

1930.
—
VICTORIA.

STATE RIVERS AND WATER SUPPLY COMMISSION.

TWENTY-FIFTH
ANNUAL REPORT.

1929-30.

PRESENTED TO BOTH HOUSES OF PARLIAMENT PURSUANT TO THE PROVISIONS OF THE
WATER ACT 1928.

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STATE RIVERS AND WATER SUPPLY COMMISSION.

WM. CATTANACH, CHAIRMAN,
E. SHAW, COMMISSIONER,
R. H. HORSFIELD, COMMISSIONER.

ANNUAL REPORT, 1929-30.

In compliance with the provisions of the *Water Act* 1928, the State Rivers and Water Supply Commission submits the following Report and Statement for the Financial Year 1929-30, 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, 1930. Exclusive of cost of Loan Flotation.
1. Broken River Works :—Casey's Weir and offtake, with about 59 chains of channel to the Broken Creek; Gowangardie Weir with offtake sluice	£ 14,853
2. Goulburn River Works :—Weir on the Goulburn River, about 9 miles above Murchison; channel therefrom, about 23½ miles, to Waranga Reservoir; and that Reservoir (but exclusive of the work of its enlargement)	739,552
3. Kerang North-West Lakes Works :—Weir on the Loddon River at its confluence with the Pyramid Creek; regulating weirs at the effluence from the Loddon of the Sheepwash and Washpen Creeks; channel from the Washpen Creek regulator to Reedy Lake, Middle Lake, Third Lake, Lake 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	23,307
4. Kow Swamp Works :—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 ..	187,944
5. Lake Lonsdale Reservoir :—Reservoir at Lake Lonsdale, on the Little Wimmera River, near Ledcourt	49,054
6. Loddon River Works :—Laanecoorie Weir, on the Loddon; Bridgewater Weir, on the Loddon; Kinypanial Weir, on the Loddon	167,789
7. Long Lake Pumping Works :—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. Lower Wimmera Compensation Works :—Drung Drung Weir, on the Wimmera, near allotment 29, parish of Longerenong; Dimboola Weir, on the Wimmera, near Dimboola township; Antwerp Weir, on the Wimmera, at Antwerp Station home- stead; Jeparit Weir, on the Wimmera, near Jeparit township	8,558
Total	1,218,403

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, 1930.	Tentative Debits to Districts, 1929-30. £	
Goulburn Main Channels (Free Headworks excluded)—	£	Rodney 120,000	
1. East Goulburn Main	345,627	Tragowel Plains 100,000	
2. Waranga Reservoir to Campaspe ..	375,632	Rochester 74,000	
3. West of Campaspe	642,394	Tongala 58,000	
4. Goulburn Main Channel Distri- butaries	13,412	Shepparton 57,000	
		Deakin 24,000	
		Boort 20,000	
		Echuca North 17,000	
		Dingee 15,000	
		Stanhope 15,000	
		South Shepparton 9,000	
		509,000	
	1,377,065	.. ..	1,377,065
Goulburn Storages—			
5. Eildon Reservoir	1,701,480		
6. Waranga Reservoir Enlargement	604,226		
	2,305,706	.. ..	2,305,706
Bacchus Marsh and Werribee Schemes—			
7. Ballan Tunnel	21,057	Werribee 33,000	
8. Pykes Creek Reservoir	137,315	Bacchus Marsh 81,428	
9. Melton Reservoir	85,624	Werribee 85,624	
	243,996	.. ..	243,996
10. Bellarine Peninsula	249,193	Waterworks Districts to be debited later	249,193
Maffra-Sale Scheme—			
11. Glenmaggie Reservoir and Channels	1,145,520	Irrigation Districts to be debited later ..	1,145,520
Red Cliffs Scheme—			
12. Main and Distributary Channels	768,028	Irrigation District Progressing Debit 470,000	768,028
Millewa District—			
13. Main and Distributary Channels	490,848	Waterworks Districts to be debited later	490,848
Flood Protection Districts—			
14. Kooweerup and Cardinia	365,943	Lower Kooweerup and Cardinia 145,000	
15. Goulburn Levees	59,990	Echuca, Kanyapella, and Loch Garry 17,002	
	425,933	.. ..	425,933
Carried forward			8,224,692

WORKS UNDER CONTROL OF COMMISSION—*continued.*Capital Debit
at 30th June,
1930,
Exclusive
of Cost of Loan
Flotation.

£

8,224,692

Brought forward

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 1925 and 1951.	Redemption Paid to Treasury.	Capital Debit at 30th June, 1930.
	£	£	£	£
1. Bacchus Marsh	102,489	8,906	493	93,090
2. Boort	107,789	35,259	1,794	70,736
3. Calivil	105,594	..	..	105,594
4. Campaspe	64,621	52,685	305	11,631
5. Cohuna and Gannawarra ..	386,800	82,376	1,386	303,038
6. Deakin	94,472	34,748	2,144	57,580
7. Dingee	17,084	..	..	17,084
8. Dry Lake	1,704	686	299	719
9. Echuca North	23,493	..	..	23,493
10. Fish Point	15,339	..	..	15,339
11. Katandra	97,967	..	..	97,967
12. Kerang	141,653	35,338	2,334	103,981
13. Koondrook	213,051	30,872	1,562	180,617
14. Leitchville	41,964	..	..	41,964
15. Merbein	218,440	..	133	218,307
16. Mystic Park	16,105	..	..	16,105
17. North Shepparton	166,493	..	..	166,493
18. Nyah	106,864	..	..	106,864
19. Rochester	308,425	..	..	308,425
20. Rodney	692,197	149,949	8,967	533,281
21. Shepparton	173,382	..	584	172,798
22. South Shepparton	57,835	..	..	57,835
23. Stanhope	107,950	..	53	107,897
24. Swan Hill	178,268	19,799	371	158,098
25. Third Lake	24,994	..	..	24,994
26. Tongala	140,126	..	..	140,126
27. Tragowel Plains	375,158	124,534	527	250,097
28. Tresco	90,923	..	..	90,923
29. Werribee	111,749	..	10,242	101,507
	4,182,929	575,152	31,194	3,576,583

3,576,583

D.—WATERWORKS 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 1925 and 1951.	Redemption Paid to Treasury.	Capital Debit at 30th June, 1930.
	£	£	£	£
1. Birchip	811,389	700	2,473	808,216
2. Sea Lake				
3. Tyrrell				
4. Wycheproof				
5. Carwarp	41,817	..	..	41,817
6. Coliban	1,592,466	..	..	1,592,466
7. Coreena	45,259	..	..	45,259
8. Dandenong	39,156	5,128	1,506	32,522
9. Dering	11,379	..	..	11,379
10. Eureka	4,011	..	..	4,011
11. Hindmarsh	26,567	..	..	26,567
12. Karkaroc	265,450	..	2,893	262,557
13. Kerang North-West Lakes ..	1,952	..	..	1,952
14. Kia	6,805	..	..	6,805
15. Long Lake	120,132	..	1,081	119,051
16. Mornington Peninsula	744,831	..	..	744,831
17. Ouyen	18,644	..	..	18,644
18. Pyramid Hill	6,234	..	1,300	4,934
19. Tyntynder	251,451	..	60	251,391
20. Upper Western Wimmera	90,475	26,567	3,450	60,458
21. Upper Wimmera United	128,059	10,918	4,499	112,642
22. Walpeup West	42,531	..	..	42,531
23. Werribee	11,636	..	..	11,636
24. Western Wimmera	331,776	106,268	13,198	212,310
25. Wimmera United	269,697	25,474	10,231	233,992
26. Wonthaggi	76,544	..	9,071	67,473
27. Yelta	5,820	..	..	5,820
28. Wimmera Main Channels	106,816	..	..	106,816
29. Wimmera Storages—				
Fyans Lake	43,685	..	..	43,685
Taylors Lake	204,419	..	..	204,419
Pine Lake	177,178	..	..	177,178
Lake Whitton	10,336	..	..	10,336
	5,486,515	175,055	49,762	5,261,698

5,261,698

Carried forward

17,062,973

WORKS UNDER CONTROL OF COMMISSION— <i>continued.</i>				Capital Debit at 30th June, 1930. Exclusive of Cost of Loan Flotation.
Brought forward				£ 17,062,973
E.—WATERWORKS TRUSTS DISTRICTS.				
DISTRICTS HELD IN TRUST BY THE COMMISSION.				
Name of Trust.	Total Advances by State.	Capital Written Off by Acts 1625 and 1651.	Redemption Paid to Treasury.	Capital Debit at 30th June, 1930.
	£	£	£	£
1. Avoca Water Trust—				
Rural District	8,386	2,494	2,471	3,421
Urban District (Quambatook) ..	4,444	..	618	3,826
2. Carrum Waterworks Trust	38,800	7,732	4,411	26,657
3. Loddon United Waterworks Trust—				
Rural District	23,411	1,717	6,568	15,126
Urban District (Mitiamo) ..	5,158	..	150	5,008
	80,199	11,943	14,218	54,038
Grand Total				£17,062,973

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 24,239 square miles, equal to about 15,513,000 acres.

The area under irrigated culture for all kinds of crops was 566,577 acres, being an increase of 94,882 acres over the area irrigated in the previous year and 151,594 acres above the average of the previous five years. The area irrigated in 1929–30 constitutes a new record, being no less than 89,077 acres over any previous watering. The area irrigated last year includes upwards of 18,000 acres watered under yearly permits granting authority to divert water from streams throughout the State.

The number of separate towns supplied, exclusive of the city of Melbourne and Suburbs, is as shown in the following statement:—

Controlling Authorities.	Number of Towns Supplied.	Estimated Population Served.
Commission	92	118,600
Waterworks Trusts	110	193,000
Local Governing Bodies ...	17	77,200
Totals	219	388,800

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 1929-30.

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.	Total.
<i>Supplied from Goulburn State Works.</i>								
Katandra	1,679	3,671	195	824	53	654	100	7,176
North Shepparton	2,463	2,444	544	1,007	52	56	75	6,641
Shepparton	1,460	2,970	720	1,540	8,720	340	260	16,010
South Shepparton	1,120	1,950	670	1,680	20	70	150	5,660
Rodney	13,530	35,108	2,497	24,148	8,089	2,390	376	86,138
Stanhope	1,739	10,907	652	494	308	139	6	14,245
Tongala	2,926	13,336	1,077	4,469	1,482	813	66	24,169
Rochester	9,803	26,279	5,306	10,344	2,619	673	548	54,972
Echuca North	1,007	2,012	329	1,947	..	102	111	5,508
Dingee	1,257	2,127	385	1,681	44	64	289	5,847
Calivil	2,955	1,370	2,119	2,988	35	254	112	9,833
Tragowel Plains	13,228	1,816	9,565	29,807	33	131	1,107	55,687
Deakin	4,693	1,247	557	2,462	6	249	2	9,216
Boort	5,117	287	4,384	10,144	12	993	..	20,937
Totals	62,977	105,524	29,000	93,535	20,873	6,928	3,202	322,039
<i>Supplied from River Murray State Works.</i>								
<i>(a) Torrumbarry Weir.</i>								
Leitchville	538	1,706	275	942	16	34	57	3,568
Cohuna	1,257	4,023	1,898	10,367	113	472	2,488	20,618
Gannawarra	2,655	1,377	3,184	10,012	111	275	985	18,599
Koondrook	4,927	1,586	4,007	12,060	906	133	223	23,842
Swan Hill	4,926	5,059	3,054	4,188	3,067	305	..	20,599
Third Lake	828	69	621	2,088	..	5	..	3,611
Mystic Park	1,068	313	1,529	1,927	..	44	..	4,881
Tresco .. .. .	..	37	93	..	1,126	..	7	1,263
Fish Point	346	289	416	1,325	14	..	..	2,390
Kerang	7,021	824	7,036	27,090	20	420	6	42,417
Dry Lake	12	..	130	210	2	..	..	354
Kerang North-West Lakes	940	196	361	1,911	503	..	..	3,911
Lands supplied direct (outside Districts)	1,230	1,388	587	4,012	25	..	7	7,249
Totals	25,748	16,867	23,191	76,132	5,903	1,688	3,773	153,302
<i>(b) Direct from River.</i>								
Nyah	60	40	..	..	2,610	..	..	2,710
Red Cliffs .. .. .	..	150	30	..	10,100	..	..	10,280
Merbein .. .. .	..	50	..	..	7,300	..	..	7,350
Totals	60	240	30	..	20,010	..	..	20,340
Totals (River Murray State Works)	25,808	17,107	23,221	76,132	25,913	1,688	3,773	173,642
<i>Supplied from Loddon and Other Northern State Works.</i>								
Boort	159	9	136	314	..	30	..	648
Coliban	345	542	430	1,872	5,489	122	206	9,006
Campaspe	528	248	..	619	..	..	..	1,395
Western Wimmera .. .. .	..	45	91	..	1,301	..	..	1,437
Totals	1,032	844	657	2,805	6,790	152	206	12,486
<i>Supplied from Southern State Works.</i>								
Bacchus Marsh	25	1,582	44	677	246	139	..	2,713
Werribee	400	3,230	169	2,640	305	800	775	8,319
Narre Warren .. .. .	..	..	..	..	650	..	..	650
Maffra	510	1,570	1,537	3,945	..	1,006	448	9,016
Sale	105	1,333	906	2,229	..	383	177	5,133
Totals	1,040	7,715	2,656	9,491	1,201	2,328	1,400	25,831
<i>Supplied from other Works.</i>								
First Mildura District .. .. .	..	264	121	..	11,288	..	171	11,844
Private Diversions—Kerang (outside Districts)	546	157	546	1,486	..	..	..	2,735
Other Private Diversions throughout the State	2,400	3,500	3,200	2,800	4,200	1,500	400	18,000
Totals	2,946	3,921	3,867	4,286	15,488	1,500	571	32,579
Grand Totals 1929-30	93,803	135,111	59,401	186,249	70,265	12,596	9,152	566,577
Grand Totals, 1928-29	60,880	122,441	41,130	154,459	70,681	11,120	10,984	471,695

(B) COMPARATIVE STATEMENT OF THE EXTENT OF IRRIGATION, 1925-26 TO 1929-30.

Source of Supply.	Area under Irrigation (Acres).				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Goulburn State Works	175,313	206,459	261,812	245,658	322,039
River Murray State Works	112,775	140,256	156,202	160,760	173,642
Loddon and other Northern State Works	14,882	12,205	14,485	14,172	12,486
Southern State Works	10,593	16,894	14,085	19,888	25,831
Mildura and Private Diversions	30,122	30,718	30,916	31,217	32,579
Totals	343,685	406,532	477,500	471,695	566,577

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 Urban Waterworks Districts of Dooen, Meringur, and Yaapeet, and for a half-year in the Urban Districts of Antwerp and Murrabit, while in the Hindmarsh Waterworks District a rate was also, for the first time, made.

On the application of the Werribee Shire Council, the Urban Waterworks District of Werribee was constituted a Local Governing Body, and now receives its supply from the Melbourne and Metropolitan Board of Works.

In thirty-three 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 62 of the *Water Act* 1928, a minimum annual rate on the basis of £10 13s. 4d. per 640 acres was fixed by the Commission on the first division lands of the Birchip, Carwarp, Karkarooc, Long Lake, Sea Lake, Tyntynder, Tyrrell, Upper Western Wimmera, Upper Wimmera United, Western Wimmera, Wimmera United, Wycheproof, and Yelta Waterworks Districts, while in the Baring, Carwarp Central, and Kia Districts the minimum was fixed at £16 per 640 acres, in the Eureka District at £18 13s. 4d. per 640 acres, in the Dering and Millewa Districts at £21 6s. 8d. per 640 acres, in the Hindmarsh District at £24 per 640 acres, in the Millewa Central District at £26 13s. 4d. per 640 acres, in the Coreena District at £34 13s. 4d. per 640 acres, and in the Walpeup West Waterworks District at £5 6s. 8d. per 640 acres.

In twenty-five 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, 1930.	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 ..	15,006	1 0	..	..	1st July, 1929, to 30th June, 1930	794
2. BOORT ..	18,200	2 0	1 0	..	" " "	660
3. CALIVIL ..	12,588	1 0	..	..	" " "	200
4. CAMPASPE ..	11,190	2 0	1 0	0 6	" " "	576
5. COHUNA ..	22,576	2 0	1 0	..	" " "	1,008
6. DEAKIN ..	52,096	1 8	0 10	0 5	" " "	1,730
7. DINGEE ..	3,603	1 0	..	..	" " "	200
8. DRY LAKE ..	250	(No rate made)			" " "	14
9. ECHUCA NORTH ..	5,751	1 0	0 6	..	1st July, 1929, to 30th June, 1930	568
10. FISH POINT..	1,643	1 0	..	..	" " "	155
11. GANNAWARRA ..	19,954	2 0	1 0	..	" " "	617
12. KATANDRA ..	8,449	1 0	..	..	" " "	630
13. KERANG ..	20,969	2 4	1 2	0 7	" " "	1,130
14. KOONDROOK ..	23,249	2 0	1 0	..	" " "	1,240
15. LEITCHVILLE ..	7,708	2 0	..	..	" " "	175
16. MAFFRA ..	33,086	1 0	..	..	" " "	1,103
17. MERBEIN ..	26,497	1 0	..	..	" " "	3,500
18. MYSTIC PARK ..	4,622	1 0	..	..	" " "	107
19. NORTH SHEPPARTON ..	36,456	1 0	..	..	" " "	1,280

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, 1930	Period of Rate.	Estimated Number of Persons dwelling in District.
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IRRIGATION AND WATER SUPPLY DISTRICTS—*continued.*

	Valuation by Commission.	Divisions.				
		1st.	2nd.	3rd.		
	£	s. d.	s. d.	s. d.		
20. NYAH	6,809	1 0	..	..	1st July, 1929, to 30th June, 1930	1,000
21. RED CLIFFS	23,623	1 0	..	..	" " "	2,750
22. ROCHESTER	66,640	1 0	0 6	0 3	" " "	4,190
23. RODNEY	144,940	1 0	0 6	0 3	" " "	5,475
24. SALE	15,842	1 0	..	..	" " "	675
25. SHEPPARTON	38,909	1 0	..	..	" " "	2,520
26. SOUTH SHEPPARTON	15,117	1 0	..	..	" " "	530
27. STANHOPE	15,085	1 0	..	..	" " "	770
28. SWAN HILL	24,401	1 0	..	..	" " "	1,490
29. THIRD LAKE	2,431	2 0	..	..	" " "	165
30. TONGALA	29,318	1 0	..	..	" " "	2,250
31. TRAGOWEL PLAINS	43,595	1 0	0 6	..	" " "	1,730
32. WERRIBEE	17,401	1 0	..	..	" " "	1,107

WATERWORKS DISTRICTS.

33. AXE CREEK	1,683	2 0	..	..	1st July, 1929, to 30th June, 1930	260
34. BARING	1,235	5 0	2 6	1 3	" " "	150
35. BIRCHIP	40,519	2 4	1 2	0 7	" " "	2,645
36. CARWARP	9,397	3 10	1 11	0 11½	" " "	760
37. CARWARP CENTRAL	1,065	5 0	2 6	..	" " "	200
38. COREENA	12,148	5 0	2 6	1 3	" " "	400
39. DERING	2,392	6 0	3 0	1 6	" " "	211
40. EUREKA	1,797	4 0	2 0	1 0	" " "	115
41. HARCOURT	8,686	1 6	..	..	" " "	600
42. HINDMARSH	8,961	3 6	..	..	" " "	238
43. KARKAROOC	147,963	2 2	1 1	0 6½	" " "	4,000
44. KERANG N.W. LAKES	8,074	0 6	..	..	" " "	575
45. KIA	5,055	5 0	2 6	1 3	" " "	300
46. LONG LAKE	72,554	2 10	1 5	0 8½	" " "	2,330
47. MILLEWA	13,521	5 0	2 6	1 3	" " "	2,350
48. MILLEWA CENTRAL	8,991	7 6	3 9	..	" " "	1,250
49. NARRE WARREN	3,219	1 0	..	..	" " "	250
50. SEA LAKE	67,539	2 8	1 4	0 8	" " "	2,405
51. TYNTYNDER	56,507	3 4	1 8	0 10	" " "	3,000
52. TYRRELL	103,816	3 4	1 8	0 10	" " "	5,630
53. UPPER WEST'N WIMMERA	64,970	1 6	0 9	0 4½	" " "	1,685
54. UPPER WIMMERA UNITED	114,257	1 6	0 9	0 4½	" " "	2,750
55. WALPEUP WEST	74,058	0 9	0 4½	..	" " "	2,900
56. WERRIBEE	7,813	2 0	..	..	" " "	140
57. WESTERN WIMMERA	305,562	1 2	0 7	0 3½	" " "	8,800
58. WIMMERA UNITED	344,169	1 2	0 7	0 3½	" " "	7,800
59. WYCHEPROOF	77,518	2 4	1 2	0 7	" " "	2,945
60. YELTA	2,771	3 4	..	..	" " "	150

WATERWORKS TRUSTS.

	Municipal Valuation.	£	s. d.			
			s.	d.		
61. AVOCA	40,849	..	0	4	1st January, 1930, to 31st December, 1930	990
62. MITIAMO (URBAN)	732	..	4	0	" " "	190
63. QUAMBATOOK (URBAN)	4,370	..	2	6	" " "	330
64. CARRUM	30,502	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.				
		£				
65. LODDON UNITED	100,321	1st Division	0	8	" " "	3,520
		2nd Division	0	4		
		3rd Division	0	2		

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, 1930.	Period of Rate.	Estimated Number of Persons dwelling in District.
URBAN DIVISIONS AND DISTRICTS.				
	Municipal Valuation.			
	£	s. d.		
66. ANTWERP	310	.. .. 2 6	1st Jan., 1930, to 30th June, 1930	75
67. BACCHUS MARSH ..	17,380	.. .. 1 6	1st July, 1929, to 30th June, 1930	1,872
68. BERRIWILLOCK ..	1,669	.. .. 3 6	" " "	160
69. BERWICK	5,259	.. .. 2 0	" " "	900
70. BEULAH	4,798	.. .. 2 3	" " "	500
71. BIRCHIP	8,090	.. .. 1 8	" " "	970
72. BITTERN	439	.. .. 3 0	" " "	90
73. BRIM	1,432	.. .. 4 0	" " "	230
74. CARRUM	88,652	.. .. 1 4	" " "	6,355
75. CARWARP	207	.. .. 5 0	" " "	40
76. CHILLINGOLLAH ..	602	.. .. 5 0	" " "	90
77. CHINKAPOOK	677	.. .. 6 0	" " "	120
78. COHUNA	10,060	.. .. 1 9	" " "	984
79. COROP	271	.. .. 2 0	" " "	90
80. CRANBOURNE	2,824	.. .. 2 0	" " "	250
81. CULGOA	1,502	.. .. 3 6	" " "	155
82. DANDENONG	60,276	.. .. 1 3	" " "	4,500
83. DIMBOOLA	15,830	.. .. 1 6	" " "	1,615
84. DINGEE	494	.. .. 4 0	" " "	90
85. DOON	174	.. .. 2 0	" " "	30
86. FRANKSTON	51,634	.. .. 1 4	" " "	5,420
87. HASTINGS	2,003	.. .. 3 0	" " "	450
88. HOPETOUN	7,259	.. .. 2 3	" " "	700
89. JEPARIT	8,958	.. .. 1 9	" " "	860
90. JUNG JUNG	959	.. .. 3 0	" " "	168
91. KOONDROOK	3,906	.. .. 2 6	" " "	485
92. LAKE BOGA	2,584	.. .. 3 0	" " "	370
93. LALBERT	1,161	.. .. 5 0	" " "	155
94. LASCELLES	1,216	.. .. 3 6	" " "	130
95. LEITCHVILLE	2,450	.. .. 3 0	" " "	224
96. LOCKINGTON	1,516	.. .. 3 6	" " "	240
97. MANANGATANG	2,451	.. .. 3 6	" " "	200
98. MARNOO	1,752	.. .. 3 6	" " "	300
99. MARONG	768	.. .. 3 0	" " "	300
100. MERBEIN	8,640	.. .. 3 0	" " "	700
101. MERINGUR	400	.. .. 7 0	" " "	130
102. MINYIP	6,055	.. .. 2 9	" " "	800
103. MORNINGTON	33,307	.. .. 1 6	" " "	2,270
104. MOUNT MARTHA ..	5,038	.. .. 2 3	" " "	150
105. MURRABIT	230	.. .. 3 0	1st Jan., 1930, to 30th June, 1930	40
106. NANDALY	382	.. .. 6 0	1st July, 1929, to 30th June, 1930	105
107. NATIMUK	4,000	.. .. 1 6	" " "	590
108. NORTH WONTHAGGI ..	3,878	.. .. 2 0	" " "	1,000
109. NULLAWIL	872	.. .. 5 0	" " "	103
110. NYAH	842	.. .. 2 6	" " "	170
111. NYAH WEST	4,754	.. .. 2 9	" " "	300
112. OUYEN	12,550	.. .. 2 6	" " "	900
113. PAKENHAM	5,949	.. .. 2 0	" " "	650
114. PATCHEWOLLOCK ..	610	.. .. 6 0	" " "	155
115. PIANGIL	1,869	.. .. 3 6	" " "	220
116. PYRAMID HILL	2,912	.. .. 3 0	" " "	603
117. RAINBOW	9,663	.. .. 1 9	" " "	960
118. RED CLIFFS	10,034	.. .. 3 0	" " "	770
119. RUPANYUP	5,671	.. .. 2 9	" " "	700
120. SEA LAKE	7,665	.. .. 2 0	" " "	610
121. SOMERVILLE	1,649	.. .. 2 6	" " "	260
122. SOUTH FRANKSTON ..	11,771	.. .. 2 6	" " "	715
123. SPEED	528	.. .. 10 0	" " "	110
124. SPRINGVALE	23,311	.. .. 1 6	" " "	1,820
125. STANHOPE	894	.. .. 4 0	" " "	360
126. TEMPY	510	.. .. 6 6	" " "	135
127. ULTIMA	3,190	.. .. 3 0	" " "	390
128. WAITCHIE	375	.. .. 5 0	" " "	90
129. WATCHEM	2,419	.. .. 3 0	" " "	260
130. WERRIMULL	870	.. .. 7 0	" " "	150
131. WONTHAGGI	35,525	.. .. 1 6	" " "	9,000
132. WOOMELANG	2,886	.. .. 2 9	" " "	420
133. WOORINEN	546	.. .. 4 0	" " "	60
134. WYCHEPROOF	9,136	.. .. 2 0	" " "	805
135. YAAPEET	388	.. .. 7 6	" " "	105

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, 1930.	Period of Rate.	Estimated Number of Persons dwelling in District
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COLIBAN SYSTEM.

	Municipal Valuation. £	<i>s. d.</i> On Valuations up to £300 .. 1 6 (Minimum 20s.) From £301 up to £700 .. 1 3 From £701 on 1 0 Vacant lands .. 1 6	1st July, 1929, to 30th June, 1930	61,000
136. COLIBAN ..	386,942			

FLOOD PROTECTION DISTRICTS.

	Valuation by Commission. £	<i>s. d.</i> 1 0	1st July, 1929, to 30th June, 1930	
137. ECHUCA (HIGH-ST.)	1,454			80
138. CARDINIA ..	Acres. 36,206	1st Div. (p.ac.) 3 0 2nd Div. (p.ac.) 1 6 3rd Div. (p.ac.) 0 9	" " "	900
139. LOWER KOOWEERUP }	54,834	1st Div. (p.ac.) 2 0 2nd Div. (p.ac.) 1 0 3rd Div. (p.ac.) 0 6	" " "	2,700
140. KANYAPELLA ..	14,494	1st Div. (p.ac.) 0 7 2nd Div. (p.ac.) 0 3½	" " "	68
141. LOCH GARRY ..	40,886	Per acre .. 0 6	" " "	200

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 ..	6,684	3,360	3,360	22s. 6d.	1st October, 1929, to 30th April, 1930
2. COHUNA ..	34,662	22,231	22,334	6s.	1st September, 1929, to 30th April, 1930
3. DINGEE ..	6,383	4,494	4,494	7s.	" " " "
4. ECHUCA NORTH ..	13,863	5,591	5,660	7s. 6d.	" " " "
5. FISH POINT ..	5,788	3,761	1,847	8s.	" " " "
6. GANNAWARRA ..	52,766	19,765	19,839	6s.	" " " "
7. KOONDROOK ..	61,848	18,840	18,840	6s.	" " " "
8. LEITCHVILLE ..	13,239	11,455	3,851	7s.	" " " "
9. MAFFRA ..	23,083	10,284	8,987	10s.	" " " "
10. MERBEIN ..	8,427	7,631	19,029	24s. Min. 60s. per acre	1st August, 1929, to 30th April, 1930
11. MYSTIC PARK ..	18,181	9,076	3,074	6s.	1st September, 1929, to 30th April, 1930
12. NYAH ..	3,680	3,085	7,652	20s. Min. 50s. per acre	1st August, 1929, to 30th April, 1930
13. RED CLIFFS ..	30,880	11,143	27,859	28s.	" " " "
14. ROCHESTER ..	170,014	54,359	55,046	6s.	1st September, 1929, to 30th April, 1930
15. RODNEY ..	268,003	190,142	59,611	6s.	" " " "
16. SALE ..	15,053	8,074	3,635	10s.	" " " "
17. SHEPPARTON ..	24,683	21,794	21,794	6s.	" " " "
18. SOUTH SHEPPARTON	33,608	18,888	4,735	8s.	" " " "
19. STANHOPE ..	26,005	18,800	17,682	6s.	" " " "
20. SWAN HILL ..	36,453	21,486	21,486	6s.	" " " "
21. THIRD LAKE ..	12,128	4,128	2,753	7s.	" " " "
22. TONGALA ..	45,480	29,454	29,036	6s.	" " " "
23. TRAGOWEL PLAINS	212,750	147,840	31,308	7s.	" " " "
24. TRESKO ..	3,894	2,398	5,995	16s. Min. 40s. per acre	1st January, 1929, to 31st Dec., 1929
25. WERRIBEE ..	9,982	7,908	7,931	12s.	1st October, 1929, to 30th April, 1930

CONTRACTS.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1930.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote.)		
			£	s.	d.
2599	H. C. Bridges	Earthen Storage, Rupanyup	1,253	13	0
2600	Thompsons Engineering & Pipe Co. Ltd.	Mild Steel Bends, Bellarine Peninsula	630	0	0
2601	Bethune Bros.	Boring for Water, Walpeup West	153	12	0
2602	A. J. Lindorff	Firewood, Nyah	212	17	6
2603	S. Sedgman	Firewood, Nyah	378	12	6
2604	P. Mannix, Snr.	Firewood, Nyah	722	16	0
2605	A. W. Osborne	Firewood, Nyah	715	0	0
2606	A. Jeans	Firewood, Nyah	162	16	6
2607	A. J. Bell	Firewood, Nyah	538	17	0
2608	T. McCredde	Firewood, Nyah	216	2	6
2609	Howe & Jeffers	Firewood, Tresco	500	0	0
2610	J. H. Storer	Firewood, Merbein	400	11	8
2611	I. T. Storer	Firewood, Merbein	562	10	0
2612	A. Storer	Firewood, Merbein	400	3	9
2613	T. H. Field	Firewood, Merbein	390	19	9
2614	T. Riordan	Firewood, Merbein	198	0	3
2615	M. P. Cairns	Firewood, Merbein	568	15	0
2616	P. J. McPhee	Firewood, Merbein	547	9	8
2617	W. Russell	Firewood, Merbein	451	7	8
2618	W. Russell	Firewood, Merbein	833	6	8
2619	W. Russell	Firewood, Merbein	383	6	8
2620	J. A. Bettie	Firewood, Merbein	441	13	4
2621	J. A. Bettie	Firewood, Merbein	228	7	6
2622	M. O'Halloran	Firewood, Merbein	451	10	0
2623	S. G. Massie	Firewood, Merbein	197	12	6
2624	J. H. Russell	Firewood, Merbein	218	15	0
2625	J. H. Russell	Firewood, Merbein	452	14	2
2626	Australian Wood Pipe Co. Ltd.	Wood Pipes, Bellarine Peninsula	4,662	19	1
2627	F. Russell	Firewood, Merbein	537	13	6
2628	Hume Steel Limited	Steel Pipes, Eaglehawk	3,386	7	6
2629	L. A. McTaggart	Firewood, Merbein	277	1	8
2630	Mephan Ferguson Pty. Ltd.	Steel Pipes, Wimmera-Mallee	5,178	5	0
2631	B. Holland	Earthen Storage, Ultima	445	7	8
2632	E. E. Green	Earthen Storage, Antwerp	494	10	11
2633	Australian Wood Pipe Co. Ltd.	Wood Stave Pipes, Bendigo	371	5	0
2634	W. E. Chatterton	Boring for Water, Walpeup West	123	0	0
2635	W. Kiley	Eastern Goulburn Main Channel Extension	242	14	4
2636	W. Kiley	Eastern Goulburn Main Channel Extension	246	7	5
2637	W. E. Chatterton	Boring for Water, Walpeup West	350	0	0
2638	C. Tucknott	Eastern Goulburn Main Channel Extension	201	3	8
2639	D. Cameron	Eastern Goulburn Main Channel Extension	244	1	9
2640	E. J. D. Finegan	Embankment, Kilmany Park Estate	1,335	0	0
2641	M. P. Cairns	Firewood, Merbein	700	0	0
2642	Ronaldson Bros. & Tippet	Oil Engines, Walpeup West	1,892	0	0
2643	G. W. Kelly & Lewis Pty. Ltd.	Centrifugal Pumps, Walpeup West	325	10	0
2644	Australian Cement Ltd.	2,500 tons cement	11,500	0	0
2645	Australian Wood Pipe Co. Ltd.	Wood Stave Pipes, Bunyip-Garfield	5,961	4	11
2646	Australian Wood Pipe Co. Ltd.	Wood Stave Pipes, Crib Point	1,499	8	9
2647	Gibson Battle (Melb.) Pty. Ltd.	Needle Valves, Eildon Reservoir	5,612	0	0
2648	Thompsons Engineering & Pipe Co. Ltd.	Control Valves, Eildon Reservoir	2,500	0	0
2649	Hume Steel Ltd.	Steel Pipes, Walpeup West	2,413	2	6
2650	Australian Cement Ltd.	3,000 tons cement	13,800	0	0
2651	E. Kelly	Earthen Storage, Werrimull	445	17	1
2652	Australian Wood Pipe Co. Ltd.	Wood Stave Pipes, Heyfield	2,942	13	2
	Sundry small contracts at piece-work rates				
	—Distributary channels		60,172	0	0
		Total	140,071	4	6

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.
Eildon Reservoir	£152,714
Wimmera-Mallee System	91,632
River Murray Storages (Hume Reservoir and Traffic Diversions)	89,700
Rochester, Rodney, Shepparton, Stanhope, and Tongala Districts	48,427
Goulburn Main Channels	44,427
Bellarine Peninsula	43,488
Mornington Peninsula	39,760
Maffra District (Glenmaggie Reservoir) and Sale District	27,835
Cohuna, Kerang, Kerang Lakes, Koondrook, and Mystic Park Districts	25,818
Boort, Tragowel Plains, Nyah, and Swan Hill Districts	23,328
Bacchus Marsh and Werribee Districts	19,307
Coliban District	18,670
Merbein, Millewa, Red Cliffs, Coreena, Carwarp, and Walpeup Districts	17,661
Kooweerup, Cardinia, and Other Flood Protection Districts	9,906
Other Districts	8,484
Campaspe and Loddon River Storages	3,639
Mallee Tanks and Clearing Roads (Mallee)	3,614
Total	£668,410

WORKS CARRIED ON OR COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1930.

Throughout all Districts the work of extending and remodelling channels was continued. Many old structures were replaced thereby increasing the efficiency of the various channel systems. The benefit of such works was shown by the fact that despite a very dry season being experienced, all demands for water were satisfactorily met.

Set out in the following pages are the chief items of interest relating to each respective District.

COLIBAN SYSTEM.

Included under this System are the important City of Bendigo, the important Towns of Castlemaine, Eaglehawk, and Maldon, and the adjoining townships and districts.

At Jackass Flat, near California Gully, a system of supplying irrigation water under pressure through pipes is being installed and should be in operation during this season. A similar scheme was satisfactorily established at South Lockwood about two years ago.

The work of replacing the old "Lightning Hill" Syphon at Eaglehawk was completed, and an improved supply to Raywood, Sebastian and adjoining areas is provided.

With a view to giving a full water supply to North Bendigo and Eaglehawk, a comprehensive scheme for remodelling the reticulations governing these places is being prepared, and will be carried out as opportunity permits. A number of general improvements and extensions of other parts of the reticulation system at Bendigo were also carried out.

To improve the supply to the high level areas at Taradale, two elevated tanks were erected on the outskirts of the township.

IRRIGATION AND WATER SUPPLY DISTRICTS.

RODNEY DISTRICT.

The quantity of water delivered for irrigation purposes during the year was 90,000 acre feet, being 40 per cent. more than the quantity delivered in any previous season. The total area of land watered, 86,000 acres, is the largest area watered in any one season.

Three hundred Dethridge Meters have been installed and are proving most successful in regulating and computing volumes of water used.

About 15 miles of channels were remodelled and enlarged, while numerous requests for extensions and enlargement of channels are being examined.

DISTRICTS ADMINISTERED FROM SHEPPARTON CENTRE.

In the Shepparton District, the principal works carried out were for drainage, while in the South Shepparton District concrete channel structures and an outfall for the main drainage system of No. 2 Estate were constructed.

The North Shepparton District was further extended by the construction of 4 miles of the Narioka Main Channel, and another 2 miles of this channel are being constructed. Investigations were made and work put in hand for the construction of $4\frac{1}{2}$ miles of channel to supply the Bunbartha area which is to be added to the North Shepparton District.

In Katandra District, 4 miles of domestic and stock channel were so improved that a supply to the township of Wunghnu was maintained throughout the dry summer months.

A total of 42,583 acre feet of water was supplied in the districts administered from Shepparton Centre, being an increase of 13,458 acre feet on the quantity supplied last year.

SWAN HILL DISTRICT.

General improvements to the channel system and some new channelling works were carried out. The past season was exceptionally dry and the demand for irrigation water heavy, but all requirements were met.

DISTRICTS ADMINISTERED FROM KERANG CENTRE.

The past irrigation season, both for duration and quantity of water delivered, was a record. Notwithstanding the heavy demands, however, it was possible to meet all requirements, the Torrumbarry Weir again proving of immense value by maintaining the water in the River Murray at a level suitable for gravitation.

The work of enlarging and reconditioning the No. 5 Macorna North Channel in the Kerang District is proceeding, while designs for the proposed 12 feet diameter syphons at Calival and Nine Mile Creeks, Macorna Channel, were prepared, and construction will be put in hand when the necessary money is available. A number of drainage schemes to meet conditions in areas adjoining the District are now being investigated.

In the Koondrook District, a reticulated supply for Murrabit Township was completed and an Urban Division was proclaimed.

Further meters were installed in the Third Lake District and, as in other Districts, are proving most satisfactory in not only recording the water supplied but also regulating its use.

DISTRICTS ADMINISTERED FROM COHUNA CENTRE.

The water rights allotted to the three Districts, Cohuna, Gannawarra, and Leitchville, were greatly exceeded during the season, and the total quantity of water supplied, over 65,000 acre feet, constituted a record.

The Cohuna District has been extended to embrace 1,881 acres of land on Gunbower Island, the supply to which has been improved and added to by the Commission.

In the Leitchville District drainage works were extended and the boundaries of the District were amended to include an area of 3,423 acres now served by the new drains.

Drainage works are receiving close attention and a Main Drain is being constructed and surveys of other drains have been made in order to prevent seepage of lands adjoining the Pyramid Creek. The portions of these lands at present outside any constituted District will be included in the adjacent constituted Districts.

In the Cohuna and Leitchville Urban Divisions improvements were effected in the water supply works.

DISTRICTS ADMINISTERED FROM LODDON CENTRE.

A record quantity of 69,000 acre feet of water was supplied to these Districts during the season, such quantity being 66 per cent. over and above water rights.

Remodelling of channels and installation of new structures were carried out in the Tragowel Plains District.

In the Calivil District, the construction of channels and structures to supply lands immediately to the west of Bullock Creek was completed, and irrigation water was supplied as the work progressed.

The water supply to the Pyramid Hill Urban District was improved, both as regards quantity and pressure, by the completion of a new standpipe.

BOORT DISTRICT.

One result of the season's operations in this District was the increased efficiency ratio of water deliveries. The main contributory factors to this improvement were the use of meters and the benefit arising from the substitution of channels in place of the Kinypaniel Creek as a main carrier to supply North Boort. The total quantity of water delivered during the season was 18,027 acre feet.

DISTRICTS ADMINISTERED FROM ROCHESTER CENTRE.

The season in the Rochester District extended over a period of nearly ten months, the total deliveries of water amounting to 74,142 acre feet, and the area irrigated being 55,000 acres, which is far in excess of any previous season.

Following the construction of supply channels in Wharparilla and Turrumberry North the area of the District was increased by nearly 5,000 acres, making the total now 170,000 acres.

The Cornelia Creek Channel No. 2 is being remodelled by means of a dragline excavator, and this work when completed will considerably improve the supply to the Echuca North District.

Record deliveries were also made in the Campaspe District, where cereals were watered.

DISTRICTS ADMINISTERED FROM TONGALA CENTRE.

A record amount of water, being about 33 per cent. more than in any previous year, was delivered in these Districts during the season. Notwithstanding the heavy demand, all requirements were met without difficulty.

The enlargement of the Wyuna Main Channel was proceeded with, 6½ miles being practically completed.

In the Tongala District, further works for drainage were carried out. The No. 1A and No. 2 Main Drainage Channels were completed, the total length being 37 miles.

The drainage works in the Stanhope District were completed.

In the Deakin District, irrigation channels, about 4 miles in length, were carried out to supply lands in the proposed Timmering Irrigation District. An application of other landholders for inclusion in this proposed District was approved and the necessary supply channel is being constructed.

New structures were erected on the Deakin Main Drainage Channel in the Echuca North District.

BACCHUS MARSH AND WERRIBEE DISTRICTS.

In the Bacchus Marsh District, protective works consisting of timber and stone cribs were carried out on portions of the Coimadai Creek to prevent scouring of the banks. Similarly constructed works on the Lerderberg and Werribee Rivers are still in excellent condition.

To improve its carrying capacity, 100 feet of the Pykes Creek Tunnel at Ballan was concreted. Additional plantings of *Pinus insignis* seedlings were made on the eastern slopes of the Pykes Creek Reservoir. The trees planted in 1924-26 are still making good progress.

At the Commission's workshops at Bacchus Marsh, 437 large and 152 small Dethridge Meters were constructed for use in Districts under the Commission's control.

In the Werribee District, concrete lining of channels was continued and the Main Channel was cleaned out, thereby restoring its capacity to the maximum. Ample supplies of water for domestic and stock purposes were made available to lands in the Waterworks District.

As forecasted, the change in the control and supply of the Werribee Urban District was made during the year. The Werribee Shire Council now controls this District, water being purchased from the Melbourne and Metropolitan Board of Works.

MERBEIN DISTRICT.

This District is now controlled from Red Cliffs, thus reducing administration costs. Seven waterings were given, five being under water rights and two being special waterings.

The quantity of water pumped was somewhat less than last year, and this fact, taking into account the dry weather conditions, indicates an improvement in the water distribution and irrigation methods, particularly as yields were not affected by the reduced quantity.

Meters to measure water applied to typical soils have been installed in order to ascertain more accurately the water requirements of the District.

An electrically driven pump was installed for the Merbein Urban District water supply.

RED CLIFFS DISTRICT.

The irrigation requirements of this District were fully met, five waterings being given. An improvement was effected in the distribution as, notwithstanding the very dry year, a volume of water less than in the previous season was pumped. The crops were not affected by the smaller quantity used, 17,000 tons of dried fruits being delivered to packing sheds, or the same quantity as last year, and, had not adverse drying conditions reduced the quantity, the yield would have considerably exceeded last season's total.

The water supply to the Red Cliffs Urban Division was improved as a result of the installation of a larger engine and pump. A plant for the chlorination of water was installed, and this should improve the River Murray water for domestic consumption under all conditions.

NYAH DISTRICT.

Practically all the channel reticulation in this District is now concrete lined, the total length being about 45 miles.

Last year's record of dried fruit production, 3,500 tons, was exceeded, the total packs for all sheds this year being 4,200 tons.

MYSTIC PARK, TRESKO, AND FISH POINT DISTRICTS.

In the Mystic Park District some 8 miles of original channels were remodelled and 32 chains of new channel were made. A full supply was given to all irrigators during the season.

Construction work in the Tresko District for the year was confined to the lining with concrete of 4½ chains of earthen channel and the remodelling of some structures.

The total length of channels to supply lands in Fish Point District is now 18 miles 14 chains, 38 chains of earthen channel having been constructed during the year.

KERANG NORTH-WEST LAKES DISTRICT.

During the irrigation season the North-west Lakes storages were maintained at or near full supply level by a carefully regulated supply from the Torrumbarry Weir.

MAFFRA-SALE IRRIGATION DISTRICTS.

The area of lands under irrigated culture in these Districts has increased from 9,009 acres in the 1928-29 season to 14,151 acres in 1929-30, and this rate of progress is expected to continue.

Channel extensions to supply additional lands were carried out, while 10½ miles of channel to supply water to the Heyfield Township Reservoir were constructed. This channel will also be used to supply water to adjoining lands for domestic and stock and irrigation purposes.

The construction of drainage channels was continued. The Main Nuntin Drainage Channel, which was completed for 8½ miles, proved of great benefit by carrying off water from heavy rainfall. The Airly-Nuntin Drainage Channel has been constructed, making it possible to now cultivate all suitable land on Airly Estate. Other important works for the effective drainage of the Sale District are now in hand, and will be expedited so as to give relief in wet seasons.

The main works for supply to the reticulation of the township of Heyfield being completed, the works of completing the reticulation itself are being put in hand.

Many applications from outside landholders were received for the inclusion of their lands in the Irrigation Districts, and surveys are being carried out to ascertain the areas commandable.

The development of blocks on Closer Settlement Estates in the Districts greatly increased, and many holdings should reach their full capacity in the coming year. Many inquiries are being received for irrigated holdings now that the benefit of irrigation has been so substantially proved.

INVESTIGATIONS OF NEW IRRIGATION AND WATER SUPPLY PROPOSALS.

In view of the progress that has been made with the Hume Reservoir on the River Murray, which at an early date will have a storage capacity of 500,000 acre feet, plans are being prepared by the Commission for a diversion weir at or near Yarrawonga by means of which water could be supplied by gravitation for the irrigation of lands commanded. It is hoped that New South Wales will join in the cost of the construction of this weir and negotiations are proceeding to this end. Negotiations which are likely to be successful are also proceeding with the State Electricity Commission of Victoria for the supply of electric power to pump water to lands not governed by the proposed weir. Contour surveys are now in hand of lands in the Rutherglen, Yarrawonga, and Cobram areas which are likely to be supplied with water for irrigation.

Investigations are proceeding to ascertain whether it would be possible to provide at a reasonable cost more storage on the Loddon River by increasing the capacity of the present Laanecoorie Reservoir. A preliminary investigation has also been carried out in connexion with proposals to utilize the waters of the Upper Loddon River and branches for the water supply to the comparatively high country extending from Newstead to Maryborough and Dunolly.

Preparatory work has been put in hand on a minor scheme to store the waters of the Campaspe River at Eppalock. The proposal is to construct a storage which, while providing for a domestic and stock supply to a very large area of land not at present supplied, would, by means of the Waranga Western Channel, supplement the supply to the Wimmera-Mallee. The scheme would, in addition, provide a useful irrigation supply to suitable lands in the Campaspe Valley.

In regard to the proposals to provide supplies from the Goulburn System to lands in Patho, Turrumberry North and Terricks East area, a contour survey is now being carried out. Surveys of portions of the channels necessary to supply water to the Terricks area along the eastern side of Bullock Creek have been made and construction of channels has commenced.

Surveys are being carried out in the Maffra-Sale Districts in compliance with strong requests for the inclusion of additional lands in the irrigation areas.

Investigations for an extension from the Waranga Western Channel to provide a water supply to Quambatook, Leaghur, and Normanville areas were completed, and the construction of the channel is being proceeded with. With regard to the possible extension of the Boort District, contour surveys of the area between the District boundary and a proposed channel line to Normanville are being carried out.

Requests having been made by holders of lands adjacent to the Werribee District for an irrigation supply, investigations are being carried out by boring to ascertain the suitability of a site for a dam at Cobbledick's Ford on the Werribee River for storage purposes.

Estimates of cost of works to provide a water supply to certain lands in the Shires of Bulla, Keilor, Melton, Braybrook, and Werribee were submitted to the interested municipal and other bodies who, after conference, appointed a committee to further consider the proposals.

A request has been received for a comprehensive scheme of pipe reticulated water supply from the Otway Ranges to Camperdown, Cobden, Terang, Mortlake, Warrnambool, Koroit, and Port Fairy, and a number of smaller townships in the Western District in the vicinity of the project. Investigations are being made with a view to submitting a proposal for consideration by the authorities at the various centres concerned.

To supplement the Grampians storages, the headworks of the important Wimmera-Mallee Water Supply System, it was decided to divert portion of the waters of the Glenelg River into such storages. A commencement has been made with the construction of the main diversion channel, 30 miles in length, and it is estimated that in a normal season 30,000 to 40,000 acre feet of water will be thus made available to the Wimmera-Mallee from this source.

WATERWORKS DISTRICTS.

CARWARP AND CARWARP CENTRAL DISTRICTS.

Notwithstanding that the dry conditions caused channels to be filled with drift sand, water was run through the whole system in these Districts and all requirements were met.

COREENA DISTRICT.

The total length of channels in this District is now 92½ miles, and a further 7 miles 65 chains are being constructed and should be completed in time for the next watering.

The second annual watering of the District commenced early in September, 1929, and was completed before the end of November, 1929. The watering lasted 56 days, during which time about 88 miles of channel were run and 75 tanks were filled.

YELTA DISTRICT.

During the year the channel system was cleaned out and the supply of water for domestic and stock requirements was satisfactorily provided. At the request of a syndicate of settlers, an emergency supply consisting of two waterings on 60 acres of land was given for fodder growing, and the successful large growth of green fodder was of considerable value to the settlers concerned and will repay them for the cost involved.

WIMMERA-MALLEE WATER SUPPLY.

The series of dry seasons which have been experienced during the past six years has not yet definitely broken; and, although the forthcoming season has opened satisfactorily, the run off from most of the water catchments supplying the above area is still far below normal.

The new Waranga Western Channel Extension has more than justified its construction; the watering of the northern portion of the area supplied from this source was this year completed two months earlier than usual.

A commencement was made with the construction of a main channel, some 30 miles in length with a capacity of 100 cusecs, from the Upper Glenelg River to supplement the Wimmera storages (Taylors Lake and Pine Lake) which have been seriously depleted as a result of the recent series of dry years. It is estimated that in a normal season 30,000 to 40,000 acre feet of water will be made available to the Wimmera-Mallee System from this source without adversely affecting the flow in the lower Glenelg River. It is expected that the channel will be completed and in operation during the present year.

The difficult season passed through this year has been more severe than any year since 1914-15 and caused many channels not previously affected by sand drift to become filled. The cleaning out of these channels was carried out as a relief work at piecework rates by district farmers and settlers whose crops failed, and such work proved of great benefit to them.

Full supplies of water for domestic and stock purposes were, in spite of the unfavorable conditions, provided through the 6,000 miles of channels in the area of 11,000 square miles now comprising the system.

Sufficient supplies of water were also given to a number of towns within the Wimmera-Mallee Districts controlled by local Waterworks Trusts, as well as to the steadily increasing number of towns whose reticulation systems are administered directly by the Commission, of which there are now 37, namely:—

Antwerp	Dimboola	Marnoo	Patchewollock	Ultima
Berriwillock	Dooen	Minyip	Quambatook	Waitchie
Beulah	Hopetoun	Nandaly	Rainbow	Watchem
Birchip	Jeparit	Natimuk	Rupanyup	Woomelang
Brim	Jung Jung	Nullawil	Sea Lake	Woorinen
Chillingollah	Lalbert	Nyah West	Speed	Wycheproof
Chinkapook	Lascelles	Ouyen	Tempy	Yaapect
Culgoa	Manangatang			

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

During the year a water supply was given for the first time to an area of 56 square miles known as the Hindmarsh District. This country adjoins the Western Wimmera District and is west of the Wimmera River and directly south of Lake Hindmarsh. The underground supplies met with farther west are not available here, while catchments are poor. Supply was given by gravitation from the Wimmera-Mallee system, the river being crossed by a pipe syphon 1 mile 56 chains long, from which water is distributed through 36 miles of earthen channels. A new reticulated supply for the township of Antwerp was also installed in connexion with these works. Channel extensions totalling 19½ miles in length were also carried out, chiefly in the parishes of Katyil, Lalbert, Longerenong, Drung Drung and Rupanyup.

At Hopetoun and Rupanyup additional storages of 50,000 cubic yards each were constructed to augment the town reservoirs, and extensions to mains were carried out in the towns of Rainbow, Jeparit, Dimboola, Beulah, Hopetoun and Watchem.

At Dimboola and Watchem auxiliary pumps in connexion with the town supplies were installed and the pumping plant at Minyip was remodelled.

BIRCHIP, WYCHEPROOF, SEA LAKE, DERING, EUREKA, BARING, AND TYRRELL DISTRICTS.

Eighty-five miles of channel extension were constructed and watered during the year in the parishes of Wycheproof, Teddywaddy, Charlton West, Nyang and Underbool. Supply was for the first time given to an area near Underbool, and during the ensuing season the channel system will be further extended to the Underbool Township and vicinity.

Construction work in connexion with the water supply to the high country adjacent to Walpeup has been undertaken and this area will be supplied before the end of the present watering season by pumping from the main Dennyning Channel.

Improvements to Speed and Tempy town storages have been made, and extensions to mains and remodelling have been carried out in the towns of Wycheproof, Sea Lake, Berriwillock, and Ouyen.

LONG LAKE AND TYNTYNDER DISTRICTS.

Several short extensions of channels were made in the above Districts, and an additional storage was constructed for the Ultima town supply, while improvements were made to the Quambatook storage.

Extensions to mains were carried out in the towns of Piangil, Nyah West, Ultima and Manangatang.

MORNINGTON PENINSULA DISTRICTS.

Satisfactory progress has been made with the construction of the new Eumemmerring Reservoir some 3 miles north-east of Dandenong, and 1,000 acre feet of water can be stored in the basin at a depth of 26 feet.

The work of reticulating the townships of Garfield, Bunyip and Crib Point from the Mornington Peninsula Water Supply Scheme was commenced, and is now so well advanced that the whole of these schemes will be completed to enable the townspeople to obtain the benefits of a reticulated water supply during the coming summer season.

The existing reticulation systems of the various townships throughout the scheme were considerably extended and numerous applications for further extensions have been received.

A scheme of water supply to the important bayside townships, extending from Dromana to Portsea, was submitted through the Flinders Shire Council for consideration by the residents concerned.

The works in connexion with the Commission's scheme of improvement of the Kananook Creek, prepared at the special request of the Frankston Shire Council and being carried out at the Council's cost, are considerably advanced. The erection of the jetty at Seaford, in conjunction with the 39-inch diameter suction pipes and the electrically-driven centrifugal pump, was completed. This pump will take a supply of 60 cusecs from Hobson's Bay and will deliver the sea water through a 48-inch diameter concrete main along Station-street into the Kananook Creek. Arrangements have been made so that this flushing stream can be diverted either to Frankston or the Paterson River at Carrum as desired. The Commission's dragline excavator now on loan to the Frankston Shire Council is making good progress in cleaning out and enlarging the Kananook Creek.

The Public Works Department has also loaned a substantial barge to the Council for the purpose of cleaning out the Creek at the Frankston end, and this barge is now in operation.

BELLARINE PENINSULA WATER SUPPLY SCHEME.

Further substantial progress was made during the year with this scheme. The main inlet channel to the Wurdee Boluc Storage has been considerably extended and now taps the flows of the East and the West Pennyroyal, Retreat, Matthews, Goslings and Dewings Creeks.

As there is a practically permanent flow in the East Barwon River and as it is most desirable to safeguard and improve storage supplies, it is proposed early in the coming year to extend the main inlet channel for a further $6\frac{1}{2}$ miles to pick up that river's flow. This work, which involves the installation of 29 chains of 54-inch diameter steel pipe syphon and the construction of 12 chains of fluming, is expected to be ready for operation before next summer. The main works of supply are rapidly approaching completion and it is proposed to now undertake the extension of the main pipe line to the Bellarine Peninsula, the construction of local service basins, and the pipe reticulation of the various towns on the Peninsula.

Supplies of water for the City of Geelong have already been made available to augment as required the shortages of the Geelong Waterworks and Sewerage Trust reservoirs, which were seriously depleted as the result of the recent series of abnormally dry years.

WONTHAGGI DISTRICT.

The works of this District having been extended to provide for the reticulation of the Hicksborough Township, properties at that place were connected with the water mains and the Hicksborough Urban District was proclaimed. An aerator was erected at the Service Basin at Wonthaggi and arrangements were also made to install a chemical treatment plant to improve the quality of the water.

NORTHERN MALLEE WATER SUPPLY.

In the Northern Mallee areas, adjoining those supplied by the Wimmera-Mallee scheme, but above the levels of its channels, a considerable amount of work has been done in opening up new country by cutting tracks, clearing, and grubbing roads, and in providing tanks, bores, and other means of water supply for contractors and new settlers.

BORES.

Six additional bores have been put down in the Walpeup West Waterworks District. Three bores, one each in the parishes of Purnya, Manpy and Pallarang were completed during the year and water of fair to good quality was struck at depths of 517 feet, 386 feet and 445 feet respectively. In the unallotted country south of the township of Murrayville, three bores were put down to depths of 300 feet, 301 feet and 367 feet respectively, excellent water being obtained in each bore. A bore put down in the parish of Koonda by a contractor under guarantee that if usable water was not obtained he was to receive no payment for work done, was unfortunately not successful.

Successful bores in the Northern Mallee now number 109.

TANKS.

There are in the Mallee areas 260 public earthen tanks of total storage capacity 1,209,617 cubic yards, equal to 204,425,000 gallons. Of these tanks, 61 are in the county of Millewa, and have a total storage capacity of 125,268 cubic yards, equal to 21,170,000 gallons.

ARTIFICIAL CATCHMENTS.

In continuance of its policy of constructing artificial catchments of sheet iron discharging into watertight covered storages to supply water to lands which cannot be economically served from the ordinary channel system, the Commission completed the construction of six ironclad catchments and tanks of varying sizes which are operating very satisfactorily. The total number of artificial catchment installations is now 12.

WINDMILLS.

The windmills and hand pumps, erected by the Commission at suitable points along the River Murray for the purpose of supplying soldier settlers on the Murray frontages, have operated satisfactorily during the year.

ROADS.

The total length of roads grubbed and cleared by the Commission in the Mallee is now 5,887 miles, 98 miles having been grubbed during the year. Sixty tracks over sandhills totalling 8 miles 30 chains in length were also improved by rubbling with local limestone.

MILLEWA AND MILLEWA CENTRAL WATERWORKS DISTRICTS.

Abundant supplies were made available to the above Districts during the sixth annual watering of this system. As supplies are drawn from the River Murray by pumping in winter and spring, no scarcity of water was felt.

Owing to the extremely dry conditions, sand drift into channels, which now total at least 670 miles in length, was exceptionally severe during the past season. Arrangements were made to have the cleaning carried out at piecework rates by settlers whose crops had failed.

The storages for the reticulated supplies to the towns of Werrimull and Meringur have been either enlarged or improved, while some extensions to mains were made in each place.

Surveys are being carried out for extensions of the channel system to provide a water supply to the country commanded by the new railway extension from Meringur to Morkalla.

DRAINAGE AND FLOOD PROTECTION SCHEMES.

KOOWEERUP AND CARDINIA.

The Commission, in order to establish as far as possible an effective system of internal drainage to cope with local conditions, has, for the past year, confined operations, within the Kooweerup and Cardinia Districts, chiefly to the reconstruction of lateral feeders. During the year approximately 65 miles of these subsidiary and minor drains have been reconstructed or cleaned out and regraded. All growth has been removed from 20 miles of main channel reserve, and 50 miles of drains and banks have been treated for the extermination of vermin and noxious weeds.

In the Cardinia District, the enlargement by dredger of the Toomuc Catch Drain has been extended $1\frac{1}{2}$ miles to the southern boundary of Hagelthorn's Estate.

During the year in the two Districts approximately 30,000 cubic yards of earthwork have been removed. Structural work has included the building of 4 timber bridges; the installation of pipe outlets and 20 concrete spillovers, and the necessary maintenance and repairs to existing structures.

Privately owned suction plants have during the year continued operations steadily, under an arrangement with the Commission, for the removal of coarse clean sand from the Kooweerup Main Canal. The total output of sand by such plants to date is approximately 230,000 tons, for which a royalty of 3d. per ton has been paid to the Commission. The removal of this sand, which is sold for various utilities, assists materially in maintaining an efficient discharge section in the canal.

ECHUCA.

During the year the levee banks in this District again proved effective for the purpose for which they were designed and constructed.

LOCH GARRY.

Owing to the absence of floods in the Goulburn River, the Loch Garry Flood Protection works were not called into operation during the past year, but the fact that greater areas are being placed under crop each year in the flood protected district shows that the landowners are making full use of the protection which the scheme affords.

KANYAPELLA.

The flow of the Goulburn River kept within the banks last year and the protection works were not therefore put to use, but all works for the protection of this District are being maintained in good order.

CARRUM.

During the year the dragline excavator enlarged portion of the internal drainage system in the Carrum area so as to satisfactorily deal with local drainage water in the area in periods of high flood.

The Rossiter's Road and McCool's Drains have been remodelled and are now of ample capacity to deal with internal waters. It is proposed to connect this system of channels with the Kananook Creek so as to provide when available a flushing stream for the Creek.

MURRAY LEVEES.

The Interstate Committee, appointed for the purpose, dealt with a number of applications received during the year for permission to carry out works to protect lands from the effect of floods in the River Murray.

RIVER EROSION, DRAINAGE, AND GENERAL.

A number of applications were received during the year for permission to construct flood protection, drainage and other works, and, where investigations showed that the proposals were reasonable, permission under the *Water Act* 1928 was granted to carry out the required works at the applicants own cost.

On behalf of the Closer Settlement Board, the Commission supervised the construction of a levee bank to protect the Island Morass, Kilmany Park Estate, Sale, from flooding from the Latrobe River. A channel, to divert to the Latrobe River the water flowing into the Island Morass from the local catchment, was also constructed under the Commission's supervision.

On the Avon River, in the Maffra District, the work of preventing the river bank from scour adjacent to the Commission's channels was continued, 50 chains of stone cribbing being erected. This work was well tested by a rapid rise in the river and proved satisfactory.

RIVER GAUGING.

As provided by section 32 of the *Water Act* 1928, the work of gauging and recording the flows of the principal rivers and streams of the State was continued. Weekly returns showing the volumes of water stored in reservoirs were made available for publication.

New gauging stations were established on the Werribee River at Cobbledick's Ford, the Carlisle River at Carlisle River Settlement, the Creswick Creek at Tourello, the Bullarook Creek at Clunes Weir, and the Jim Crow Creek at Franklinford. As sufficient information has been obtained in regard to the behaviour of the Yarrowee River at Garibaldi, the gauging of this stream has been discontinued. The number of gauging stations in the State is now 67.

In conjunction with the Water Conservation and Irrigation Commission, New South Wales, a new gauging station was established on the River Murray at a site above Albury to measure the regulated flow from the Hume Reservoir. The gaugings at this station are being taken by the Water Conservation and Irrigation Commission of New South Wales.

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.

Consequent on the low flow in many streams, it was found necessary about the middle of January to regulate and restrict diversions of water from the Loddon River above Laanecoorie, the Murray River below Wodonga, the Broken River, tributaries of the Ovens and King Rivers, and Creighton's, Seven, Willimigongon and Fifteen-mile Creeks. These restrictions were continued during the remainder of the irrigation season.

The conditions during the year were favorable for irrigation, and the demand for authority to divert water was in excess of the previous year. Authorized diversions now in force are:—

Yearly permits	..	..	..	..	1,963
Flood permit	..	..	..	..	1
Licences	..	..	..	..	13
					<u>1,977</u>

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; the Waranga Western Main Channel Extension, extending north-westerly from the Loddon River a distance of 36 miles, and the Leaghur-Normanville Main Channel from that point northerly for a distance of 4 miles; the Tandarra-Calivil Main Channel, extending from 64 miles 69 chains on the Waranga Western Main Channel north-westerly to Tragowel Plains No. 1 Main Channel, a distance of 26 miles; and the Main Eastern Channel, which extends from the Goulburn Weir to the Katandra Area, a distance of 51 miles. The total length of main channels is 243 miles. The Irrigation Districts supplied are South Shepparton, Shepparton, North Shepparton, Katandra, Rodney, Deakin, Tongala, Stanhope, Rochester, Echuca North, Dingee, Calivil, Tragowel Plains and Boort.

An estimate has been prepared for a proposed auxiliary channel to increase by 600 cubic feet per second the maximum volume that can now be delivered through the Goulburn-Waranga Channel into Waranga Reservoir from the Goulburn Weir. Construction of this channel is now under consideration and some preliminary work has been put in hand.

A commencement has been made with the construction of a further 2 miles of the Eastern Goulburn Main Channel Extension to supply water for the irrigation of lands beyond the southern boundary of the Parish of Dunbulbalane, which lands will later be included in either the Katandra or North Shepparton Irrigation District. The excavation work, involving about 39,000 cubic yards of earth, has been completed and the erection of structures is in progress. It is proposed to further extend this main channel beyond the eastern boundary of the parish of Dunbulbalane, and to construct a branch channel to the Broken Creek.

The enlargement of the Eastern Goulburn Main Channel has proceeded satisfactorily, two dragline excavators and a bucket dredge being employed on this work practically throughout the year. The enlargement of this channel has now been completed for a total length of 23 miles; 5 miles involving the excavation of 176,000 cubic yards of material have been completed during the year. Eight and a half miles of enlargement remain to be done, and it is proposed to continue this work to completion, conditionally on funds being provided. The beaching of a strip of the side slopes of the deep sections of the channel as enlarged from the Goulburn Storage to a point 5 miles therefrom has also been continued as opportunity permitted.

The enlargement of the Waranga Western Main Channel, to meet the requirements of proposed extensions in Rochester, Calivil, Tragowel Plains and other Districts, as well as for additional requirements arising from the extension of the channel west of the Loddon River, has proceeded satisfactorily. Three dragline excavators, operating on sections requiring immediate enlargement, have been employed continuously. The capacity of the channel has been considerably increased for some 18½ miles, 7 miles having been completed during the past year. As the enlargement of the channel section from Waranga Reservoir to Rochester is really the governing factor of the supply, it is proposed to concentrate on its enlargement, and, with a view to expediting this work, one of the dragline excavators from the Eastern Goulburn Channel is being transferred to Colbinabbin to operate on the section.

Construction of the Emergency Outlet on the Waranga-Western Channel at 25 miles 19 chains has been completed, while urgent necessary repairs were carried out to the Wanalta and Nine-mile Creek Regulators and the Myer's Creek Syphon.

A commencement has been made with the construction of the Terricks Main Channel No. 1, which takes off from the Tandarra-Calivil Channel near Dingee, and will provide a supply to lands along the eastern side of Bullock Creek.

Construction of the Leaghur-Normanville Channel taking off from the Waranga Western Channel Extension about 6½ miles south-west from Boort, to provide a domestic and stock water supply to the Normanville area, and to lands between that area and the Avoca River near Quambatook, with provision later for limited irrigation, and to the Leaghur areas has been put in hand.

NEW STORAGES.

EILDON RESERVOIR.

During the year good progress was made in carrying out the recommendations of the Inquiry Board referred to in the last report. Considerable quantities of additional rockfill were placed in the bank on either side of the reinforced concrete corewall, an enlarged drainage system was installed along a great length at the base of the corewall, and a reinforced concrete tunnel was built along the face of the concrete spillway to lead water to the opening for the emergency or power outlet. The members of the Inquiry Board inspected the remedial works undertaken in accordance with their recommendations, and expressed satisfaction with the progress and the manner in which they were being carried out. The work is now so far advanced that the Commission is in the position to store 200,000 acre feet of water.

PYKES CREEK RESERVOIR ENLARGEMENT.

The raising of the dam to R.L. 1,316 feet was continued to completion, except for general cleaning up and dismantling of plant and buildings.

The necessary road deviations were finished early in the year and the new road bridge over Myer's Creek was opened for traffic in February.

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.

In the last Annual Report reference was made to the appointment of an independent committee to report on the question of the estimated cost of completing the Hume Reservoir to a capacity of 2,000,000 acre feet. The report of this Committee, which was known as the Hume Reservoir Committee of Inquiry, was forwarded to the four Contracting Governments in October, 1929, and was considered by Ministers representing these Governments at a conference held at Canberra on the 18th February, 1930.

At this conference, a resolution was presented by the Chairman of the River Murray Advisory Committee recommending that the Hume Reservoir be now constructed to a capacity of 1,250,000 acre feet and suggesting that the conference should consider the question of continuing construction until an ultimate capacity of 2,000,000 acre feet is reached conditionally on a satisfactory agreement being entered into with the State Electricity Commission of Victoria regarding the payment of interest on the amount of the additional cost of a 2,000,000 acre feet reservoir as against a reservoir of 1,250,000 acre feet and for the conversion of any surplus water into electric power until it is required for the purpose of the River Murray Agreement.

The conference of Ministers decided---

1. That the construction of the Hume Reservoir be continued to a capacity of 1,250,000 acre feet, with the intention of providing later for a capacity of 2,000,000 acre feet;
2. That the River Murray Commission inquire into and report—
 - (a) as to the extension of the Hume Reservoir to a capacity of 2,000,000 acre feet, and the suggestion of the State Electricity Commission of Victoria that the Reservoir be constructed to a capacity of 2,000,000 acre feet—the State Electricity Commission of Victoria to bear the interest on the additional amount involved in increasing the capacity from 1,250,000 acre feet to 2,000,000 acre feet, for a limited and agreed-upon number of years;
 - (b) as to the advisability of the construction of works or allocation of additional water to protect the lower Murray against salinity;
 - (c) on the question of the advisability of revising the River Murray Agreement so far as it relates to the weirs and locks on the River Murrumbidgee;
 - (d) on the question of the responsibility for expenditure in connexion with the maintenance, operation and control of completed works and gauging stations.

Investigations are still being made by the River Murray Commission in regard to these matters, and it is anticipated that its report will be completed before the end of 1930.

The Weir-Lock No. 10 at Wentworth constructed by the New South Wales Authority is in operation. No further work was carried out by this Authority on the Weir and Lock No. 15 at Euston.

The Constructing Authority for South Australia has completed the construction of Locks Nos. 1, 2, 3, 4, 5, 6, and 9, and has commenced preliminary work at Lock No. 7.

The Weir-Locks at Torrumbarry and Mildura have been finished by the State Rivers and Water Supply Commission, the Constructing Authority for Victoria.

HUME RESERVOIR.

During the year, the New South Wales Constructing Authority has been engaged on the Hume Reservoir within its territory. The main work carried out in this section has been the concreting of the wing walls, spillway, and outlet sections. The erection of the steelwork at Bethanga Bridge was completed during the year, and the bridge is now open for traffic.

In Victoria, the construction of the main embankment was continued by the Water Commission. The height of the embankment, extending from the Victorian bank of the river for about 2,400 feet to the high land on the Victorian side, was brought to approximately 75 feet above the flats.

During the year 494,000 cubic yards of earthwork were placed in the embankment ; 6,670 cubic yards of concrete and 127 tons of steel were placed in the core wall ; and 8,580 cubic yards of gravel were transported from Chiltern to the works, as well as 72,400 cubic yards of river gravel from New South Wales. On the downstream slope of the embankment, 2,350 cubic yards of gravel beaching were placed in position. On the upstream slope 3,250 cubic yards of gravel beaching were placed and faced with a 12-inch layer of concrete, making a total of 22,000 square yards so treated during the year.

The reinforced concrete slabs for the drainage layer on the downstream side of the core wall were commenced ; 18,050 slabs were made on the works, 8,683 of these being placed in position during the year.

The level of the spillway wall was raised to R.L. 558. The maximum amount of water stored was 155,000 acre feet.

Permission was given to the public to cut and remove, free of charge, and subject to certain conditions, timber from the submerged areas of the Reservoir. A few permits have been taken out, but generally there has been very little demand for this timber, notwithstanding that offers were invited through the Press.

In connexion with the deviation of traffic routes made necessary by the construction of the Reservoir, several contracts were let by the Country Roads Board of Victoria on behalf of this Constructing Authority, for the construction of roads from Talgarno to Bethanga Bridge, from Bethanga Bridge to Bethanga, and for the deviation of the Omeo Highway between Ebdon and Bolga ; good progress has been made on these works.

Work in connexion with the Sandy Creek deviation of the Wodonga to Tallangatta Railway is being carried out by the Victorian Railways Department, and good progress is being made.

During mid-summer the water stored in Hume Reservoir became infected with algae, causing an unpleasant taste and odour. This was successfully overcome by treatment with copper sulphate. The increase in the depth of water in the reservoir will, it is hoped, assist in preventing the unpleasant conditions this coming summer. Close observations are being made with a view to treatment of the waters should there be any indication of a recurrence of the trouble.

Further investigations were made in regard to the supply of water for irrigation of lands along the Murray Valley from the Hume Reservoir to Picola, some 120 miles westward, and to allow of this, provision is being made for the construction of an outlet at the Hume Reservoir, while plans are being prepared for a diversion weir near Yarrawonga, and negotiations are in hand with the State Electricity Commission of Victoria for electric power to supply lands too high to be served by gravitation.

WEIR AND LOCKS, TORRUMBARRY AND MILDURA.

Both these works were operated satisfactorily during the year, and once again proved of great benefit in connexion with the water supply to the important Irrigation Districts along the River Murray.

WORKS CONTROLLED BY OTHER AUTHORITIES.

(Under General Supervision of the Commission.)

SEWERAGE IN COUNTRY DISTRICTS.

The Bendigo Sewerage Authority has completed the reticulation of the principal portion of its sewerage district and is now proceeding with the sewerage of the outlying areas. This Authority is also making extensive alterations to its treatment works to cope with the increasing number of house connexions.

The Ballarat Sewerage Authority has completed the sewerage of the city area, and plans for the reticulation of the suburban areas are in course of preparation. Minor improvements to the Colac treatment works were carried out for the purpose of improving the efficiency of the plant.

The Horsham Sewerage Authority is temporarily deferring construction of works pending consideration of an improved water supply to the town.

The Swan Hill Sewerage Authority has received tenders for the construction of sewers, pumping station, and treatment works, and is making arrangements for financing its operations.

The Echuca Sewerage Authority is rapidly completing the construction of its works, and anticipates making an early start with the house connexions.

The Mildura Sewerage Authority has made satisfactory progress with the construction of sewers and treatment works, and will shortly be in a position to permit the connexion of house drains.

The Warrnambool Sewerage Authority was constituted during the year, and has completed the detailed survey of its district necessary for the preparation of working plans.

Applications for the constitution of Sewerage Authorities at Dandenong, Kerang, Shepparton, and Wangaratta are under consideration.

Other country centres contemplating the installation of sewerage schemes are Bairnsdale, Kyneton, and Maryborough.

COUNTRY WATER SUPPLIES.

Many important works were carried out by Waterworks Trusts and Local Governing Bodies, of which there are now 111 and 18 respectively.

The Avoca Township Waterworks Trust completed the laying of a new and larger pipe line from its main storage reservoir to provide an improved water supply to the township; and the Benalla Waterworks Trust constructed a new storage weir on the Broken River to ensure a supply during the summer months.

The Corryong Waterworks Trust improved the supply to the high level portion of the town by the construction of a new service basin, while the Hamilton Waterworks Trust completed the construction of a new storage reservoir and also enlarged a section of its main pipe line to meet the increasing demands of the town.

The Kooweerup Waterworks Trust carried out works for supplying the township with water, the principal works being a settling basin, pumping plant, elevated concrete tank, and pipe reticulation of the town.

The Kyneton Waterworks Trust is engaged in the construction of an additional storage reservoir of 30 million gallons capacity to safeguard the supply to the town in dry periods.

The Macedon Waterworks Trust is improving its supply by the provision of an additional storage reservoir on the Willimigongon Creek; the Maffra Waterworks Trust has installed a new pumping plant and rising main to provide an increased supply at lower operating costs; and the Portland Waterworks Trust commenced the installation of works of water supply and completed the construction of the rising main and elevated tank.

In connexion with the water supply to the township of Beaufort, the Ripon Shire Council, Local Governing Body, is constructing a main pipe line from Mt. Cole to supersede the old water-race, which was inadequate and costly to maintain.

The Shepparton Waterworks Trust commenced the construction of purification works to improve the quality of the water supply, the works consisting of a filtration and chlorination plant.

The Stawell Borough Council is continuing the replacement of its main pipe line, the second section of 3 miles is being completed, and it is intended to relay further sections as circumstances warrant.

The St. Arnaud Waterworks Trust renewed a further section of its main pipe line, the cost of maintaining the old main having become excessive.

The Wangaratta Waterworks Trust installed a new well and an electric pumping plant with a capacity of 60,000 gallons per hour, while the Yarrawonga Urban Waterworks Trust is engaged in remodelling its reticulation system, following on the installation of a new pumping plant.

Pipe extensions and minor works were carried out at Alexandra, Ararat, Devenish, Donald, Healesville, Horsham, Kerang, Kilmore, Korong Vale, Kyabram, Leongatha, Mooropna, Murtoa, Rushworth, Sunbury, Swan Hill, Upper Macedon, Warrnambool, and Yarra Junction.

Proposed water supply schemes for Foster, Kellor and St. Albans, Moe, Myrtleford, and Tallarook were investigated,

Proposed improvements were investigated in connexion with the following existing schemes:—Elmore, Gisborne, Inglewood, Nhill, Numurkah, Seymour, Swan Hill, Tarnagulla, Toora, and Woodend.

GENERAL.

LANDS UNDER CLOSER SETTLEMENT IN IRRIGATION DISTRICTS.

Notwithstanding that no additional lands have been purchased within the irrigable areas for subdivision and settlement under Closer Settlement conditions, which, of course, resulted in the number of applications dealt with during the year being less than the average of preceding years, still, for the number of farm allotments which from time to time became available, there was always a good demand, and no less than 75 applications from new settlers for irrigation farms were approved by the Commission. Sixty-six of the applicants took up farms under ordinary Closer Settlement terms, six under the Discharged Soldiers Settlement Act, and three were granted to Overseas Settlers.

The Commission continues, wherever it is possible and the demand exists, to assist established lessees by subdividing allotments which become vacant, and grant portions to adjoining settlers who have worked their holdings to full capacity and feel the necessity to enlarge their farms. By this means some 78 applicants for additional areas, the majority of whom are discharged soldiers, were able to obtain larger areas to operate.

In a number of cases the Commission has leased blocks pending their purchase, and in such cases the rents are fixed so as to give the Commission a satisfactory return, having regard to the capital value of the land.

The number of applications from lessees desiring to transfer their holdings has exceeded that dealt with as shown in the last report, no fewer than 113 applications to transfer having been approved. In the majority of cases the vendors have disposed of their holdings at a substantial profit, after having met their obligations to the State.

It will be seen from the statement hereunder that the Commission still holds, for future subdivision, an area of 3,980 acres. This area is at present leased in blocks to neighbouring landholders, and will from time to time be subdivided for settlement as required.

The statement also shows the total area of irrigable lands purchased and subdivided by the State and the extent of settlement in each District. The subdivided portions of the estates are supporting about seventeen times as many families as resided thereon prior to their subdivision for Closer Settlement :—

Closer Settlement Estates.	Area of Lands purchased by the State in Acres.	Properties Subdivided.					Number of Closer Settlement Blocks now occupied.	Present Increase in Number of Families.
		Area in Acres.	Number.	Number of Families thereon when Purchased.	Subdivided into—			
					Number of Closer Settlement Blocks.	Average Area in Acres.		
Shepparton	14,170	14,170	33	29	377	35	361	332
East Goulburn	13,400	13,400	21	20	162	74	156	136
Rodney	3,230	3,230	8	5	55	57	46	41
Stanhope	21,500	21,500	7	13	272	68	250	237
Kyabram	4,600	4,600	10	12	68	63	63	51
Tongala	19,090	19,090	41	36	308	60	295	259
Koyuga	4,200	4,200	Pt. 1	..	54	73	52	52
Cornelia Creek	2,500	2,500			19	161	19	19
Nanneella	9,040	9,040	18	8	124	70	119	111
Echuca	3,600	3,600	8	4	30	105	30	26
Bamawm	13,400	13,400	28	21	192	65	189	168
Dingee	500	500	3	1	20	23	15	14
Calivil	4,800	3,860	8	6	26	149	26	20
Cohuna	12,000	12,000	29	10	142	80	120	110
Koondrook	9,060	9,060	14	10	125	66	105	95
Swan Hill	12,500	12,500	34	16	325	36	322	306
Nyah	3,800	3,800	8	1	235	15	230	229
Merbein (Crown)	8,300	8,300	..	..	417	20	416	416
Red Cliffs	33,000	18,000	1	3	682	17	673	670
Bacchus Marsh	70	70	1	..	2	36	2	2
Werribee	10,000	10,000	1	11	228	36	223	212
Hallam	3,300	1,860	7	4	96	19	85	81
Maffra-Sale	10,570	8,970	23	22	175	48	173	151
Properties acquired under Sec. 20, <i>Closer Settlement Act</i> 1928, outside above Estates	216,630	197,650	304	232	4,134	43	3,970	3,738
	19,540	..	..	..	..	..	203	..
	236,170							

PROGRESS OF IRRIGATED CLOSER SETTLED DISTRICTS.

Dairying is still the main source of production in the irrigation areas and, as pointed out in previous reports, the irrigation areas are proving most suitable for this industry.

In the Standard Herd Test for pure bred cows conducted by the Department of Agriculture, the herds from the irrigation areas were again well placed, second, third, and fourth places being obtained by herds owned by irrigation settlers. In this Standard Test there were 50 herds whose average yield exceeded 400 lb. of butter fat per cow for the period of test, and of these no less than 21 were from the irrigation areas, although, on the other hand, these areas contain only one-ninth of the cows of the State. As was the case last year, a cow from the irrigation areas filled top place in the individual cow test with a yield of no less than 737 lb. of butter fat. Several other cows from the irrigation areas also exceeded 600 lb. of butter fat for the period of test, and in the junior two year old class a cow from the Rodney District established, with the remarkable yield of 534 lb. of butter fat, a State record for this class. Cows from the irrigation areas were also the highest producers in the Jersey, Milking Shorthorns, Ayrshire, and Guernsey breeds.

Following on the successes gained at the Royal Agricultural Show last year, cows from the irrigation areas again demonstrated their superiority by gaining the first four places in the *Weekly Times* butter fat production test, and also the first four places in the Payne test for the most economical production of butter fat. As the cows were of three different breeds—Milking Shorthorn, Jersey, and Guernsey—it shows that variety is not restricted in irrigation areas, and that practically any recognized breed of milch cow can produce successfully under irrigation conditions.

The District Herd Testing Associations, which admit cows of all descriptions, further illustrate the high position that dairying has attained in the irrigation areas; for instance, the Goulburn Valley Irrigation Districts show an average yield of 239·4 lb. of butter fat per cow, although 40 per cent. of the cows in the test were less than four years old; while the Gippsland group, which includes the six units in the Maffra and Sale Irrigation Districts, had, with 242 lb., a slightly higher average yield per cow. One great factor in the success of dairying in irrigation districts is the increasing practice of top dressing lucerne and pastures which, together with the economical use of water, has always been stressed by the Irrigation Field Officers of the Department of Agriculture and the Commission's Supervisors, and there is no doubt that these efforts are now bearing fruit, to the benefit of both settlers and the State.

The Department of Agriculture's scheme of supplying pure bred bulls, which are the progeny of cows of high butter fat production, at half cost to approved settlers, has continued to be availed of by the settlers in irrigation areas, and to date no less than 154 of the 523 supplied have been obtained by settlers on the irrigation areas, although only about 11 per cent. of the dairy cows in the State are on these areas.

The past year has also served to further illustrate the great advantages that irrigation has afforded the rural industries of Victoria, and it can safely be stated that the irrigation districts are being increasingly recognized as the most progressive and revenue producing in the State. Although during the last few years dairying and fruit growing have become the main industries in the districts under the administration of the Commission, many other avenues of production hitherto restricted to areas where a good natural rainfall is enjoyed, are now being exploited, one of the most noticeable being broom millet.

In the Murrabit District, which is especially suited to sorghums, broom millet is being produced in greater quantities each year, and this year it again topped the local market in price.

Tobacco, and especially tobacco seedlings, are also being profitably grown in the Rochester and Shepparton Districts, and from results obtained to date it would appear that a great expansion in production of these in the irrigation areas is possible. In addition, as showing the variety of products of the irrigation areas, it is significant that at the Royal Agricultural Show the first prizes in two such non-related products as malting barley and asparagus should have been won by entrants from the Cohuna Irrigation District.

The returns obtainable from other lines of production are also shown by the fact that last year no fewer than 1,160,000 cases of tomatoes, valued at approximately £235,000, were produced under irrigation in the Bendigo District alone. Large quantities of tomatoes are now produced at Cohuna, Koondrook, Murrabit, Merbein, Red Cliffs, and throughout the Goulburn Valley. Favoured by a good season this form of production is one of the most profitable, and returns of up to £100 per acre are by no means uncommon.

During the past season also, as a result of the lack of the usual spring rains, there was a considerable increase in the irrigation of cereals, especially wheat. As increases in yield ranging up to 20 bushels per acre were obtained with one or two irrigations, using only about 6 inches of water, the results were very satisfactory.

Although the production in the Dried Grape Districts during 1929 was considered exceptional, another large crop was harvested again this year, the total tonnage yield being 47,750 tons, as against 48,000 tons for 1929. Red Cliffs again headed the list with a yield of 17,000 tons, or an average of over 2 tons per producing acre of vines, while Merbein produced 11,000 tons, Nyah 4,360 tons, and Woorinen 2,750 tons, the remainder being from the Irymple and Mildura areas. It is pleasing to note that, as has been the case each year since the appointment of a Trade Commissioner to Canada, there was again an increase in tonnage of dried fruit exported to that country.

With a view to helping to stabilize the industry and to place it on a sounder financial footing, a conference was recently convened by the Federal Government, of the States producing dried vine fruits. After a full discussion of the position Committees were appointed to further investigate certain phases of the industry and report to a further meeting.

At Red Cliffs during the year a Horticultural Society was formed with the object of arranging for a series of lectures on viticulture and allied subjects by the staffs of the Department of Agriculture, of the Research Farm at Merbein, and of the Commission, the main object being the lessening of production costs and the improvement of quality in dried fruit.

During the year the local Advisory Boards in the dried fruit areas continued, in co-operation with the Commission, efforts to determine the most effective quantity of water to use, and as an outcome 4,000 acre feet less water were used at Red Cliffs than in the previous year.

The production of canned fruit this year was a record, the pack for the whole of the State being 21,200,000 tins, of apricots, peaches, and pears. Of this quantity no less than 71 per cent. was put up by the co-operative canneries established in the irrigation areas. This also represents 50 per cent. of the total Australian pack for the past season.

The appointment of a Trade Commissioner in Canada has also, as in the case of the dried fruit, greatly assisted the disposal of canned fruit in that Dominion, the quantity now exported being greater than any previous year. As similar appointments are now being contemplated for the East, it is anticipated that further avenues of disposal for these and other irrigation products should be successfully opened up in the near future.

Despite damage done by the severe frosts in September, 1929, to the citrus orchards in the irrigation areas of the Goulburn and Murray Valleys, large crops are being harvested this year. The experiments being at present carried out with the export of this product to Canada are creating a great deal of interest; and, if the success obtained by the preliminary shipments is maintained, there will be another market for surplus production. At Red Cliffs, experiments in re-budding to improve the yield and to obtain standardization of citrus types are being carried out by the Department of Agriculture. Special attention is also being given to producing Valencias that will not revert to the green stage, and if this is successful freshly picked fruit will be available until much later in the summer than at present.

Farm competitions were again held in the Cohuna, Tongala, Stanhope, Werribee, Rochester, and Sale Districts. The growth and the popularity of these competitions can be gauged from the fact that in 1927, when they were first instituted at Cohuna, the number of entrants was seven, whereas last year the total number of entries received from all districts was well over 100. The spirit of friendly rivalry that has been set up amongst the settlers competing is doing a tremendous

amount of good to the individual and settlements generally. As in the past, the judges comprised officers from the Department of Agriculture and the Commission who gave much valuable information to the entrants. The publicity that has been given to these competitions by both the country and metropolitan press is of immense value in illustrating to other farmers and the public generally the value of irrigation to the State as a whole.

These competitions have also served to show the large part that mixed pastures of rye grass, cocksfoot, and clovers are now playing in irrigation development. Not many years ago the only pastures grown in irrigation areas were of native grasses, but following the excellent results obtained at the Werribee Research Station and on the various demonstration plots with mixed pastures of introduced grasses and clover, the Commission has made special efforts to extend pasture sowing, and increasing areas have been laid down each year, with the result that these pastures are now, in some districts, rivalling lucerne as the main crop. Thus, in the Werribee District, out of 8,319 acres irrigated last season, 2,640 acres, almost one-third, comprised mixed pastures.

The Irrigation and Research Committee, comprised of representatives of the Department of Agriculture and the Commission, continued the manurial and other experiments in irrigated culture at Cohuna, Stanhope, Rochester, Tongala, and Murrabit. These experiments are proving of great value to the settlers in the various irrigation districts in determining the best treatment for the various crops and types of soil. The results obtained prove conclusively that the application of manure in quantities of from 1 to 4 cwt. per acre is most profitable, as the increased yield obtained is of much more value than the cost incurred. New plots are to be established in the Tragowel Plains District, while the special work on the Tresco Irrigation Settlement has been continued, the improvement mentioned in previous reports being maintained.

Organized tours through some of the other irrigation areas arranged by Commission's officers were made by settlers from the Tragowel Plains, Calivil, and Boort Districts during the year. The Districts visited were Cohuna, Rochester, Stanhope, and Tongala, where the visitors were conducted around the settlements by the various officers in charge, and the experience gained will be of the utmost value. A direct result has been that in the Tragowel Plains and Boort Districts considerable areas of permanent pasture and lucerne have recently been sown and excellent strikes obtained. In addition, the practice of topdressing has also become more widely adopted.

The system of Joint Committees comprising representatives of the settlers and the Commission, which was initiated on the overseas settlements at Tongala and Shepparton for the purpose of discussing various matters appertaining to the Overseas Settlers generally or individually, has been applied to the settlements at Narre Warren and Katandra, with similar good results. The Soldier Settlers in the Shepparton, Stanhope, and Tongala Districts, following the practice in vogue at Red Cliffs for some time, have appointed local Committees to act in conjunction with the Inquiry Boards that are appointed from time to time by the Commission to deal with individual Soldier Settlers cases.

As an example of the steady progress made in Irrigation Closer Settlement Districts, Stanhope, which was constituted in 1918, might be referred to. The Closer Settlement area comprises 21,500 acres out of the District total of 26,000, and in 1918, 1,904 acres were under cultivation, namely—cereals 124 acres, lucerne 1,405 acres, fodder 94 acres, pastures 41 acres, orchards 212 acres, fallows 15 acres, and miscellaneous 13 acres. In 1930, the acreage under cultivation is 14,481, viz.:—cereals 1,739 acres, lucerne 10,907 acres, fodders 652 acres, pastures 730 acres, orchards 308 acres, fallows 139 acres, and miscellaneous 6 acres. The population of the District now comprises 1,058 persons, who are members of some 264 families, an increase of 251 over the 13 families in the District prior to its settlement under irrigation. Dairying and sheep fattening are the main sources of revenue, while good returns are obtained from the small areas of soft and citrus fruits. The quantities of the various commodities despatched by rail during last season from the District included butter 380,800 lb., cheese 511,812 lb., cream 400,000 lb., fat sheep and lambs 75,000, fat cattle 944, pigs 1,200, wool 1,005 bales, hay and chaff 570 tons, wheat 17,032 bags, and fruit 16,400 cases. Of the 3,700 head of cattle carried in the District 2,700 are dairy cows, and amongst them are to be found some of the most productive animals in the State. One herd of eighteen cows obtained third place in the Standard Herd Test, with an average production of 551 lb. of butter fat per cow.

These figures, which are typical of all Irrigation Districts, show in no uncertain manner the benefits of Closer Settlement to the State in increasing production and consequent revenue.

ADMINISTRATION.

EXTENSIONS AND EXCISIONS.

As a result of extensions of channels in the Goulburn Irrigation System, Irrigation Districts were correspondingly enlarged.

The North Shepparton District was extended by adding 9,130 acres in the parishes of Congupna and Tallygaroopna, formerly within the Waterworks District of the Shire of Shepparton Waterworks Trust.

Rochester Irrigation District was extended by the addition of an area of 2,220 acres in the parishes of Turrumberry, Turrumberry North, and Wharparilla not previously within any constituted District.

Dingee Irrigation District has been extended by adding 2,500 acres, Tragowel Plains District by adding 2,250 acres, and Boort District by adding 360 acres, all of which areas were excised from the Waterworks District of the Loddon United Waterworks Trust.

The Calivil Irrigation District was extended by the inclusion of 15,470 acres, of which 15,150 acres were excised from the Loddon United District and 320 acres from Tragowel Plains District.

Cohuna Irrigation District, which draws its supply from the River Murray, was extended by adding an area of 1,881 acres in the parishes of Gannawarra and Gunbower.

Minor extensions were also made to the Gannawarra, Mystic Park, and Maffra Irrigation Districts, and to the Nyah and Merbein Irrigation Areas, while minor excisions were made from Shepparton, Rodney, Campaspe, Tresco, Red Cliffs, and Werribee Irrigation Districts.

In the Wimmera-Mallee System, the Baring Waterworks District was extended by the inclusion of 1,100 acres of lands in the parish of Ginap, not previously within a constituted District, and the Dering Waterworks District by adding 870 acres excised from the Karkaroo District.

The Western Wimmera Waterworks District was reduced in extent by the excision of an area of 387 square miles, comprising forest country and lands of inferior quality.

The extent of the Avoca Water Trust District has been increased by the addition of 1,100 acres excised from Long Lake Waterworks District.

The Mornington Peninsula Waterworks District was extended so as to embrace the townships of Bunyip, Crib Point, and Garfield, which will be duly proclaimed Urban Districts.

Minor extensions were made to Carwarp and Millewa Central Waterworks Districts, and minor excisions from the Wimmera United, Upper Wimmera United, and Western Wimmera Waterworks Districts, of lands subsequently added to the Waterworks District of the Warracknabeal Waterworks Trust.

The Werribee Urban District and adjacent lands comprising in all 720 acres have been excised from the Werribee Waterworks District and created a Water Supply District under the Local Governing provisions of the Water Act, and transferred, together with the Urban reticulation works, to the Werribee Shire Council, which has been constituted a Local Governing Body for this area, and has taken over from the Commission a share of the loan liability of the Werribee Waterworks District.

NEW AND PROPOSED DISTRICTS.

Reticulation works having been completed for the supply of the township of Murrabit, in Koondrook Irrigation District, that township has been proclaimed an Urban Division. Similarly, the townships of Antwerp in Western Wimmera Waterworks District and Hicksborough in Wonthaggi Waterworks District have been proclaimed Urban Districts.

The township of Heyfield, adjoining the Maffra Irrigation District, having been reticulated, has now been included within that District, and will be proclaimed an Urban Division. Likewise the townships of Bunyip, Crib Point, and Garfield added to Mornington Peninsula Waterworks District, as stated above, have been reticulated and will be proclaimed Urban Districts.

STAFF.

Mr. S. P. Bromfield, District Engineer, Red Cliffs, was appointed to fill, in addition, a similar position at Merbein.

Mr. J. A. Aird, Chief Superintendent of Closer Settlement, was appointed as one of the Government Representatives on the Faculty of Agriculture at the University of Melbourne in place of Mr. G. Laing, resigned.

Mr. J. W. McKenzie, Closer Settlement Supervisor at Tongala, was transferred to fill a similar office at Murrabit *vice* Mr. A. C. Stewart resigned, Mr. J. F. Doolan being in turn transferred from the position of Overseer to fill the vacancy for a Supervisor at Tongala.

Mr. A. D. Brown, formerly Secretary, Victorian Dried Fruits Board, was appointed to fill the position of Closer Settlement Products Officer rendered vacant by the retirement of Mr. D. A. Dowrick.

Mr. G. Berry, Engineer, who had been a member of the Commission's staff since its inception, and who had previously been associated with the Water Supply Department, retired on 30th June.

Other officers to retire during the year were Messrs. G. C. Mehrens, C. Fraser, and W. H. Huntington.

FIRE INSURANCE.

The Commission has continued its policy of carrying the fire risk on its own buildings. The premiums thus saved now amount to £8,227.

RECEIPTS, DISBURSEMENTS, AND ESTIMATES.

The total collections amounted to £531,393, which is some £8,272 less than the receipts of the previous year which, however, constituted a record return. This shortage arises mainly from the failure of crops chiefly in the North-west Mallee and the lower prices obtained generally for primary products. In ordinary circumstances it is estimated the collections would have exceeded those of the previous year by at least £70,000. The unpaid amounts have, of course, been carried forward for collection as conditions become normal. In this connexion it is pointed out that in the wheat areas, especially the very large areas of Crown lands in the North-west Mallee, where the Government has been paying large sums of money as sustenance allowances, a highly successful season seems now fully assured, and the Commission expects an increase of no less than £100,000 therefrom in the collections for the incoming financial year.

The expenditure under the annual vote amounted to £265,977. The amount represents an increase of only £959 on the expenditure for the previous financial year, notwithstanding the abnormal dryness and the great expenditure necessary in removing drift sand from the extensive channel system throughout the Mallee districts. The Loan expenditure amounted to £1,141,553, and was apportioned over districts embracing all parts of the State. Complete particulars are set out in another portion of this Report.

The receipts from the Irrigation Districts amounted to £292,054, an increase of £29,690 over those for the previous year. After debiting the Districts with working expenses and interest chargeable the deficit for the year was £13,451, but this only provides for interest at the rate of 4 per cent. per annum. As the State is now paying a considerably higher rate than this on its loan expenditure, it will be necessary to revise the irrigation charges in order to recoup the State for the amount which it is obliged to meet in interest payments on loan moneys raised for Water Supply purposes. It is to be added that there are several new and important districts in course of development which should gradually lead to a substantial increase of the revenue derived from this division. Full particulars are set out elsewhere in this Report as to the financial position of each district.

In the Coliban District the collections amounted to £47,870, which is an increase of £3,318 over those for the previous year. The additional revenue was received mainly from sales of water for irrigation. The deficit for the District for the past year amounted to £30,548, and as previously pointed out the rating in these districts is specially limited by the Water Act, and any substantial improvement in the revenue can only be achieved by a general development throughout the whole district.

The Waterworks Districts under the direct control of the Commission, excluding the Coliban District, now number 101, which includes 71 township supplies. The total receipts from all districts amounted to £154,880, and after debiting working expenses and interest chargeable the deficit for the year was £35,168, as against a loss of £7,778 for the previous year. The increased deficiency is attributable to the crop failure in the Northern and North-west Mallee. With very large areas of Crown lands in process of settlement, the harvest was a complete failure, and the Government found it necessary to grant sustenance allowances to very many settlers in these districts. For the incoming year, as stated above, it is estimated that there will be an increase of £100,000 in the collections from these districts.

In the five Flood Protection Districts administered and controlled by the Commission in accordance with the requirements of the Water Act the receipts were £7,042. After debiting working expenses and interest charged on the capital allocated the deficiency for the year amounted to £1,033. Owing to the general financial stringency the collection of the Flood Protection Charges was found to be more difficult than in previous years, and it has been necessary to carry forward many of the accounts for the present.

The disbursements for the next financial year are estimated at £252,100, as against an estimate of £267,500 for 1929-30. On the other hand the receipts are estimated at £668,000, which is no less than £136,607 in advance of the cash received in 1929-30.

The Loan Liability of the State for Works for Water Supply at the close of the year was £23,382,970. Of this total, £1,254,128 is for Free Headworks; £1,263,228 was Written Off; £147,046 was advanced to some early-formed Local Authorities; £46,776 has not been expended; £2,135,083 is represented by River Murray Works; and £5,984,976 by Uncompleted or Unallotted 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 £12,551,733 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 £1,073,427. Of this amount, £124,459 is not chargeable to any districts, being debitable against Free Headworks, Amounts Written Off, and Unexpended Balances, and £97,994 is debitable against River Murray Works, while £274,756 is not at present debitable, being interest on cost of Uncompleted or Unallotted Works which are not yet revenue producing, leaving £576,218 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 £42,733 for non-revenue producing works and services not chargeable to any districts) was £337,046, as set out in the statement on page 40.

FINANCIAL POSITION.

The Statement of Loan Liability on page 40 of this Report sets out the present aggregate financial position in connexion with 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 which cannot be charged to water users, 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 ..	736,381	
To which certain Amounts are debited for Pensions by Treasury ..	6,284	
Making a total (including £100,000—North-west Mallee Arrears) of		742,665
Included in this is Interest on—		
CAPITAL WRITTEN OFF 31 years ago (£1,263,228)		
FREE HEADWORKS declared 25 years ago (£1,401,174)		
RIVER MURRAY AGREEMENT WORKS (£2,135,083)		
Totalling	220,302	
LOSS ON COLIBAN District where Rate is limited by Water Act in lieu of general Writing Off	30,548	
GENERAL SERVICES rendered by Water Commission chargeable to whole State (see page 33 of Report)	42,733	
INTEREST ON LOAN MONEYS in hand at Treasury	2,151	
		295,734
Deducting the above there remains to be accounted for a further sum of		446,931
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—Eildon and Waranga Reservoirs; Maffra and Sale Irrigation Districts; new Goulburn Districts; Kooweerup and Cardinia Flood Protection Districts; and Bellarine, Millewa, and other Domestic and Stock Schemes. The Interest on these would amount to		274,756
Leaving still to be accounted for a sum of		172,175
The Interest chargeable to Districts controlled by the Commission is fixed by the Water Act at 4 per cent., which until recently was sufficient. The percentage now charged by the Treasury is £4 14s. 6d., and this represents approximately a sum of		91,000
Leaving after excluding Interest on Free Headworks, Amounts Written Off, River Murray Works, and other Items mentioned		81,175

As shown in the above statement, considerable sums are still debited to Country Water Supply for Capital Written Off by the Legislature some 31 years ago and for headworks declared by Parliament to be "Free Headworks" some 25 years ago. No interest can be charged to water users in respect to such expenditure. The cost of the River Murray Works, which is being borne equally by the States of New South Wales, South Australia, Victoria, and the Commonwealth, in pursuance of the agreement ratified by each of the Parliaments, is also debited to Country Water Supply. This expenditure is not chargeable to any district. The Uncompleted and Unallotted Works include a number of large schemes in various parts of the State which are still in course of construction or from which the capital cannot be allotted pending the development of these districts. To several of these works, notably at Millewa, there should be an allotment of a considerable amount of capital for the incoming financial year, while the satisfactory development of irrigated culture in the Maffra-Sale Districts should also lead to a substantial transfer of capital to those areas. In the Bellarine District the works should be sufficiently advanced within the year 1930-31 to enable an early return to be obtained from rates and charges. There are also several large and important irrigation works in course of development in connexion with the Goulburn System, and these districts are rapidly advancing and will be debited with capital in accordance with the benefits which the works confer. Much of this work is approaching completion, the further financial commitment being set out in a loan statement recently furnished to Parliament.

The Commission again directs attention to the increase in the average rate of interest paid by the Treasury and debited to Country Water Supply. The rate is now £4 14s. 6d. per centum, or 14s. 6d. higher than that which can be charged under the provisions of the present Water Act. The rate of interest earned on the gross capital, including Free Headworks, Amounts Written Off, and Uncompleted and Unallotted Works debits, was £1 9s. 1d. per centum.

The receipts from the Commission's works for last year amounted to £531,393. The collections were lower than the estimate because of the partial failure of the wheat harvest, financial stringency, and the low prices ruling for primary products, the amount collected representing the equivalent of 80 per centum of the current rates and charges. For the incoming year the estimated collections of the Commission are £668,000, an increase of no less than £136,607 over the actual receipts for 1929-30.

	DISBURSEMENTS, exclusive of Interest, Redemption, and Depreciation Charges.	Excess.
Interest on bonds and notes	\$ 10,768.90	
Interest on mortgages	1,000.00	
Interest on other loans	1,000.00	
Interest on bank deposits	1,000.00	
Interest on cash	1,000.00	
Interest on other investments	1,000.00	
Interest on other securities	1,000.00	
Interest on other assets	1,000.00	
Interest on other liabilities	1,000.00	
Interest on other obligations	1,000.00	
Interest on other contracts	1,000.00	
Interest on other agreements	1,000.00	
Interest on other arrangements	1,000.00	
Interest on other understandings	1,000.00	
Interest on other relations	1,000.00	
Interest on other connections	1,000.00	
Interest on other associations	1,000.00	
Interest on other societies	1,000.00	
Interest on other organizations	1,000.00	
Interest on other institutions	1,000.00	
Interest on other establishments	1,000.00	
Interest on other enterprises	1,000.00	
Interest on other undertakings	1,000.00	
Interest on other projects	1,000.00	
Interest on other schemes	1,000.00	
Interest on other plans	1,000.00	
Interest on other proposals	1,000.00	
Interest on other suggestions	1,000.00	
Interest on other recommendations	1,000.00	
Interest on other advice	1,000.00	
Interest on other counsel	1,000.00	
Interest on other assistance	1,000.00	
Interest on other aid	1,000.00	
Interest on other support	1,000.00	
Interest on other help	1,000.00	
Interest on other service	1,000.00	
Interest on other labor	1,000.00	
Interest on other work	1,000.00	
Interest on other business	1,000.00	
Interest on other industry	1,000.00	
Interest on other occupation	1,000.00	
Interest on other profession	1,000.00	
Interest on other vocation	1,000.00	
Interest on other calling	1,000.00	
Interest on other employment	1,000.00	
Interest on other engagement	1,000.00	
Interest on other association	1,000.00	
Interest on other connection	1,000.00	
Interest on other relation	1,000.00	
Interest on other acquaintance	1,000.00	
Interest on other familiarity	1,000.00	
Interest on other intimacy	1,000.00	
Interest on other friendship	1,000.00	
Interest on other love	1,000.00	
Interest on other affection	1,000.00	
Interest on other attachment	1,000.00	
Interest on other devotion	1,000.00	
Interest on other loyalty	1,000.00	
Interest on other allegiance	1,000.00	
Interest on other fealty	1,000.00	
Interest on other fidelity	1,000.00	
Interest on other faithfulness	1,000.00	
Interest on other honesty	1,000.00	
Interest on other integrity	1,000.00	
Interest on other uprightness	1,000.00	
Interest on other rectitude	1,000.00	
Interest on other righteousness	1,000.00	
Interest on other justice	1,000.00	
Interest on other equity	1,000.00	
Interest on other fairness	1,000.00	
Interest on other reasonableness	1,000.00	
Interest on other moderation	1,000.00	
Interest on other temperance	1,000.00	
Interest on other sobriety	1,000.00	
Interest on other chastity	1,000.00	
Interest on other purity	1,000.00	
Interest on other cleanliness	1,000.00	
Interest on other decency	1,000.00	
Interest on other modesty	1,000.00	
Interest on other propriety	1,000.00	
Interest on other decorum	1,000.00	
Interest on other civility	1,000.00	
Interest on other politeness	1,000.00	
Interest on other good breeding	1,000.00	
Interest on other refinement	1,000.00	
Interest on other elegance	1,000.00	
Interest on other grace	1,000.00	
Interest on other beauty	1,000.00	
Interest on other loveliness	1,000.00	
Interest on other attractiveness	1,000.00	
Interest on other charm	1,000.00	
Interest on other allure	1,000.00	
Interest on other fascinate	1,000.00	
Interest on other captivate	1,000.00	
Interest on other enchant	1,000.00	
Interest on other bewitch	1,000.00	
Interest on other mesmerize	1,000.00	
Interest on other hypnotize	1,000.00	
Interest on other mesmerism	1,000.00	
Interest on other hypnosis	1,000.00	
Interest on other magnetism	1,000.00	
Interest on other electricity	1,000.00	
Interest on other magnet	1,000.00	
Interest on other electric	1,000.00	
Interest on other galvanic	1,000.00	
Interest on other voltaic	1,000.00	
Interest on other pyroelectric	1,000.00	
Interest on other thermoelectric	1,000.00	
Interest on other piezoelectric	1,000.00	
Interest on other photoelectric	1,000.00	
Interest on other electrostatic	1,000.00	
Interest on other electrodynamic	1,000.00	
Interest on other electromagnetic	1,000.00	
Interest on other electrochemical	1,000.00	
Interest on other electrophoretic	1,000.00	
Interest on other electrolytic	1,000.00	
Interest on other electrocapillary	1,000.00	
Interest on other electroosmotic	1,000.00	
Interest on other electrokinetic	1,000.00	
Interest on other electroacoustic	1,000.00	
Interest on other electrothermal	1,000.00	
Interest on other electrocaloric	1,000.00	
Interest on other electrochromatic	1,000.00	
Interest on other electrooptical	1,000.00	
Interest		

Amount available to meet Depreciation	...	...	...	...	£500
Amount available to meet Interest, as per page 40 of Report	..	..	..	..	£264,916

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1930 ;
and of Interest charged at the rate of 4 per cent. on Capital Debits.

Totals	1,592,465	47,870	15,327	63,091	78,418	157	30,705
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STATEMENT of Moneys received and disbursed from 1st July, 1920, to 30th June, 1930; and of Interest charged at the rate of 4 per cent. on Capital Debits; and also of Depreciation and Redemption charged as at 30th June, 1930.

District.	1st July, 1920, to 30th June, 1929.	1929-30.			Grand Total at 30th June, 1930.
		Charge.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£
1. Cardinia	12,627	1,691	18	1,709	14,336
2. Echuca	1,216	78	1	79	1,295
3. Kanyapella	1,205	204	2	206	1,411
4. Loch Garry	3,711	911	7	918	4,629
5. Lower Kooweerup ..	28,899	3,411	719	4,130	33,029
Totals	47,658	6,295	747	7,042	54,700

District.	DISBURSEMENTS.					INTEREST CHARGED.			(A) DEPRE- CIATION. (B) RE- DEMP- TION.	Grand Total at 30th June, 1930.
	1st July, 1920, to 30th June, 1929.	1929-30.			Total at 30th June, 1930.	1st July, 1920, to 30th June, 1929.	1st July, 1929, to 30th June, 1930.	Total at 30th June, 1930.		
		Repairs and Main- tenance.	Manage- ment.	Total.						
	£	£	£	£	£	£	£	£	£	£
1. Cardinia	3,251	420	190	610	3,861	11,128	1,800	12,928	..	16,789
2. Echuca	767	12	20	32	799	385	47	432	..	1,231
3. Kanyapella	339	35	65	100	439	541	139	680	..	1,119
4. Loch Garry	468	41	62	103	571	1,928	490	2,418	(B) 800	3,789
5. Lower Kooweerup	5,992	515	239	754	6,746	24,968	4,000	28,968	..	35,714
Totals	10,817	1,023	576	1,599	12,416	38,950	6,476	45,426	(B) 800	58,642

IRRIGATION AND WATER SUPPLY DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1930; 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, 1930. (Free Headworks excluded.)

RECEIPTS.

District.	1st May, 1906, to 30th June, 1929.	1929-30.					Grand Total at 30th June, 1930.
		Rates.	Compulsory Irrigation Charge.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£	£
1. Bacchus Marsh	83,462	732	3,720	540	1,015	6,007	89,469
2. Boort	59,696	1,789	..	5,738	21	7,548	67,244
3. Calivil .. ..	..	558	..	3,761	28	4,347	4,347
4. Campaspe	17,082	845	..	109	7	961	18,043
5. Cohuna	173,952	2,134	5,808	2,078	53	10,073	184,025
6. Deakin	98,212	3,431	..	1,176	64	4,671	102,883
7. Dingee	26,365	163	1,306	684	59	2,212	28,577
8. Echuca North	13,084	271	1,774	82	48	2,175	15,259
9. Fish Point	2,115	77	641	328	11	1,057	3,172
10. Gannawarra	140,709	1,834	5,502	2,026	70	9,432	150,141
11. Katandra .. ..	..	314	..	1,169	1,001	2,484	2,484
12. Kerang	114,341	2,189	..	6,486	14	8,689	123,030
13. Koondrook	115,394	1,430	3,885	1,657	1,579	8,551	123,945
14. Leitchville	6,232	601	1,099	953	11	2,664	8,896
15. Maffra-Sale	6,362	2,213	4,960	1,526	175	8,874	15,236
16. Merbein	281,280	1,121	19,759	955	969	22,804	304,084
17. Mystic Park	7,814	200	534	258	3	995	8,809
18. North Shepparton .. ..	..	1,712	..	3,112	755	5,579	5,579
19. Nyah	84,443	240	6,131	379	1,308	8,058	92,501
20. Red Cliffs	131,782	1,141	39,354	5,803	2,240	48,538	180,320
21. Rochester	218,483	3,275	15,520	4,861	416	24,072	242,555
22. Rodney	473,196	6,880	17,405	6,092	1,717	32,094	505,290
23. Shepparton	106,723	1,823	5,702	201	1,870	9,596	116,319
24. South Shepparton	7,278	794	2,009	424	30	3,257	10,535
25. Stanhope	43,985	851	5,229	682	352	7,114	51,099
26. Swan Hill	120,125	992	5,248	3,719	224	10,183	130,308
27. Third Lake	3,852	173	653	217	7	1,050	4,902
28. Tongala	99,277	1,471	7,308	1,074	915	10,768	110,045
29. Tragowel Plains	216,959	1,959	9,791	4,949	863	17,562	234,521
30. Tresco	19,942	..	1,089	10	6	1,105	21,047
31. Werribee	64,288	956	5,008	2,818	752	9,534	73,822
Totals	2,736,433	42,169	169,435	63,867	16,583	292,054	3,028,487

DISBURSEMENTS, AND INTEREST, DEPRECIATION, AND REDEMPTION CHARGED.

District.	DISBURSEMENTS.						INTEREST CHARGED.			(A) DEPRECIATION. (B) REDEMPTION.	Grand Total at 30th June, 1930.
	1st May, 1906, to 30th June, 1929.	1929-30.				Total at 30th June, 1930.	1st May, 1906, to 30th June, 1929.	1st July, 1929, to 30th June, 1930.	Total at 30th June, 1930.		
		Repairs and Maintenance.	Distribution of Water.	Manage- ment.	Total.						
	£	£	£	£	£	£	£	£	£	£	£
1. Bacchus Marsh	19,912	29	1,028	234	1,291	21,203	69,896	5,468	75,364	..	96,567
2. Boort ..	31,187	624	1,519	335	2,478	33,665	24,158	3,430	27,588	(B) 1,400	62,653
3. Calivil ..	..	260	1,174	158	1,592	1,592	..	3,750	3,750	..	5,342
4. Campaspe ..	10,238	51	275	64	390	10,628	9,643	464	10,107	..	20,735
5. Cohuna ..	109,030	1,316	1,276	330	2,922	111,952	68,518	5,665	74,183	(A) 9,010	195,145
6. Deakin ..	38,597	375	913	173	1,461	40,058	62,496	3,197	65,693	..	105,751
7. Dingee ..	13,503	156	796	68	1,020	14,523	17,087	1,212	18,299	..	32,822
8. Echuca North	5,468	134	586	120	840	6,308	7,756	1,603	9,359	..	15,667
9. Fish Point ..	1,124	589	240	55	884	2,008	1,464	608	2,072	..	4,080
10. Gannawarra ..	80,899	1,178	1,140	290	2,608	83,507	59,053	5,479	64,532	(A) 5,694	153,733
11. Katandra ..	..	189	293	79	561	561	..	3,844	3,844	..	4,405
12. Kerang ..	62,768	1,099	1,678	584	3,361	66,129	46,147	3,873	50,020	(A) 450 (B) 2,700	119,299
13. Koondrook ..	71,131	1,013	1,532	257	2,802	73,933	73,133	6,840	79,973	(A) 4,501	158,407
14. Leitchville ..	2,418	436	440	126	1,002	3,420	3,807	1,485	5,292	..	8,712
15. Maffra-Sale ..	2,195	371	1,256	601	2,228	4,423	4,280	6,480	10,760	..	15,183
16. Merbein ..	229,840	964	14,275	309	15,548	245,388	89,465	7,955	97,420	(A) 9,928	352,736
17. Mystic Park ..	5,779	453	145	107	705	6,484	3,231	632	3,863	..	10,347
18. Nth. Shepparton	..	497	299	127	923	923	..	6,239	6,239	..	7,162
19. Nyah ..	71,967	1,212	4,479	504	6,195	78,162	39,970	4,207	44,177	(A) 3,802	126,141
20. Red Cliffs ..	81,389	1,632	25,868	779	28,279	109,668	52,808	18,600	71,408	..	181,076
21. Rochester ..	97,411	1,761	4,432	716	6,909	104,320	152,000	14,611	166,611	..	270,931
22. Rodney ..	196,120	4,171	7,926	1,109	13,206	209,326	302,479	23,714	326,193	..	535,519
23. Shepparton ..	40,915	811	524	414	1,749	42,664	88,527	8,956	97,483	..	140,147
24. Sth. Shepparton	2,010	157	271	126	554	2,564	4,596	2,629	7,225	..	9,789
25. Stanhope ..	20,923	478	1,490	146	2,114	23,037	28,216	4,673	32,889	..	55,926
26. Swan Hill ..	70,484	633	1,725	543	2,901	73,385	52,063	6,215	58,278	(A) 4,768	136,431
27. Third Lake ..	810	86	233	55	374	1,184	3,691	995	4,686	..	5,870
28. Tongala ..	44,558	1,558	1,825	347	3,730	48,288	88,128	7,632	95,760	..	144,048
29. Tragowel Plains	87,395	1,595	3,259	482	5,336	92,731	135,628	13,697	149,325	..	242,056
30. Tresco ..	22,168	759	2,971	129	3,859	26,027	19,751	3,631	23,382	..	49,409
31. Werribee ..	13,091	525	599	281	1,405	14,496	50,739	8,494	59,233	..	73,729
Totals ..	1,433,330	25,112	84,467	9,648	119,227	1,552,557	1,558,730	186,278	1,745,008	42,253	3,339,818

WATERWORKS DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1930; 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, 1930. (Free Head-works excluded.)

RECEIPTS.

District.	1st May, 1906, to 30th June, 1929.	1929-30.				Grand Total at 30th June, 1930.
		Rates.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£
1. Birchip	408,593	3,274	78	11	3,363	430,653
2. Sea Lake		6,074	173	62	6,309	
3. Tyrrell		5,448	..	296	5,744	
4. Wycheproof		6,521	94	29	6,644	
5. Carwarp	9,090	296	..	30	326	9,416
6. Carwarp Central	680	..	..	5	5	685
7. Dering	1,688	322	..	3	325	2,013
8. Eureka	949	70	..	23	93	1,042
9. Hindmarsh .. .. .	..	1,324	..	..	1,324	1,324
10. Karkarooc	164,824	11,325	..	55	11,380	176,204
11. Kerang North-West Lakes	2,670	159	..	1	160	2,830
12. Kia .. .. .	..	219	..	7	226	226
13. Long Lake	142,074	5,604	..	55	5,659	147,733
14. Mornington Peninsula	33,849	3,000	..	78	3,078	36,927
15. Narre Warren	997	52	270	2	324	1,321
16. Tyntynder	80,790	3,342	..	109	3,451	84,241
17. Upper Western Wimmera	61,407	4,287	..	2	4,289	65,696
18. Upper Wimmera United	102,233	6,749	28	19	6,796	109,029
19. Walpeup West	22,962	1,279	120	65	1,464	24,426
20. Werribee	6,845	672	10	4	686	7,531
21. Western Wimmera	216,945	12,913	1,344	64	14,321	231,266
22. Wimmera United	239,044	15,706	1,281	162	17,149	256,193
23. Yelta	3,660	109	164	9	282	3,942
Totals	1,499,300	88,745	3,562	1,091	93,398	1,592,698

DISBURSEMENTS, AND INTEREST, DEPRECIATION, AND REDEMPTION CHARGED.

District.	DISBURSEMENTS.						INTEREST CHARGED.				(A) DEPRECIATION.	(B) REDEMPTION.	Grand Total at 30th June, 1930.
	1st May 1906, to 30th June, 1929.	1929-30.				Total at 30th June, 1930.	1st May, 1906, to 30th June, 1929.	1st July 1929, to 30th June, 1930.	Total at 30th June, 1930.				
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.								
	£	£	£	£	£	£	£	£	£	£	£	£	
1. Birchip ..	196,126	9,833	3,429	1,375	14,637	210,763	236,601	24,877	261,478	..	..	472,241
2. Sea Lake ..													
3. Tyrrell ..													
4. Wycheproof ..													
5. Carwarp ..	15,374	76	669	31	776	16,150	8,561	1,520	10,081	A	586	26,817	
6. Carwarp Central ..	651	..	38	16	54	705	450	94	544	..	..	1,249
7. Dering ..	902	270	106	42	418	1,320	1,414	445	1,859	..	..	3,179
8. Eureka ..	1,275	331	400	37	768	2,043	565	160	725	..	..	2,768
9. Hindmarsh ..	..	239	235	190	664	664	..	771	771	..	..	1,435
10. Karkarooc ..	63,043	1,381	773	315	2,469	65,512	104,875	9,949	114,824	..	..	180,336
11. Kerang N.W. Lakes ..	1,578	6	77	28	111	1,689	1,243	78	1,321	..	..	3,010
12. Kia.. ..	..	16	41	34	91	91	..	199	199	..	..	290
13. Long Lake ..	88,443	783	885	401	2,069	90,512	56,890	5,574	62,464	A	8,305	161,281	
14. Mornington Peninsula..	5,304	101	124	83	308	5,612	29,110	2,700	31,810	..	..	37,422
15. Narre Warren ..	99	7	7	84	98	197	719	412	1,131	..	..	1,328
16. Tyntynder ..	51,657	983	767	258	2,008	53,665	55,026	6,847	61,873	..	..	115,538
17. Upper Western Wimmera	25,790	444	461	97	1,002	26,792	29,779	2,632	32,411	{ A 606 B 1,500 }	61,309
18. Upper Wimmera United	32,924	1,532	1,214	173	2,919	35,843	62,202	5,422	67,624	B 2,390	105,857
19. Walpeup West ..	17,010	1,354	..	148	1,502	18,512	9,437	1,482	10,919	A 1,200	30,631
20. Werribee ..	2,043	4	161	52	217	2,260	5,975	598	6,573	8,833
21. Western Wimmera ..	102,476	2,763	2,302	386	5,451	107,927	100,866	7,855	108,721	{ A 2,422 B 5,400 }	224,470
22. Wimmera United ..	82,090	3,573	2,831	407	6,811	88,901	139,186	12,145	151,331	B 5,310	245,542
23. Yelta ..	2,538	263	210	40	513	3,051	1,820	231	2,051	5,102
Totals ..	689,323	23,959	14,730	4,197	42,886	732,209	844,719	83,991	928,710	27,719	1,688,638

DISTRICTS HELD IN TRUST BY THE COMMISSION.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 31ST DECEMBER, 1929.

RECEIPTS.

Name of Trust.	Bank Balance, at 31st December, 1928.	1929.				Grand Total for Year 1929.
		Rates.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£
Avoca	Cr. 77	609	21	13	643	720
Avoca (Quambatook, Urban)	Cr. 151	557	25	27	609	760
Carrum	Dr. 450	2,012	..	354	2,366	1,916
Loddon United	Dr. 526	2,217	10	229	2,456	1,930
Loddon United (Mitiamq, Urban)	Cr. 7	158	200	48	406	413
Totals	{ Cr. 235 Dr. 976 }	5,553	256	671	6,480	5,739

DISBURSEMENTS.

Name of Trust.	1929.						Grand Total for Year 1929.	Bank Balance carried forward, 1st January, 1930.
	Repairs and Maintenance.	Water Distribution.	Management.	Total.	Interest.	(A) Depreciation. (B) Redemption.		
	£	£	£	£	£	£	£	£
Avoca	334	..	174	508	81	B 97	686	Cr. 34
Avoca (Quambatook, Urban)	189	147	60	396	163	{ A 60 B 36 }	655	Cr. 105
Carrum	834	..	170	1,004	1,156	B 240	2,400	Dr. 484
Loddon United	482	1,032	224	1,738	647	B 305	2,690	Dr. 760
Loddon United (Mitiamq, Urban)	206	..	16	222	206	{ A 28 B 18 }	474	Dr. 61
Totals	2,045	1,179	644	3,868	2,253	{ A 88 B 696 }	6,905	Cr. 139 Dr. 1,305

URBAN DISTRICTS

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, of Depreciation and Redemption charged, as at 30th June, 1930. (Free Headworks)

RECEIPTS.

District or Division.	1st May, 1906, to 30th June, 1929.	1929-30.				Grand Total at 30th June, 1930.
		Rates.	Water Sales.	Interest and Miscel- laneous.	Total.	
	£	£	£	£	£	£
1. Antwerp .. .. .	..	32	..	..	32	32
2. Bacchus Marsh	25,189	1,343	438	6	1,787	26,976
3. Berriwillock	2,796	256	3	17	276	3,072
4. Berwick	2,526	522	126	23	671	3,197
5. Beulah	8,160	518	87	32	637	8,797
6. Birchip	17,978	607	368	76	1,051	19,029
7. Bittern	690	100	48	3	151	841
8. Brim	1,336	295	5	14	314	1,650
9. Carrum	38,741	6,346	757	204	7,307	46,048
10. Carwarp	70	37	..	1	38	108
11. Chillingollah	475	99	36	1	136	611
12. Chinkapook	85	209	..	1	210	295
13. Cohuna	10,253	861	105	57	1,023	11,276
14. Corop	586	29	..	..	29	615
15. Cranbourne	4,412	257	411	6	674	5,086
16. Culgoa	2,856	221	120	10	351	3,207
17. Dandenong	33,280	4,096	884	187	5,167	38,447
18. Dimboola.. .. .	31,918	1,243	576	138	1,957	33,875
19. Dingee	341	104	..	2	106	447
20. Doon .. .. .	..	17	..	..	17	17
21. Frankston	23,460	3,585	785	206	4,576	28,036
22. Hastings	747	315	10	5	330	1,077
23. Hopetoun	9,616	766	189	54	1,009	10,625
24. Jeparit	11,280	776	219	27	1,022	12,302
25. Jung Jung	1,544	126	23	1	150	1,694
26. Koondrook	6,369	388	20	1	409	6,778
27. Lake Boga	5,468	333	6	19	358	5,826
28. Lalbert	1,305	280	112	1	393	1,698
29. Lascelles	1,899	150	20	12	182	2,081
30. Leitchville	1,619	332	4	17	353	1,972
31. Lockington	1,097	334	18	22	374	1,471
32. Manangatang	2,563	269	76	2	347	2,910
33. Marnoo	1,081	300	25	1	326	1,407
34. Merbein	9,014	1,180	76	69	1,325	10,339
35. Meringur .. .. .	..	63	..	..	63	63
36. Minyip	11,903	854	82	60	996	12,899
37. Mornington	17,114	2,375	356	189	2,920	20,034
38. Mount Martha	532	583	11	1	595	1,127
39. Murrabit .. .. .	..	27	..	..	27	27
40. Nandaly	439	122	..	2	124	563
41. Natimuk	9,530	306	254	99	659	10,189
42. North Wonthaggi	673	441	..	4	445	1,118
43. Nullawil	507	107	2	8	117	624
44. Nyah	963	91	13	..	104	1,067
45. Nyah West	3,509	650	42	4	696	4,205
46. Ouyen	15,103	1,391	573	56	2,020	17,123
47. Pakenham	1,477	530	521	15	1,066	2,543
48. Patchewollock	97	142	7	1	150	247
49. Piangil	2,499	284	178	3	465	2,964
50. Pyramid Hill	1,749	417	66	28	511	2,260
51. Rainbow	15,952	811	164	44	1,019	16,971
52. Red Cliffs	6,201	1,564	149	72	1,785	7,986
53. Rupanyup	10,396	760	34	46	840	11,236
54. Sea Lake	12,266	739	239	59	1,037	13,303
55. Somerville	1,509	215	50	5	270	1,779
56. South Frankston	7,099	1,352	211	2	1,565	8,664
57. Speed	63	203	..	2	205	268
58. Spring Vale	7,634	2,140	205	12	2,357	9,991
59. Stanhope	694	192	..	2	194	888
60. Tempy	140	142	..	3	145	285
61. Ultima	5,946	485	7	36	528	6,474
62. Waitchie	317	83	4	1	88	405
63. Watchem	4,437	345	8	28	381	4,818
64. Werrimull	279	191	..	2	193	472
65. Wonthaggi	68,638	2,654	2,058	27	4,739	73,377
66. Woomelang	11,357	322	420	30	772	12,129
67. Woorinen.. .. .	331	164	..	2	166	497
68. Wycheproof	11,991	856	152	59	1,067	13,058
69. Yaapeet .. .. .	..	85	..	..	85	85
Totals	490,099	48,012	11,353	2,117	61,482	551,581

AND DIVISIONS.

1930; 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.				(a) DEPRECIATION. (b) REDEMPTION.		Grand Total at 30th June, 1930.
	1st May, 1906, to 30th June, 1929.	1929-30.				Total at 30th June, 1930.	1st May, 1906, to 30th June, 1929.	1st July, 1929, to 30th June, 1930.	Total at 30th June, 1930.	(a) DEPRECIATION. (b) REDEMPTION.			
		Repairs and Maintenance.	Distribution of Water.	Management.	Total.								
	£	£	£	£	£	£	£	£	£	£	£	£	
1. Antwerp ..	..	..	6	11	17	17	..	6	6	(a) 3	..	26
2. Bacchus Marsh ..	6,255	21	186	105	312	6,567	18,279	1,446	19,725	(a) 686	..	26,978	
3. Berriwillock ..	1,499	68	28	34	130	1,629	1,216	213	1,429	(a) 58	..	3,116	
4. Berwick ..	356	19	23	28	70	426	2,164	585	2,749	..	..	3,175
5. Beulah ..	3,498	92	199	32	323	3,821	4,331	324	4,655	(a) 68	..	8,544	
6. Birchip ..	8,384	27	374	75	476	8,860	8,447	657	9,104	(a) (b) 944	..	18,908	
7. Bittern ..	103	3	3	4	10	113	589	150	739	..	..	852
8. Brim ..	340	34	12	33	79	419	741	190	931	(a) 105	..	1,455	
9. Carrum ..	6,946	222	273	330	825	7,771	31,740	6,500	38,240	..	..	46,011
10. Carwarp ..	20	..	10	13	23	43	24	25	49	(a) 29	..	121	
11. Chillingollah ..	195	14	24	39	77	272	400	149	549	(a) 80	..	901	
12. Chinkapook ..	27	6	22	23	51	78	56	146	202	(a) 53	..	333	
13. Cohuna ..	2,896	52	229	78	359	3,255	6,391	673	7,064	(a) (b) 727	..	11,046	
14. Corop ..	261	..	5	8	13	274	293	14	307	(a) 45	..	626	
15. Cranbourne ..	633	10	12	15	37	670	3,840	648	4,488	..	..	5,158
16. Culgoa ..	1,327	27	13	34	74	1,401	1,549	267	1,816	(a) 48	..	3,265	
17. Dandenong ..	6,243	135	166	200	501	6,744	26,005	4,650	30,655	(a) 500	..	37,899	
18. Dimboola ..	20,818	214	282	123	619	21,437	8,179	1,238	9,417	{ (a) 1,620 (b) 1,230 }	..	33,704	
19. Dingee ..	128	14	15	18	47	175	216	61	277	(a) 56	..	508	
20. Doon ..	..	..	6	12	18	18	..	28	28	..	..	46
21. Frankston ..	4,195	121	148	179	448	4,643	19,053	4,130	23,183	..	..	27,826
22. Hastings ..	169	12	15	18	45	214	631	277	908	..	..	1,122
23. Hopetoun ..	5,706	166	221	43	430	6,136	4,194	440	4,634	(b) 150	..	10,920	
24. Jeparit ..	2,295	127	39	68	234	2,529	7,589	876	8,465	(b) 800	..	11,794	
25. Jung Jung ..	996	18	63	29	110	1,106	587	83	670	(a) 40	..	1,816	
26. Koondrook ..	3,236	10	223	39	272	3,508	2,778	204	2,982	(a) 270	..	6,760	
27. Lake Boga ..	2,524	23	170	51	244	2,768	2,901	165	3,066	(a) (b) 276	..	6,110	
28. Lalbert ..	268	15	24	53	92	360	930	281	1,211	(a) 327	..	1,898	
29. Lascelles ..	987	10	36	23	69	1,056	1,044	114	1,158	(a) 120	..	2,334	
30. Leitchville ..	793	75	185	37	297	1,090	881	85	966	(a) 112	..	2,168	
31. Lockington ..	261	16	26	29	71	332	795	240	1,035	(a) 180	..	1,547	
32. Manangatang ..	749	39	24	57	120	869	1,392	336	1,728	(a) 325	..	2,922	
33. Marnoo ..	214	14	25	28	67	281	570	233	803	(a) 252	..	1,336	
34. Merbein ..	4,369	31	533	122	686	5,055	4,598	745	5,343	(a) 400	..	10,798	
35. Meringur ..	..	15	12	20	47	47	..	43	43	..	..	90
36. Minyip ..	3,692	84	170	67	321	4,013	7,224	631	7,855	{ (a) 491 (b) 400 }	..	12,759	
37. Mornington ..	2,983	88	108	131	327	3,310	13,813	2,600	16,413	..	..	19,723
38. Mount Martha ..	122	20	24	30	74	196	400	520	920	..	..	1,116
39. Murrabit ..	..	..	10	14	24	24	..	20	20	..	..	44
40. Nandaly ..	185	11	12	19	42	227	173	69	242	(a) 96	..	565	
41. Natimuk ..	2,361	73	69	94	236	2,597	6,512	441	6,953	(b) 750	..	10,300	
42. North Wonthaggi ..	179	45	80	28	153	332	400	314	714	(a) 120	..	1,166	
43. Nullawil ..	180	22	15	18	55	235	321	166	487	..	..	722
44. Nyah ..	385	..	27	21	48	433	440	55	495	(a) 64	..	992	
45. Nyah West ..	831	107	64	55	226	1,057	2,320	494	2,814	(a) 390	..	4,261	
46. Ouyen ..	6,023	124	493	129	746	6,769	8,746	1,341	10,087	(a) 400	..	17,256	
47. Pakenham ..	183	21	26	31	78	261	960	930	1,890	(a) 204	..	2,355	
48. Patchewollock ..	28	29	25	23	77	105	67	127	194	(a) 46	..	345	
49. Piangil ..	637	26	36	39	101	738	1,412	278	1,690	(a) 340	..	2,768	
50. Pyramid Hill ..	750	170	93	30	293	1,043	808	315	1,123	(a) 90	..	2,256	
51. Rainbow ..	2,997	35	100	51	186	3,183	10,748	921	11,669	(a) (b) 1,640	..	16,492	
52. Red Cliffs ..	3,358	26	559	104	689	4,047	2,174	642	2,816	(a) 320	..	7,183	
53. Rupanyup ..	3,434	51	191	32	274	3,708	5,771	640	6,411	(a) (b) 841	..	10,960	
54. Sea Lake ..	6,640	52	245	61	358	6,998	4,653	591	5,244	(a) 799	..	13,041	
55. Somerville ..	293	7	9	11	27	320	1,419	240	1,659	..	..	1,979
56. South Frankston ..	1,144	54	66	80	200	1,344	5,843	1,400	7,243	..	..	8,587
57. Speed ..	34	21	24	24	69	103	30	77	107	(a) 60	..	270	
58. Spring Vale ..	1,218	71	87	105	263	1,481	6,030	2,100	8,130	..	..	9,611
59. Stanhope ..	203	10	16	18	44	247	454	141	595	(a) 128	..	970	
60. Tempy ..	48	29	36	24	89	137	84	52	136	(a) 52	..	325	
61. Ultima ..	2,251	70	35	41	146	2,397	3,406	393	3,799	(a) 170	..	6,366	
62. Waitchie ..	165	19	24	30	73	238	234	100	334	(a) 108	..	680	
63. Watchem ..	1,418	68	24	36	128	1,546	2,783	324	3,107	(a) 150	..	4,803	
64. Werrimull ..	55	20	24	26	70	125	128	133	261	..	..	386
65. Wonthaggi ..	11,583	407	722	250	1,379	12,962	43,718	2,361	46,079	(b) 9,000	..	68,041	
66. Woomelang ..	3,736	112	85	65	262	3,998	6,950	666	7,616	(a) (b) 540	..	12,154	
67. Woornin ..	110	9	12	32	53	163	231	101	332	(a) 51	..	546	
68. Wycheproof ..	6,331	51	494	58	603	6,934	5,280	479	5,759	(a) 661	..	13,354	
69. Yaapeet ..	..	2	18	17	37	37	..	89	89	..	..	126
Totals ..	150,248	3,584	7,655	3,805	15,044	165,292	305,935	45,973	351,908	27,415	..	544,615	

LOAN EXPENDITURE.

STATEMENT OF LOAN EXPENDITURE DURING THE YEAR ENDED 30TH JUNE, 1930.

Works.	Loans Application Act No. 3582.	Loans Application Act No. 3513 and other Sources.	Total.
	£ s. d.	£ s. d.	£ s. d.
<i>Free Headworks.</i>			
1. Kerang North-West Lakes .. .. .	.. .. .	310 15 4	310 15 4
2. Loddon River .. .. .	.. .. .	152 9 0	152 9 0
<i>River Murray Waters Acts—Works.</i>			
3. Storages, Weirs and Locks	57,281 5 5	147,364 15 8	204,646 1 1
<i>Reservoirs and Storages.</i>			
4. Campaspe and Loddon River Storages	1,404 12 11	3,829 11 9	5,234 4 8
5. Goulburn Storages—			
Eildon Reservoir	25,588 16 5	179,047 15 10	204,636 12 3
Waranga Reservoir Enlargement	244 19 10	1,907 7 8	2,152 7 6
6. Maffra, Glenmaggie Reservoir .. .. .	.. .. .	6,513 2 7	6,513 2 7
7. Melton and Pykes Creek Reservoirs	3,297 19 3	15,786 3 6	19,084 2 9
8. Wimmera-Mallee Storages—			
Fyans Lake .. .. .	.. .. .	1,047 0 0	1,047 0 0
Pine Lake	4 3 6	5,021 9 5	5,025 12 11
<i>Waterworks Districts.</i>			
9. Bellarine Peninsula	16 13 4	103,774 12 2	103,791 5 6
10. Birchip, Sea Lake, Tyrrell, and Wycheproof	5 0 0	63,172 12 4	63,177 12 4
11. Carwarp and Carwarp Central	1,051 2 1	590 18 10	1,642 0 11
12. Coreena	116 9 4	1,505 18 1	1,622 7 5
13. Dering, Eureka, Baring, and Kia .. .. .	.. .. .	3,134 10 2	3,134 10 2
14. Hindmarsh .. .. .	.. .. .	14,566 14 9	14,566 14 9
15. Karkaroo	2 10 0	12,737 11 1	12,740 1 1
16. Long Lake .. .. .	.. .. .	6,809 12 8	6,809 12 8
17. Millewa	37 1 1	9,644 2 9	9,681 3 10
18. Mornington Peninsula	134 17 6	65,488 3 8	65,623 1 2
19. Tyntynder	13 12 8	11,998 15 5	12,012 8 1
20. Walpeup	245 9 4	10,700 16 7	10,946 5 11
21. Western Wimmera .. .. .	.. .. .	9,842 14 0	9,842 14 0
22. Wimmera United	0 15 0	9,203 8 1	9,204 3 1
23. Wimmera Main Channels .. .. .	.. .. .	6,815 2 1	6,815 2 1
24. Yelta .. .. .	.. .. .	131 3 7	131 3 7
<i>Towns.</i>			
25. Bacchus Marsh and Werribee	2 1 6	110 16 4	112 17 10
26. Berrillock, Beulah, Birchip, and Brim .. .. .	.. .. .	378 9 8	378 9 8
27. Cohuna, Koondrook, Leitchville, and Murrabit	18 1 7	869 10 8	887 12 3
28. Coliban .. .. .	.. .. .	30,370 17 7	30,370 17 7
29. Chillingollah, Chinkapook, Culgoa, and Dimboola .. .. .	.. .. .	847 16 10	847 16 10
30. Doon, Hopetoun, Jeparit, Jung Jung, and Lake Boga .. .. .	.. .. .	365 10 3	365 10 3
31. Heyfield and Stratford .. .. .	.. .. .	5,876 6 7	5,876 6 7
32. Lalbert, Lascelles, Marnoo, and Manangatang .. .. .	.. .. .	114 7 11	114 7 11
33. Meringur, Werrimull, and Carwarp .. .. .	.. .. .	299 4 6	299 4 6
34. Merbein, Pyramid Hill, and Red Cliffs	12 1 4	2,977 11 6	2,989 12 10
35. Minyip, Natimuk, and Antwerp .. .. .	.. .. .	503 18 5	503 18 5
36. Nullawill, Nyah West, Ouyen, Patchewollock, and Piangil .. .. .	.. .. .	618 10 4	618 10 4
37. Rainbow, Rupanyup, and Sea Lake .. .. .	.. .. .	2,755 4 10	2,755 4 10
38. Stanhope, Dingee, and Lockington .. .. .	.. .. .	117 8 10	117 8 10
39. Speed, Tempy, Ultima, and Waitechie .. .. .	.. .. .	1,111 1 0	1,111 1 0
40. Watchem and Woomelang .. .. .	.. .. .	216 1 2	216 1 2
41. Woorinen, Wycheproof, and Yaapect .. .. .	.. .. .	1,465 1 6	1,465 1 6
42. Wonthaggi and Hicksborough	32 10 0	1,157 5 6	1,189 15 6
<i>Irrigation and Water Supply Districts.</i>			
43. Bacchus Marsh and Werribee	857 19 9	5,774 7 8	6,632 7 5
44. Boort	901 2 7	5,349 16 10	6,250 19 5
45. Calivil .. .. .	.. .. .	23,696 11 8	23,696 11 8
46. Cohuna and Gannawarra	2,209 19 8	13,517 19 9	15,727 19 5
47. Deakin .. .. .	.. .. .	2,384 0 1	2,384 0 1
48. Dingee .. .. .	.. .. .	440 19 6	440 19 6
49. Fish Point	1 9 7	247 5 2	248 14 9
50. Katandra .. .. .	.. .. .	4,632 8 4	4,632 8 4
51. Kerang	1,638 1 8	4,013 8 11	5,651 10 7
52. Koondrook	2,108 1 10	814 1 7	2,922 3 5
53. Leitchville	760 13 6	3,486 18 1	4,247 11 7
54. Maffra, Sale	1 16 9	29,810 15 10	29,812 12 7
55. Merbein	196 8 5	1,294 8 4	1,490 16 9
56. Mystic Park .. .. .	.. .. .	587 5 11	587 5 11
57. North Shepparton .. .. .	.. .. .	6,907 19 9	6,907 19 9
58. Nyah .. .. .	.. .. .	642 17 1	642 17 1
59. Red Cliffs	291 15 5	3,107 12 0	3,399 7 5
60. Rochester, Campaspe, and Echuca North .. .. .	.. .. .	14,911 5 5	14,911 5 5
61. Rodney	2 10 0	20,477 3 9	20,479 13 9
62. Shepparton .. .. .	.. .. .	11,865 2 1	11,865 2 1
63. South Shepparton .. .. .	.. .. .	2,233 7 9	2,233 7 9
64. Stanhope .. .. .	.. .. .	5,082 8 1	5,082 8 1
65. Swan Hill	767 9 9	4,672 7 1	5,439 16 10
66. Third Lake .. .. .	.. .. .	195 8 3	195 8 3
67. Tongala	2 10 0	14,677 0 6	14,679 10 6
68. Tragowel Plains	24 5 0	7,855 11 1	7,879 16 1
69. Tresco	12 3 2	133 10 6	145 13 8
70. Goulburn Main Channels	101 19 9	80,571 4 8	80,673 4 5
<i>Flood Protection and Drainage Districts.</i>			
71. Gippsland Rivers and Other Districts .. .. .	.. .. .	16 3 8	16 3 8
72. Kooweerup, Cardinia, and Dandenong Creek	4,525 9 11	19,757 3 3	24,282 13 2
<i>Miscellaneous.</i>			
73. Investigations Storages and Works	610 0 2	5,915 12 4	6,525 12 6
74. Torrumbarry Districts—New Districts commanded by Torrumbarry Weir	412 4 6	291 14 11	703 19 5
Totals	104,936 3 6	1,036,616 10 3	1,141,552 13 9

STATEMENT OF EXPENDITURE DURING THE YEAR ENDED 30TH JUNE, 1930.

CONSTRUCTION OF TANKS AND FORMING ROADS IN THE MALLEE.

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

1. Mallee Tanks (Public Tanks) and Channels	£ s. d.
2. Clearing Roads	4,014 8 7
Total	4,785 9 7
	<u>£8,799 18 2</u>

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, 1931, 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, 1931.

ESTIMATED DISBURSEMENTS.

A.

Revenue Producing Works—

Coliban District	£ 13,350
Irrigation and Water Supply Districts	119,850
Waterworks Districts	68,100
Drainage and Flood Protection Districts	1,200
Diversions from Streams	500
General Expenditure and Salaries (proportion) over £250 to be apportioned to above Districts ..	24,000
	<hr/> £227,000

B.

Non-Revenue Producing Works—

General Services—

River Gaugings, Surveys, New Projects, Boring for Water, Land Settlement, General Expenditure and Salaries (proportion) over £250	£10,500
Loan Works, Services on Account defrayed from Votes	7,000
Waterworks Trusts Administration	2,600
	<hr/> £20,100

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/> £252,100

ESTIMATED RECEIPTS.

Coliban District	£ 47,000
Irrigation and Water Supply Districts	319,000
Waterworks Districts	264,000
Flood Protection Districts	8,000
Miscellaneous	30,000
	<hr/> £668,000

Estimated amount available from Revenue Producing Works to meet Interest	£441,000
Less expenditure as per "B" and "C" above on Non-Revenue Producing Works	25,100
	<hr/> £415,900
To which add Estimated Revenues from other Authorities—	
Waterworks Trusts	68,500
Local Bodies	28,000
	<hr/> £96,500
Total Estimated amount available from Revenues of all Authorities to meet Interest	<hr/> £512,400

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, 1930:—

		Loan Liability of State for Works of Water Supply at 30th June, 1930, exclusive of Melbourne Water Supply.					Total Interest of £1,073,427 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 or Unallotted Works. (D.) Loans Unexpended.	Balance at Debit of Authorities.	Interest payable by State on Net Advances.	(A.) Written Off. (B.) Free Head-works. (C.) Uncompleted or Unallotted Works. (D.) Loans Unexpended.	
Completed Works.— Commission	Waterworks Districts	£ 4,829,924	£ 49,775	£ 4,780,149	(A.) 175,055	£ 4,605,094	£ 219,431	(A.) 8,031	£ 211,400
	Irrigation and Water Supply Districts	4,349,628	31,690	4,317,938	(A.) 575,152	3,742,786	198,199	(A.) 26,392	171,807
	Goulburn Channel Works (Free Headworks excluded)	1,381,266	106	1,381,160	(C.) 862,310	518,850	63,401	(C.) 39,589	23,812
	Pykes Creek, Melton, and Distributary Works	228,849	..	228,849	(C.) 40,939	187,910	10,505	(C.) 1,882	8,623
	Mornington Peninsula	764,558	..	764,558	(C.) 86,853	677,705	35,103	(C.) 3,990	31,113
	Kooweerup, Cardinia and other Flood Protection Schemes	391,980	..	391,980	(C.) 226,730	165,250	17,997	(C.) 10,407	7,590
	Eildon Reservoir and Waranga Reservoir Enlargement	2,364,176	1,000	2,363,176	(C.) 2,363,176	..	108,484	(C.) 108,484	..
	Maffra-Sale Irrigation and Water Supply Districts	1,174,412	..	1,174,412	(C.) 1,008,449	165,963	53,912	(C.) 46,290	7,622
	Millewa Waterworks Districts	495,595	..	495,595	(C.) 495,595	..	22,753	(C.) 22,753	..
	Red Cliffs Irrigation and Water Supply District	774,693	..	774,693	(C.) 293,141	481,552	35,569	(C.) 13,456	22,113
Uncompleted or Unallotted Works.— Commission	Bellarine Peninsula	242,392	..	242,392	(C.) 242,392	..	11,127	(C.) 11,127	..
	Cam paspe and Loddon Rivers Storages (proposed)	81,191	..	81,191	(C.) 81,191	..	3,728	(C.) 3,728	..
	Waterworks Trusts (including First Mildura)	2,099,306	292,006	1,807,300	(A.) 316,537	1,490,763	82,979	(A.) 14,530	68,449
	Local Bodies (Municipalities)	815,371	135,751	679,620	(A.) 163,760	515,860	31,206	(A.) 7,517	23,689
	River Murray Agreement Works	2,135,083	..	2,135,083	(C.) 2,135,083	..	97,994	(C.) 97,994	..
	Irrigation and Waterworks Trusts Abolished	32,754	30	32,724	(A.) 32,724	..	1,505	(A.) 1,505	..
	Free Headworks	1,254,548	420	1,254,128	(B.) 1,254,128	..	57,581	(B.) 57,581	..
	Free Grants to Local Authorities	147,046	..	147,046	(B.) 147,046	..	6,752	(B.) 6,752	..
	Surveys, Exploratory, and Preliminary Works, including Purchase of Land reserved for Reservoirs	284,200	..	284,200	(C.) 284,200	..	13,050	(C.) 13,050	..
	Loan Moneys unexpended	46,776	..	46,776	(D.) 46,776	..	2,151	(D.) 2,151	..
Totals		23,893,748	510,778	23,382,970	10,831,937	12,551,733	1,073,427	497,209	576,218
									337,046
Other Authorities.									£72,130

Dated at the Office of the State Rivers and Water Supply Commission, Treasury Gardens,
Melbourne, the 29th day of October, 1930.

WM. CATTANACH, Chairman.

E. SHAW, Commissioner.

RICHD. HORSFIELD, Commissioner.

P. J. O'MALLEY, Secretary.