. J. A. Teague, who retired. Mr. E. S. Stevens, Clerk at Birchip, was transferred to Ouyen, the position at Birchip being filled by the transfer of Mr. O. Vincent from Hume Reservoir Works. Mr. V. Packer, Engineering Draftsman at Maffra, was transferred to the position of Assistant Engineer on the River Murray Works Head Office Staff. Mr. C. P. Hay, District Collector at Red Cliffs, was transferred to the Head Office, the vacancy at Red Cliffs being filled by the transfer of Mr. C. E. Chancellor, whose position as Supervisor at Murrabit was filled by the appointment of Mr. A. C. Stewart.

### FIRE INSURANCE.

The Commission has continued its policy of carrying the fire risk on its own buildings. The premiums thus saved now amount to £5,338.

## RECEIPTS, DISBURSEMENTS, AND ESTIMATES.

The receipts for last year amounted to £404,725. This is the highest amount yet received and exceeds the collections for the previous year by £37,525. The revenue is received in approximately equal proportions from the Irrigation Districts and Waterworks Districts, in which no less than one hundred and twenty-three separate rates and charges are annually made.

The disbursements from the Annual Vote totalled £235,543, which even with the great expansion of operations is only some £7,145 in excess of those for the preceding year. The loan expenditure amounted to £1,488,542, of which no less than £490,427 was expended on storage works. Full details of this expenditure are shown in another portion of the Report.

The receipts from the twenty-six Irrigation and Water Supply Districts shown in detail in this Report amounted to £174,848 as against £151,779 received in the preceding year. After debiting the districts with working expenses and interest chargeable on completed works the deficit for the year amounted to £12,031 as against £27,876 for the previous year. It should be noted that as a result of the Loan Expenditure incurred, other Irrigation and Water Supply Districts can now be constituted, thus gradually making a number of such Loan Works revenue producing. An instance of this is Red Cliffs District, where up to the present the revenue received has been included in the Miscellaneous Item on page 39.

In the Coliban Districts the loss for the year was £24,585 as against £27,064 for the previous year. The improvement was due to the increased water sales resulting from the abnormally dry summer. As previously pointed out the rating in these districts is limited by the Water Acts, and any appreciable reduction in this annual loss can only be achieved by a substantial advance in the progress of the whole area.

The number of Waterworks Districts under the direct control of the Commission, exclusive of the Coliban system, is steadily increasing and there are now sixty-eight, inclusive of forty-eight town supplies. The receipts for last year were £147,561, and after debiting working expenses and the interest chargeable there was a loss of only £1,826, due mainly to the crop failure in the Northern Mallee.

The Commission has also the control of five Flood Protection Districts, where the protective works are still uncompleted. The receipts from these districts amounted to £6,763, but the revenue will be substantially increased when the works in hand are completed.

The estimate of disbursements for the ensuing year are set down at £249,500, an increase of £12,000 over those for the past year, while the estimated receipts for the coming year are set down at £440,000, as against an estimate of £382,000 for the past year.

The Loan Liability of the State for Works of Water Supply at the close of the year was £17,475,150. Of this total £1,250,584 is for Free Headworks; £1,263,228 was Written Off; £147,046 was advanced to some early-formed Local Authorities; £209,890 has not been expended; £1,201,722 is represented by River Murray Works; and £4,416,143 by Uncompleted Works which are not revenue producing, details of which are set out separately in the Statement of Loan Liability in this Report. The balance of £8,986,537 is the sum in respect of which those benefited by the various works are this year liable for payment of interest.

The present Interest charges on loans amount to £750,239. Of this amount £123,244 is not chargeable to any districts, being debitable against Free Headworks, Amounts Written Off, and Unexpended Balances, and £51,591 is debitable against River Murray Works, while £189,595, although recorded for future charging, is not at present debitable, being interest on cost of Uncompleted Works which are not yet revenue producing, leaving £385,809 as chargeable against the Commission and other Authorities. The amount available last year from the Revenue of the Commission and other Authorities to meet such interest (after providing a sum of £29,168 for non-revenue producing works and services not chargeable to any districts) was £232,529 as set out in the statement on page 46.



## FINANCIAL POSITION.

The Statement of Loan Liability on page 46 of this Report sets out the present aggregate financial position of Works both for Irrigation and Domestic and Stock Supply as well as for Flood Protection and Drainage Services.

That Statement shows in detail the extent of the State's liability, although a large portion represents Amounts Written Off and other Amounts irrecoverable, such as Free Headworks.

Taking the figures in the Report the position in regard to Non-revenue and Revenue producing works is:—

	£	£
Gross deficit including all Written Off and Irrecoverable Amounts	..	517,710
To which certain Amounts are debited for Pensions by Treasury	..	955
Making a total of .. .. .	..	518,665
Included in this is Interest on—Capital Written Off some twenty-five years ago (£1,263,228); Cost of Free Headworks so declared twenty years ago (£1,397,630); and Expenditure on River Murray Works to date (£1,201,722), totalling ..	165,823	
Loss on Coliban District where Rate is limited by Water Acts in lieu of general Writing Off .. .. .	24,585	
Services rendered by Water Commission chargeable to whole State or not at present chargeable to any District. (See page 39 of Report) .. .. .	51,865	
Interest on Loan moneys in hand at Treasury .. .. .	9,012	251,285
Deducting the above there remains to be accounted for a further sum of		267,380
At present there are Works under construction from which it is impracticable to obtain Revenue until completed or until districts connected with them have been settled so that Revenue could be collected. These comprise amongst others—Sugarloaf and Waranga Reservoirs; Maffra-Sale Irrigation District; new Goulburn Districts; Kooweerup and Cardinia Flood Protection Districts; and Millewa Domestic and Stock Scheme. The Interest on these would amount to		189,595
Leaving still to be accounted for a sum of .. .. .		77,785
The Interest chargeable to Districts controlled by the Commission is fixed by the Water Acts at 4 per cent., which until recently was sufficient. The percentage now charged by the Treasury is £4 14s. 2.5d., and this represents approximately a sum of .. .. .		60,785
Leaving after excluding Interest on Free Headworks, Amounts Written Off, River Murray Works, and other Items mentioned .. .. .		17,000

The Items which the Commission desires to first reduce are those arising from uncompleted works and from the increased interest rate now paid by the Treasury over and above that fixed by the Water Acts. In regard to this latter the current figures from the Treasury show that the amount now chargeable as interest on cost of works is 14s. 2.5d. per cent. higher than the statutory rate which the Commission is empowered to charge to the various Districts. As against this, however, it should be noted that for a great number of years the statutory rate which the Commission debited to districts showed a slight margin over the interest rate paid on the moneys invested in the works, and that only recently the conversion of old Loans and new Flotations have raised the interest rate to be paid by the Treasury. If present interest rates continue, however, it would be unreasonable to debit the districts with a lower rate than that to be paid by the State.

The main Item, however, which the Commission desires to meet by increased Revenue is shown in respect to uncompleted works. Some of the main works have now reached a stage when Revenue can be justifiably collected on their account. This applies particularly to the additional storage at Waranga just completed, and to Sugarloaf Storage on the Goulburn, which is two-thirds completed and should be finished within the next eighteen months. In view of the provision for storage of water by these works the Commission can now safely proceed with a substantial expansion in Irrigation Culture resulting in increased Revenue. The Maffra-Sale Irrigation Scheme has also been so far advanced that appreciable Revenue can be expected this year. The great Millewa Domestic and Stock Scheme is likewise expected in a few years to return both Interest and Working Expenses.

The Revenue for last year amounted to approximately £405,000, which is the highest collection yet made, but the Commission has estimated that this amount will be increased by no less than £35,000 for the coming year, and it is believed that each succeeding year will show even larger increases as the works in progress are completed. The last few years have been a period of construction, but many of the principal works are nearing completion, and as a result the Treasury will each year receive a larger and larger revenue return for expenditure incurred in these most important developmental agencies in the State's progress.

## RECEIPTS AND DISBURSEMENTS.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1926.

Works.	Receipts.	DISBURSEMENTS, exclusive of Interest, Redemption, and Depreciation Charges.			Excess.	
		From Annual Votes and Special Appropriation.	Deduct Capital and Other Disbursements not Chargeable to Districts.	Net Disbursements on Maintenance and Management.	Receipts over Net Disbursements.	Disbursements over Receipts.
	£	£	£	£	£	£
Coliban ... ..	44,693	15,704	...	15,704	28,989	...
Other State Works—						
Broken River ... ..	6	344	...	344	...	338
Goulburn ... ..	483	2,902	...	2,902	...	2,419
Kow Swamp ... ..	503	1,050	...	1,050	...	547
Lake Lonsdale ... ..	57	899	...	899	...	842
Loddon River ... ..	7	435	...	435	...	423
North-West Lakes ... ..	458	662	...	662	...	204
Irrigation Districts ... ..	174,848	109,747	22,697	87,050	87,798	...
Waterworks Districts ... ..	101,208	44,837	...	44,837	56,371	...
Urban Districts and Divisions ... ..	46,353	12,855	...	12,855	33,498	...
Flood Protection Districts ... ..	6,763	751	...	751	6,012	...
Licences, Diversions, Miscellaneous ... ..	29,346	20,967	...	20,967	8,379	...
	404,725	211,153	22,697	188,456	221,047	4,778
Not Revenue Producing—						
River Gauging, Surveys and Re- ports, New Projects ... ..	...	5,462	...	5,462	...	5,462
Waterworks Trusts ... ..	...	...	...	...	...	...
Boring for Water, Road Clearing, Mallee and Land Settlement ... ..	Cost of Admin- istration	10,518	...	10,518	...	10,518
Loan Works ... ..	...	8,410	...	8,410	...	8,410
Totals ... ..	404,725	235,543	22,697	212,846	221,047	29,168
Amount available to meet Redemption and Depreciation ... ..					£2,000	
Amount available to meet Interest as per page 46 of Report after deduct- ing £22,697 not chargeable to Districts ... ..					£167,182	

## COLIBAN SYSTEM.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1926 ;  
and of Interest charged at the rate of 4 per cent. on Capital Debts.

District.	Capital Debit at 30th June, 1926.	Receipts.	Disbursements and Interest Charged.			Excess.	
			Disbursements.	Interest.	Total.	Receipts over Disbursements and Interest.	Disbursements and Interest over Receipts.
	£	£	£	£	£	£	£
Coliban ... ..	1,342,623	42,538	14,363	53,223	67,586	...	25,048
Axe Creek ... ..	1,750	331	271	70	341	...	10
Harcourt ... ..	7,040	1,824	1,070	281	1,351	473	...
Totals ... ..	1,351,413	44,693	15,704	53,574	69,278	473	25,058

## FLOOD PROTECTION DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st July, 1920, to 30th June, 1926 ; and of Interest charged at the rate of 4 per cent. on Capital Debts ; and also of Depreciation and Redemption charged as at 30th June, 1926.

## RECEIPTS.

District.	1st July, 1920, to 30th June, 1925.	1925-26.			Grand Total at 30th June, 1926.
		Charge.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£
1. Cardinia .. ..	5,237	1,976	20	1,996	7,233
2. Echuca .. ..	635	152	..	152	787
3. Lower Kooweerup .. ..	12,085	3,695	220	3,915	16,000
4. Kanyapella .. ..	..	165	..	165	165
5. Loch Garry .. ..	..	535	..	535	535
Totals .. ..	17,957	6,523	240	6,763	24,720

## DISBURSEMENTS, AND INTEREST DEPRECIATION AND REDEMPTION CHARGED.

District.	DISBURSEMENTS.					INTEREST CHARGED.			(A) DEPRE- CIATION. (B) RE- DEMP- TION.	Grand Total at 30th June, 1926.
	1st July, 1920, to 30th June, 1925.	1925-26.			Total at 30th June, 1926.	1st July, 1920, to 30th June, 1925.	1st July, 1925, to 30th June, 1926.	Total at 30th June, 1926.		
		Repairs and Mainten- ance.	Manage- ment.	Total.						
	£	£	£	£	£	£	£	£	£	£
1. Cardinia .. ..	1,803	39	178	217	2,020	3,949	1,779	5,728	..	7,748
2. Echuca .. ..	438	50	50	100	538	197	47	244	..	782
3. Lower Kooweerup .. ..	3,893	56	262	318	4,211	9,371	3,597	12,968	..	17,179
4. Kanyapella .. ..	..	30	31	61	61	..	129	129	..	190
5. Loch Garry .. ..	..	25	30	55	55	..	480	480	..	535
Totals .. ..	6,134	200	551	751	6,885	13,517	6,032	19,549	..	26,434

## IRRIGATION AND WATER SUPPLY DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1926; and of Interest charged at the rate of 4 per cent. on Capital Debts; and also of Depreciation and Redemption charged, as at 30th June, 1926. (Free Headworks excluded.)

## RECEIPTS.

District.	1st May, 1906, to 30th June, 1925.	1925-26.					Grand Total at 30th June, 1926.
		Rates.	Compulsory Irrigation Charge.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£	£
1. Bacchus Marsh .. ..	63,616	726	3,611	1,113	833	6,283	69,899
2. Boort .. ..	43,217	1,749	..	836	25	2,610	45,827
3. Campaspe .. ..	13,353	849	..	91	2	942	14,295
4. Cohuna .. ..	136,285	2,030	6,159	422	272	8,883	145,168
5. Deakin .. ..	79,757	3,297	..	948	24	4,269	84,026
6. Dingee .. ..	17,874	123	1,160	97	719	2,099	19,973
7. Dry Lake .. ..	579	..	..	..	29	29	608
8. Echuca North .. ..	4,706	154	907	14	16	1,091	5,797
9. Gannawarra .. ..	105,684	1,533	4,934	833	111	7,411	113,095
10. Kerang .. ..	85,265	2,493	..	3,399	56	5,948	91,213
11. Koondrook .. ..	87,073	1,501	4,086	374	1,145	7,106	94,179
12. Leitchville .. ..	..	472	..	613	1	1,086	1,086
13. Merbein .. ..	167,956	1,990	21,944	7	4,291	28,232	196,188
14. Mystic Park .. ..	4,017	219	579	5	..	803	4,820
15. Nyah .. ..	51,127	340	6,369	43	1,482	8,234	59,361
16. Rochester .. ..	144,169	2,310	9,380	1,412	1,209	14,311	158,480
17. Rodney .. ..	365,832	6,829	14,873	2,251	1,312	25,265	391,097
18. Shepparton .. ..	73,470	1,505	5,245	291	165	7,206	80,676
19. South Shepparton .. ..	..	303	..	710	1	1,014	1,014
20. Stanhope .. ..	22,964	514	2,529	157	1,213	4,413	27,377
21. Swan Hill .. ..	83,708	968	4,583	1,233	783	7,567	91,275
22. Third Lake .. ..	..	191	274	..	..	465	465
23. Tongala .. ..	66,181	912	4,696	191	1,160	6,959	73,140
24. Tragowel Plains .. ..	160,685	1,643	6,765	1,265	211	9,884	170,569
25. Tresco .. ..	9,501	..	3,309	..	160	3,469	12,970
26. Werribee .. ..	35,482	964	5,317	2,302	686	9,269	44,751
Totals .. ..	1,822,501	33,615	106,720	18,607	15,906	174,848	1,997,349

## DISBURSEMENTS, AND INTEREST DEPRECIATION AND REDEMPTION CHARGED.

District.	DISBURSEMENTS.						INTEREST CHARGED.				(A) DEPRECIATION. (B) REDEMPTION.	Grand Total at 30th June, 1926.
	1st May, 1906, to 30th June, 1925.	1925-26.				Total at 30th June, 1926.	1st May, 1906, to 30th June, 1925.	1st July, 1925, to 30th June, 1926.	Total 30th June, 1926.			
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.							
	£	£	£	£	£	£	£	£	£	£	£	
1. Bacchus Marsh	15,333	54	915	185	1,154	16,487	53,659	5,032	58,691	..	75,178	
2. Boort ..	23,764	431	1,181	119	1,731	25,495	15,590	1,227	16,817	(B)1,400	43,712	
3. Campaspe ..	8,415	148	277	66	491	8,906	7,816	448	8,264	..	17,170	
4. Cohuna ..	95,405	1,580	1,703	299	3,582	98,987	52,605	4,543	57,148	(A)9,010	165,145	
5. Deakin ..	33,067	367	766	255	1,388	34,455	50,299	2,906	53,205	..	87,660	
6. Dingee ..	8,803	475	503	55	1,033	9,836	12,876	1,161	14,037	..	23,873	
7. Dry Lake ..	1	..	..	..	..	1	578	29	607	..	608	
8. Echuca North..	1,787	82	583	112	777	2,564	2,903	1,021	3,924	(A)5,694	12,182	
9. Gannawarra ..	68,435	1,432	1,545	272	3,249	71,684	36,321	4,044	40,365	..	112,049	
10. Kerang ..	45,388	2,155	1,683	394	4,232	49,620	34,618	2,377	36,995	(A)450 (B)2,000	89,065	
11. Koondrook ..	58,154	1,404	1,510	244	3,158	61,312	49,953	5,483	55,436	(A)4,501	121,249	
12. Leitchville ..	..	192	193	38	423	423	..	658	658	..	1,081	
13. Merbein ..	146,419	2,868	19,259	445	22,572	168,991	59,300	7,265	66,565	(A)9,928	245,484	
14. Mystic Park ..	3,554	107	539	46	692	4,246	1,096	497	1,593	..	5,839	
15. Nyah ..	48,843	751	4,549	344	5,644	54,487	24,023	3,751	27,774	(A)3,802	86,063	
16. Rochester ..	69,267	1,371	4,322	609	6,302	75,569	107,450	8,336	115,786	..	191,355	
17. Rodney ..	151,061	2,368	7,237	921	10,526	161,587	224,320	15,927	240,247	..	401,834	
18. Shepparton ..	33,033	1,135	874	223	2,232	35,265	60,943	5,969	66,912	..	102,177	
19. Sth. Shepparton ..	..	150	270	125	545	545	..	456	456	..	1,001	
20. Stanhope ..	11,824	876	1,024	159	2,059	13,883	16,469	2,545	19,014	..	32,897	
21. Swan Hill ..	55,402	1,047	2,550	338	3,935	59,337	30,387	4,767	35,154	(A)4,768	99,259	
22. Third Lake ..	..	39	32	32	103	103	..	831	831	..	934	
23. Tongala ..	31,243	1,331	1,130	233	2,694	33,937	65,164	5,297	70,461	..	104,398	
24. Tragowel Plains	68,822	1,532	2,530	131	4,193	73,015	95,779	5,941	101,720	..	174,735	
25. Tresco ..	9,762	347	2,347	162	2,856	12,618	5,972	3,173	9,145	..	21,763	
26. Werribee ..	8,232	374	842	263	1,479	9,711	29,560	6,145	35,705	..	45,416	
Totals ..	996,014	22,616	58,364	6,070	87,050	1,083,064	1,037,681	99,829	1,137,510	41,553	2,262,127	



## WATERWORKS DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1926; and of Interest charged at the rate of 4 per cent. on Capital Debts; and also of Depreciation and Redemption charged, as at 30th June, 1926. (Free Head-works excluded.)

## RECEIPTS.

District.	1st May, 1906, to 30th June, 1925.	1925-26.				Grand Total at 30th June, 1926.
		Rates.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£
1. Birchip .. .. .	275,391	4,700	91	25	4,816	305,231
2. Sea Lake .. .. .		8,362	213	25	8,600	
3. Tyrrell .. .. .		9,155	..	207	9,362	
4. Wycheproof .. .. .		6,919	132	11	7,062	
5. Carwarp .. .. .	6,104	620	16	8	644	6,748
6. Carwarp Central .. .. .	145	149	..	1	150	295
7. Eureka .. .. .	..	274	..	4	278	278
8. Karkarooc .. .. .	114,027	11,917	..	98	12,015	126,042
9. Kerang North-West Lakes .. .. .	2,018	147	6	2	155	2,173
10. Long Lake .. .. .	107,250	8,647	31	122	8,800	116,050
11. Mornington Peninsula .. .. .	21,466	3,164	..	36	3,200	24,666
12. Tyntynder .. .. .	57,061	5,794	44	92	5,930	62,991
13. Upper Western Wimmera .. .. .	43,018	3,945	26	3	3,974	46,992
14. Upper Wimmera United .. .. .	73,504	6,213	60	19	6,292	79,796
15. Walpeup East .. .. .	5,301	458	16	20	494	5,795
16. Walpeup West .. .. .	15,313	1,736	17	73	1,826	17,139
17. Werribee .. .. .	3,793	689	20	4	713	4,506
18. Western Wimmera .. .. .	159,332	11,292	1,305	37	12,634	171,966
19. Wimmera United .. .. .	170,963	13,046	691	112	13,849	184,812
20. Yelta .. .. .	2,081	387	20	7	414	2,495
Totals .. .. .	1,056,767	97,614	2,688	906	101,208	1,157,975

## DISBURSEMENTS, AND INTEREST DEPRECIATION AND REDEMPTION CHARGED.

District.	DISBURSEMENTS.						INTEREST CHARGED.				(A) DEPRECIATION. (B) REDEMPTION.	Grand Total at 30th June, 1926.
	1st May, 1906, to 30th June, 1925.	1925-26.				Total at 30th June, 1926	1st May, 1906, to 30th June, 1925.	1st July, 1925, to 30th June, 1926.	Total at 30th June, 1926.			
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.							
	£	£	£	£	£	£	£	£	£	£	£	
1. Birchip ..	124,811	7,868	6,281	1,682	15,831	140,642	162,405	13,562	175,967	..	316,609	
2. Sea Lake ..												
3. Tyrrell ..												
4. Wycheproof ..												
5. Carwarp ..	10,148	513	133	42	688	10,836	4,112	838	4,950	A 586	16,372	
6. Carwarp Central ..	325	30	67	22	119	444	75	93	168	..	612	
7. Eureka ..	..	20	111	40	171	171	..	90	90	..	261	
8. Karkarooc ..	42,195	2,845	1,055	387	4,287	46,482	70,996	7,906	78,902	..	125,384	
9. Kerang N.W. Lakes ..	1,148	17	42	36	95	1,243	942	75	1,017	..	2,260	
10. Long Lake ..	69,374	1,922	2,390	354	4,666	74,040	36,975	4,858	41,833	A 8,305	124,178	
11. Mornington Peninsula ..	3,314	240	15	25	280	3,594	18,152	2,920	21,072	..	24,666	
12. Tyntynder ..	33,467	2,905	2,294	493	5,692	39,159	35,649	2,747	38,396	..	77,555	
13. Upper Western Wimmera ..	19,883	266	848	183	1,297	21,180	19,435	2,505	21,940	A 606	45,226	
14. Upper Wimmera Untd. ..	26,281	413	773	206	1,392	27,673	42,372	4,422	46,794	B 1,500		
15. Walpeup East ..	3,870	252	..	83	335	4,205	1,947	190	2,137	B 2,390	76,857	
16. Walpeup West ..	11,104	546	524	130	1,200	12,304	4,943	1,041	5,984	..	6,342	
17. Werribee ..	1,403	46	66	51	163	1,566	3,745	447	4,192	A 1,200	19,488	
18. Western Wimmera ..	79,526	1,001	3,335	727	5,063	84,589	69,477	7,345	76,822	..	5,758	
19. Wimmera United ..	62,681	952	1,788	478	3,218	65,899	95,422	10,253	105,675	A 2,422	169,233	
20. Yelta ..	1,083	119	190	31	340	1,423	1,044	166	1,210	B 5,400		
Totals ..	490,613	19,955	19,912	4,970	44,837	535,450	567,691	59,458	627,149	B 5,310	176,884	
										..	2,633	

## DISTRICTS HELD IN TRUST BY THE COMMISSION.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 31ST DECEMBER, 1925.

## RECEIPTS.

Name of Trust.	Bank Balance, at 31st December, 1924.	1925.				Grand Total for Year 1925.
		Rates.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£
Avoca .. .. .	Cr. 41	718	69	12	799	840
Avoca (Quambatook, Urban) .. .. .	Cr. 49	427	102	10	539	588
Carrum .. .. .	Cr. 408	2,189	26	44	2,259	2,667
Loddon United .. .. .	Dr. 381	2,587	32	13	2,632	2,251
Loddon United (Mitiamo, Urban) .. .. .	Cr. 55	129	123	10	265	320
Totals .. .. .	{ Cr. 553 } { Dr. 381 }	6,050	355	89	6,494	6,666

## DISBURSEMENTS.

Name of Trust.	1925.						Grand Total for Year 1925.	Bank Balance carried forward, 1st January, 1926.
	Repairs and Maintenance.	Water Distribution.	Management.	Total.	Interest.	(A) Depreciation. (B) Redemption.		
	£	£	£	£	£	£	£	£
Avoca .. .. .	447	..	106	553	115	B 44	712	Cr. 128
Avoca (Quambatook, Urban) .. .. .	241	82	43	366	77	B 14	517	Cr. 71
Carrum .. .. .	1,267	..	285	1,552	722	A 60	2,456	Cr. 211
Loddon United .. .. .	690	606	449	1,745	660	B 182	2,665	Dr. 414
Loddon United (Mitiamo, Urban) .. .. .	57	..	16	73	134	B 20	246	Cr. 74
Totals .. .. .	2,702	688	899	4,289	1,708	A 88 B 511	6,596	Cr. 484 Dr. 414

## URBAN DISTRICTS

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, of Depreciation and Redemption charged, as at 30th June, 1926. (Free Headworks

## RECEIPTS.

District or Division.	1st May, 1906, to 30th June, 1925.	1925-26.				Grand Total at 30th June, 1926.
		Rates.	Water Sales.	Interest and Miscel- laneous.	Total.	
	£	£	£	£	£	£
1. Bacchus Marsh .. .. .	18,465	881	608	5	1,494	19,959
2. Berriwillock .. .. .	1,655	226	1	6	233	1,888
3. Berwick .. .. .	667	368	13	20	401	1,068
4. Beulah .. .. .	5,737	500	54	33	587	6,324
5. Birchip .. .. .	13,650	559	350	69	978	14,628
6. Bittern .. .. .	237	62	41	2	105	342
7. Brim .. .. .	174	274	..	2	276	450
8. Carrum .. .. .	13,839	4,932	346	206	5,484	19,323
9. Cohuna .. .. .	6,219	751	129	63	943	7,162
10. Corop .. .. .	458	32	..	..	32	490
11. Cranbourne .. .. .	1,671	215	266	11	492	2,163
12. Culgoa .. .. .	1,563	166	31	6	203	1,766
13. Dandenong .. .. .	15,315	3,045	833	94	3,972	19,287
14. Dimboola .. .. .	24,461	943	710	115	1,768	26,229
15. Dingee .. .. .	..	48	..	..	48	48
16. Frankston .. .. .	8,816	2,864	287	84	3,235	12,051
17. Hopetoun .. .. .	6,077	545	137	36	718	6,795
18. Jeparit .. .. .	7,575	661	172	10	843	8,418
19. Jung Jung .. .. .	901	98	11	..	109	1,010
20. Koondrook .. .. .	4,579	395	20	2	417	4,996
21. Lake Boga .. .. .	3,876	333	20	21	374	4,250
22. Lascelles .. .. .	1,165	156	18	9	183	1,348
23. Leitchville .. .. .	251	249	5	4	258	509
24. Lockington .. .. .	..	180	..	1	181	181
25. Manangatang .. .. .	297	419	75	10	504	801
26. Merbein .. .. .	3,928	1,027	138	82	1,247	5,175
27. Minyip .. .. .	8,322	719	47	8	774	9,096
28. Mornington .. .. .	6,413	2,188	89	45	2,322	8,735
29. Natimuk .. .. .	7,514	280	228	6	514	8,028
30. Nyah .. .. .	537	108	..	1	109	646
31. Nyah West .. .. .	585	659	..	3	662	1,247
32. Ouyen .. .. .	7,218	1,240	533	61	1,834	9,052
33. Piangil .. .. .	350	429	130	4	563	913
34. Pyramid Hill .. .. .	..	190	..	5	195	195
35. Rainbow .. .. .	11,748	766	171	31	968	12,716
36. Red Cliffs .. .. .	780	921	9	..	930	1,710
37. Rupanyup .. .. .	6,972	692	142	4	838	7,810
38. Sea Lake .. .. .	8,222	630	181	56	867	9,089
39. Somerville .. .. .	500	180	43	3	226	726
40. South Frankston .. .. .	2,662	1,067	13	..	1,080	3,742
41. Spring Vale .. .. .	654	1,108	45	111	1,264	1,918
42. Stanhope .. .. .	..	54	..	..	54	54
43. Ultima .. .. .	3,990	394	18	24	436	4,426
44. Watchem .. .. .	2,776	314	49	2	365	3,141
45. Werribee .. .. .	9,626	1,275	222	31	1,528	11,154
46. Wonthaggi .. .. .	50,395	2,455	1,682	42	4,179	54,574
47. Woomelang .. .. .	7,838	370	518	28	916	8,754
48. Wycheproof .. .. .	8,345	512	93	39	644	8,989
Totals .. .. .	287,023	36,480	8,478	1,395	46,353	333,376

## AND DIVISIONS.

1926; and of Interest charged, at the rate of 4 per cent. on Capital Debts; and also excluded).

## DISBURSEMENTS, AND INTEREST, DEPRECIATION, AND REDEMPTION CHARGED.

District or Division.	DISBURSEMENTS.					INTEREST CHARGED.				DEPRECIATION. (a) DEPRECIATION. (b) REDEMPTION.		Grand Total at 30th June, 1926.
	1st May, 1906, to 30th June, 1925.	1925-26.				Total at 30th June, 1926.	1st May, 1906, to 30th June, 1925.	1st July, 1925, to 30th June, 1926.	Total at 30th June, 1926.	(a) DEPRECIATION. (b) REDEMPTION.		
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.							
	£	£	£	£	£	£	£	£	£	£	£	£
1. Bacchus Marsh ..	5,104	19	180	110	309	5,413	12,854	1,116	13,970	(a) (b) 662		20,045
2. Berriwillock ..	1,037	82	29	34	145	1,182	589	74	663	(a) 46		1,891
3. Berwick ..	86	29	2	10	41	127	581	360	941			1,068
4. Beulah ..	2,356	84	155	53	292	2,648	3,263	241	3,504	(a) 52		6,204
5. Birchip ..	6,404	131	257	93	481	6,885	6,341	298	6,639	(a) (b) 816		14,340
6. Bittern ..	48	8		3	11	59	189	90	279			338
7. Brim ..	63	54	6	31	91	154	100	154	254	(a) 21		429
8. Carrum ..	2,519	408	25	270	703	3,222	11,340	4,700	16,040			19,262
9. Cohuna ..	1,628	33	147	62	242	1,870	3,892	586	4,478	(a) (b) 435		6,783
10. Corop ..	199		5	6	11	210	217	19	236	(a) 33		479
11. Cranbourne ..	263	36	2	44	82	345	1,298	598	1,896			2,241
12. Culgoa ..	842	20	23	33	76	918	815	62	877	(a) 36		1,831
13. Dandenong ..	3,260	298	45	203	546	3,806	11,155	3,300	14,455	(a) 500		18,761
14. Dimboola ..	15,409	300	758	117	1,175	16,584	6,451	392	6,843	(a) 1,620		26,077
										(b) 1,030		
15. Dingee ..			10	6	16	16		49	49			65
16. Frankston ..	1,698	240	15	145	400	2,098	6,918	2,735	9,653			11,751
17. Hopetoun ..	3,796	80	291	38	409	4,205	2,736	300	3,036	(b) 150		7,391
18. Jeparit ..	1,632	63	40	50	153	1,785	4,866	584	5,450	(b) 600		7,835
19. Jung Jung ..	704	1	30	26	57	761	309	56	365			1,126
20. Koondrook ..	2,276	34	227	42	303	2,579	1,967	202	2,169	(a) 210		4,958
21. Lake Boga ..	1,432	29	193	57	279	1,711	2,250	160	2,410	(a) (b) 252		4,373
22. Lascelles ..	674	54	20	30	104	778	714	72	786	(a) 88		1,652
23. Leitchville ..	55	26	133	52	211	266	184	166	350			616
24. Lockington ..		5	26	30	61	61		105	105			166
25. Manangatang ..	108	11	82	48	141	249	173	223	396	(a) 65		710
26. Merbein ..	1,825	28	392	112	532	2,357	1,888	633	2,521	(a) 200		5,078
27. Minyip ..	2,687	24	176	39	239	2,926	4,977	489	5,466	(a) 395		8,987
										(b) 200		
28. Mornington ..	1,140	171	12	102	285	1,425	5,037	1,976	7,013			8,438
29. Natimuk ..	1,586	34	74	86	194	1,780	5,077	319	5,396	(b) 750		7,926
30. Nyah ..	210	9	17	19	45	255	220	55	275	(a) 48		578
31. Nyah West ..	122	36	81	66	183	305	418	441	859	(a) 78		1,242
32. Ouyen ..	3,557	86	368	129	583	4,140	3,880	970	4,850	(a) 200		9,190
33. Piangil ..	82	8	50	48	106	188	254	291	545	(a) 68		801
34. Pyramid Hill ..		47	26	30	103	103		46	46			149
35. Rainbow ..	2,373	48	26	76	150	2,523	7,458	618	8,076	(a) (b) 1,480		12,079
36. Red Cliffs ..	475		655	58	713	1,188	291	338	629			1,817
37. Rupanyup ..	2,585	25	108	37	170	2,755	3,542	538	4,080	(a) (b) 557		7,392
38. Sea Lake ..	5,207	71	249	73	393	5,600	2,368	312	2,680	(a) 524		8,804
39. Somerville ..	88	17		48	65	153	459	240	699			852
40. South Frankston ..	418	80	5	23	108	526	2,163	920	3,083			3,609
41. Spring Vale ..	69	93	6	10	109	178	526	1,084	1,610			1,788
42. Stanhope ..		5	5	15	25	25		34	34			59
43. Ultima ..	1,642	117	83	53	253	1,895	2,067	203	2,270	(a) 130		4,295
44. Watchem ..	924	43	38	36	117	1,041	1,794	185	1,979	(a) 110		3,130
45. Werribee ..	3,414	58	468	81	607	4,021	5,680	616	6,296	(a) 483		10,800
46. Wonthaggi ..	7,508	248	331	250	829	8,337	34,286	2,301	36,587	(b) 8,500		53,424
47. Woomelang ..	2,663	120	151	63	334	2,997	4,560	480	5,040	(a) (b) 460		8,497
48. Wycheproof ..	4,385	7	296	70	373	4,758	3,686	307	3,993	(a) 513		9,264
Totals ..	94,553	3,420	6,318	3,117	12,855	107,408	169,833	30,038	199,871	21,312		328,591

## LOAN EXPENDITURE.

## STATEMENT OF LOAN EXPENDITURE DURING THE YEAR ENDED 30TH JUNE, 1926.

Works.	Loans Application Act No. 3364.	Loans Application Act No. 3404 and other Sources.	Total.
	£ s. d.	£ s. d.	£ s. d.
<i>Free Headworks.</i>			
1. Kerang North-West Lakes .. ..	..	169 4 6	169 4 6
<i>River Murray Waters Acts—Works.</i>			
2. Storages, Weirs and Locks .. ..	70,040 13 4	101,234 12 11	171,275 6 3
<i>Reservoirs and Storages.</i>			
3. Goulburn Storages—			
Sugarloaf Reservoir .. ..	26,213 4 2	115,149 7 4	141,362 11 6
Waranga Reservoir Enlargement .. ..	24,496 6 11	42,320 0 1	66,816 7 0
4. Maffra, Glenmaggie Reservoir .. ..	..	91,313 13 10	91,313 13 10
5. Melton Reservoir .. ..	101 7 11	51 2 10	152 10 9
6. Pykes Creek Reservoir .. ..	290 0 7	631 12 10	921 13 5
7. Wimmera-Mallee Storages—			
Pine Lake .. ..	78 5 6	10,061 15 8	10,140 1 2
Taylors Lake .. ..	24 5 7	7,970 9 3	7,994 14 10
Fyans Lake .. ..	52 0 0	228 11 9	280 11 9
<i>Waterworks Districts.</i>			
8. Birchip, Sea Lake, Tyrrell, and Wycheproof .. ..	253 16 4	49,224 9 0	49,478 5 4
9. Carwarp and Carwarp Central .. ..	2,710 11 8	4,365 3 5	7,075 15 1
10. Karkaroc .. ..	8 18 3	6,374 19 1	6,383 17 4
11. Long Lake .. ..	96 1 10	8,029 8 1	8,125 9 11
12. Millewa .. ..	11,422 9 0	66,684 17 11	78,107 6 11
13. Mornington Peninsula .. ..	562 11 7	94,763 11 6	95,326 3 1
14. Tyntynder .. ..	1 1 4	9,432 8 1	9,433 9 5
15. Walpeup East and Walpeup West .. ..	294 18 8	1,578 0 9	1,872 19 5
16. Werribee .. ..	..	18 0 5	18 0 5
17. Western Wimmera .. ..	1 0 0	6,968 19 2	6,969 19 2
18. Wimmera United .. ..	4 0 0	7,136 17 5	7,140 17 5
19. Wimmera Main Channels .. ..	751 4 10	50,274 3 1	51,025 7 11
20. Yelta .. ..	..	104 7 0	104 7 0
<i>Towns.</i>			
21. Bacchus Marsh and Werribee .. ..	433 6 7	666 7 2	1,099 13 9
22. Berriwillock, Beulah, Birchip, and Brim .. ..	..	664 11 5	664 11 5
23. Cohuna .. ..	1 0 10	748 9 5	749 10 3
24. Coliban .. ..	34 10 0	24,083 2 4	24,117 12 4
25. Chillingollah, Culgoa, Dimboola, Dingee, and Hopetoun .. ..	114 4 6	2,697 13 3	2,811 17 9
26. Jeparit, Jung Jung, Koondrook, and Lake Boga .. ..	12 16 10	2,098 4 1	2,111 0 11
27. Lalbert, Lascelles, Leitchville, and Lockington .. ..	9 11 1	4,149 10 6	4,159 1 7
28. Manangatang, Marnoo, Merbein, and Minyip .. ..	15 10 5	5,311 15 2	5,327 5 7
29. Nandaly, Natimuk, Nyah West, and Piangil .. ..	Cr. 15 0 0	1,194 4 10	1,179 4 10
30. Ouyen, Rainbow, Red Cliffs, and Rupanyup .. ..	Cr. 39 3 8	1,256 3 0	1,216 19 4
31. Sea Lake, Stanhope, Ultima, and Waitchie .. ..	15 14 9	1,300 15 0	1,316 9 9
32. Watchem, Woomelang and Wycheproof .. ..	Cr. 5 0 0	721 3 1	716 3 1
33. Wonthaggi .. ..	34 13 0	1,129 15 7	1,164 8 7
<i>Irrigation and Water Supply Districts.</i>			
34. Bacchus Marsh and Werribee .. ..	604 3 11	7,193 8 2	7,797 12 1
35. Boort .. ..	1,639 10 0	5,964 12 0	7,604 2 0
36. Cohuna and Gannawarra .. ..	173 1 5	22,182 12 0	22,355 13 5
37. Deakin .. ..	31 2 0	4,048 7 7	4,079 9 7
38. Dingee .. ..	75 10 6	322 19 9	398 10 3
39. Echuca North .. ..	117 11 8	530 11 5	648 3 1
40. Fish Point .. ..	..	2,165 3 3	2,165 3 3
41. Kerang .. ..	1,083 12 10	2,881 2 10	3,964 15 8
42. Koondrook .. ..	2,522 6 8	11,795 2 8	14,317 9 4
43. Leitchville .. ..	..	5,659 17 4	5,659 17 4
44. Maffra, Sale .. ..	3 2 11	77,198 19 10	77,202 2 9
45. Merbein .. ..	393 5 11	4,489 5 10	4,882 11 9
46. Mystic Park .. ..	100 16 6	617 14 0	718 10 6
47. Nyah .. ..	1,618 13 10	3,403 17 6	5,022 11 4
48. Red Cliffs .. ..	78 13 10	42,840 15 0	42,919 8 10
49. Red Cliffs—Clearing land charged to Discharged Soldiers' Settlement Fund .. ..	..	3,673 4 9	3,673 4 9
50. Rochester .. ..	3,028 13 10	13,834 18 5	16,863 12 3
51. Rodney .. ..	7,221 1 2	31,430 8 0	38,651 9 2
52. Shepparton .. ..	678 12 10	10,669 1 3	11,347 14 1
53. South Shepparton .. ..	..	775 5 5	775 5 5
54. Stanhope .. ..	355 11 11	2,106 14 9	2,462 6 8
55. Swan Hill .. ..	69 2 0	13,831 1 11	13,900 3 11
56. Third Lake .. ..	447 7 6	3,337 8 4	3,784 15 10
57. Tongala .. ..	164 2 11	2,933 2 11	3,097 5 10
58. Tragowel Plains .. ..	3,330 16 1	31,541 7 9	34,872 3 10
59. Tresco .. ..	974 3 1	8,394 14 11	9,368 18 0
60. Goulburn Main Channels .. ..	31,981 16 7	191,762 17 5	223,744 14 0
<i>Flood Protection and Drainage Districts.</i>			
61. Gippsland Rivers and Other Districts .. ..	364 16 2	1,223 13 4	1,588 9 6
62. Goulburn Levees .. ..	1,120 2 4	3,317 0 9	4,437 3 1
63. Hallam .. ..	3,761 6 5	7,878 17 10	11,640 4 3
64. Koowearup and Cardinia .. ..	8,948 16 3	32,048 7 10	40,997 4 1
<i>Miscellaneous.</i>			
65. Investigations Storages and Works .. ..	442 5 10	5,665 9 9	6,107 15 7
66. Torrumbarry Districts—New Districts commanded by Torrumbarry Weir .. ..	323 11 10	3,047 12 8	3,371 4 6
Totals .. ..	209,669 0 7	1,278,873 7 11	1,488,542 8 6

## STATEMENT OF EXPENDITURE DURING THE YEAR ENDED 30TH JUNE, 1926.

## CONSTRUCTION OF TANKS AND FORMING ROADS IN THE MALLEE.

(This Expenditure was met by the Public Works Department.)

	£ s. d.
1. Mallee Tanks (Public Tanks) .. ..	8,225 2 2
2. Clearing Roads .. ..	20,025 6 2
Total .. ..	£28,250 8 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, 1927, with Estimate of the total amount available from the Revenues of all Authorities to meet interest payable by the State for the year ending 30th June, 1927.

## ESTIMATED DISBURSEMENTS.

## A.

## Revenue Producing Works—

Coliban District .. .. .	£14,000
Irrigation and Water Supply Districts .. ..	126,000
Waterworks Districts .. .. .	56,000
Drainage and Flood Protection Districts .. ..	2,500
Diversions from Streams .. .. .	500
General Expenditure and Salaries (proportion) over £250 to be apportioned to above Districts ..	24,000
	<hr/> £223,000

## B.

## Non-Revenue Producing Works—

## General Services—

River Gaugings, Surveys, New Projects, Boring for Water, Land Settlement, General Expenditure and Salaries (proportion) over £250 .. ..	£11,500
Loan Works, Services on Account defrayed from Votes .. ..	7,500
Waterworks Trusts Administration .. .. .	2,500
	<hr/> £21,500

## C.

## Non-Revenue Producing Works—

## Free Headworks—

Broken River .. .. .	£275
Goulburn-Waranga .. .. .	1,750
Kow Swamp .. .. .	1,750
Lake Lonsdale and Lower Wimmera .. .. .	500
Loddon River .. .. .	325
North-West Lakes .. .. .	400
	<hr/> 5,000
	<hr/> £249,500

## ESTIMATED RECEIPTS.

Coliban District .. .. .	£40,000
Irrigation and Water Supply Districts .. ..	215,000
Waterworks Districts .. .. .	160,000
Flood Protection Districts .. .. .	7,000
Miscellaneous .. .. .	18,000
	<hr/> £440,000

Estimated amount available from Revenue Producing Works to meet Interest .. .. . £217,000

Less expenditure as per "B" and "C" above on Non-Revenue Producing Works .. .. . 26,500

£190,500

To which add Estimated Revenues from other Authorities—

Waterworks Trusts .. .. .	£44,600
Local Bodies .. .. .	25,400
	<hr/> £70,000

Total Estimated amount available from Revenues of all Authorities to meet Interest .. .. . £260,500

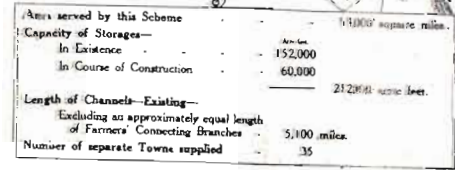
STATEMENT OF LOAN LIABILITY.

STATEMENT of the amount 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 paid from the revenues of the Commission, and from the moneys received from such other Authorities, to provide such Interest for the year ended 30th June, 1926 :—

Loan Liability of State for Works of Water Supply at 30th June, 1926, exclusive of Melbourne Water Supply.										
Works.	Loan Liability of State for Works of Water Supply at 30th June, 1926, exclusive of Melbourne Water Supply.				Interest payable by State on Net Advances.		Total Interest of £750,239 debitable to—		Amount received from Revenues of all Authorities to meet Interest	
	Total Advances, including Cost of Loan Flotation.	Deduct Redemption Paid.	Net Advances.	(A.) Amounts Written Off. (B.) Free Head-works. (C.) Uncompleted Works. (D.) Loans Unexpended.	Balance at Debt of Authorities.	£	(A.) Written Off-works. (B.) Free Head-works. (C.) Uncompleted Works. (D.) Loans Unexpended.	Commission and Other Authorities.		
Completed Works.—Commission—	Waterworks Districts .. .. .	£ 3,720,675	£ 46,906	£ 3,673,769	£ 175,055	£ 3,498,714	£ 157,718	£ 150,203	£167,182 (after providing £29,168 for non-revenue producing works, including Free Head-works).	£65,347
	Irrigation and Water Supply Districts .. .. .	3,144,120	30,937	3,113,183	(A.) 575,152	2,538,031	133,654	108,962		
	Goulburn Channel Works (Free Headworks excluded) Pykes Creek, Melton, and Distributary Works	918,957	106	918,851	(C.) 430,153	488,698	39,448	20,980		
		155,745	..	155,745	..	155,745	6,688	6,688		
Uncompleted Works.—Commission—	Mornington Peninsula .. .. .	473,192	..	473,192	(C.) 8,657	464,535	20,318	19,945	..	..
	Kooweerup and Cardinia Flood Protection Schemes .. .. .	289,737	..	289,737	(C.) 153,333	136,404	12,442	6,584		
	Sugarloaf Reservoir and Waranga Reservoir Enlargement .. .. .	1,895,908	1,000	1,894,908	(C.) 1,894,908	..	81,352	..		
	Maffra-Sale Irrigation and Water Supply District .. .. .	764,234	..	764,234	(C.) 764,234	..	32,809	..		
Other Authorities.	Millewa Waterworks District .. .. .	265,133	..	265,133	(C.) 265,133	..	11,383	..	..	..
	Red Cliffs Irrigation and Water Supply District .. .. .	709,886	..	709,886	(C.) 709,886	..	30,476	..		
	Waterworks Trusts (including First Mildura) .. .. .	1,791,732	247,838	1,543,894	(A.) 316,537	1,227,357	66,282	52,683		
	Local Bodies (Municipalities) .. .. .	762,568	121,755	640,813	(A.) 163,760	477,053	27,510	20,480		
..	River Murray Agreement Works .. .. .	1,201,722	..	1,201,722	(C.) 1,201,722	..	51,591	..	..	..
	Irrigation and Waterworks Trusts Abolished .. .. .	32,754	30	32,724	(A.) 32,724	..	1,405	..		
	Free Headworks .. .. .	1,251,004	420	1,250,584	(B.) 1,250,584	..	53,688	..		
	Free Grants to Local Authorities .. .. .	147,046	..	147,046	(B.) 147,046	..	6,313	..		
..	Surveys, Exploratory, and Preliminary Works, including Purchase of Land reserved for Reservoirs .. .. .	189,839	..	189,839	(C.) 189,839	..	8,150	..	..	..
	Loan Moneys unexpended .. .. .	209,890	..	209,890	(D.) 209,890	..	9,012	..		
Totals .. .. .	17,924,142	448,992	17,475,150	8,488,613	8,986,537	750,239	364,430	385,809	232,529	



SHOWING  
RESERVOIRS, MAIN CHANNELS, and PRINCIPAL DISTRIBUTARY CHANNELS.



Dated at the Office of the State Rivers and Water Supply Commission, Treasury  
Gardens, Melbourne, the 25th day of October, 1926.

WM. CATTANACH, Chairman.

E. SHAW, Commissioner

M. NALLY, Secretary.