

1940.

VICTORIA.

STATE RIVERS AND WATER SUPPLY COMMISSION.

THIRTY-FIFTH
ANNUAL REPORT,
1939-40.

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

[Approximate Cost of Paper.—Preparation, not given. Printing (550 copies), £180.]

By Authority:
H. E. DAW, GOVERNMENT PRINTER, MELBOURNE.

No. 10.—[2s. 3d.]-11722/40,

STATE RIVERS AND WATER SUPPLY COMMISSION.

ANNUAL REPORT, 1939-40.

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 1939-40, and Estimates for the ensuing year.

The personnel of the Commission is as follows :—

Mr. L. R. East, M.C.E., M.Inst.C.E., M.Am.Soc.C.E., M.I.E., Aust. ;
Chairman.

Mr. W. A. Robertson, M.C.E., M.Inst.C.E., M.I.E., Aust. ; Commissioner.

Mr. H. Hanslow, Commissioner.

TABLE OF CONTENTS

SUBJECT.

PAGE

Part I.

Summary of Report	4-6
---------------------------	-----

Part II.

WORKS CARRIED ON OR COMPLETED DURING THE YEAR—

Water Supply—	7
(a) Irrigation Supplies	8-11
(b) Town Supplies	12-13
(c) Domestic and Stock Supplies	14-15
(d) Pumping	16
(e) Murray Works and Main Storages	17-18
(f) Investigation and Design of New Proposals	19-22
(g) Waterworks Trusts	23
(h) Total Storages in State	24
Drainage and Flood Protection	25-26
Sewerage	27
River Improvement, Control and Gaugings	28-29
Irrigation Development	30
Area of Lands Under Irrigated Culture	31
Miscellaneous	
(a) Research and Testing	32-33
(b) Land Valuations	34

Part III.

ADMINISTRATION—

Legislation	35
Commission	35
Staff	35-37
District Extensions and Excisions	37
Statement of Rates and Charges with Valuations of Lands and Populations in Districts	38-43

FINANCE—

Summary	44-51
District Receipts and Disbursements for 1939-40	52-63
Sub-surface Drainage Works	64
Expenditure for 1939-40	
Total Capital	65-67
Contracts and Direct Labour	68
Water Supply Works Depreciation Accounts	69-71
Loan Capital Liability at 30th June, 1940—	
A.—Free Headworks	72
B.—Capital Works and Charges not apportionable to Districts	72
C.—Headworks	73
D.—Irrigation and Water Supply Districts	74
E.—Urban Divisions	75
F.—Waterworks Districts	75
G.—Urban Districts	76-77
H.—Flood Protection Districts	77
I.—Drainage Districts	78
J.—Waterworks Trusts and Local Governing Bodies	78
Summary Statement of Loan Liability as at 30th June, 1940	79
Statement of Revenue showing Arrears	80
Estimates for 1940-41	81

APPENDICES—

A.—Statement showing Unemployment Relief Grants made to the Commission from 1st June, 1930, to 30th June, 1940.
B.—Water Supply Statistics.

ANNUAL REPORT

OF

THE STATE RIVERS AND WATER SUPPLY COMMISSION

FOR

YEAR ENDED 30TH JUNE, 1940.

PART I.—SUMMARY OF REPORT.

GENERAL.

- | | |
|--|------|
| 1. The State Rivers and Water Supply Commission was constituted on 1st May, 1906, under the provisions of the Water Act 1905. | Page |
| 2. This Report covers the period 1st July, 1939, to 30th June, 1940. | 35 |
| 3. An Act, cited as the Water Act 1939, No. 4678, making a number of amendments to the law in regard to water supply matters, was passed by Parliament during the year and came into operation on 7th December, 1939 | 22 |
| 4. During the year, the Commission carried out, on behalf of the Commonwealth Government, works of water supply, drainage and sewerage for a number of military camps throughout Victoria | 15 |
| 5. An inquiry was made by the Parliamentary Public Works Committee into the "Position of Settlers on Isolated Holdings in Mallee Districts, with Respect to the Problem of Water Supplies" | |

WATER SUPPLY.

- | | |
|--|--------|
| 6. The total capacity of water storages controlled by the Commission is 1,963,200 acre feet | 24 |
| 7. The total net annual valuation of properties within irrigation and waterworks districts and the urban divisions and districts thereof, including Coliban System, amounted to £3,515,108, indicating a total capital value of over £70,000,000 | 38-42 |
| 8. The population dependent upon the works of the Commission for domestic water supplies was 230,537 | 42 |
| 9. The total area of lands supplied with water for domestic and stock purposes by channels, tanks and bores was 15,118,000 acres | 7 |
| 10. The area irrigated during the year was 517,903 acres. The largest area irrigated in any one year was 590,112 acres in 1937-38 | 31 |
| 11. The quantity of water delivered to water users in irrigation districts was 521,588 acre feet, of which 68,960 acre feet were supplied by pumping | 7 |
| 12. Owing to heavy rains over the whole of the State during August, 1939, the supply of water for irrigation did not commence until late in September, 1939. During the first six months of the year the discharge of streams generally was well above normal, but by the end of the month of June, 1940, drought conditions were approached | 7 & 29 |
| 13. During the year, irrigation supplies were made available for the first time from the Commission's works to the Cobram section comprising 26,610 acres of the new Murray Valley District, water being turned into the Yarrawonga Main Canal from the Yarrawonga Weir on 3rd October, 1939 | 10 |

TOWN SUPPLIES.

- | | |
|---|------------|
| 14. There are at present 120 towns whose reticulated water supply systems are directly controlled by the Commission | Appendix B |
| 15. In the Coliban District, a commencement was made with works to improve the supply to the high levels of Bendigo and Eaglehawk | 12 |
| 16. At a cost of approximately £17,500 four minor storages have been constructed in the Coliban District | 12 |
| 17. Works are proceeding on the extension of the Mornington Peninsula System to serve the bayside towns from Dromana to Portsea | 12 |
| 18. To meet the increased water supplies for the Mornington Peninsula District, the siphons on the Bunyip Main Race are being duplicated, and the Cranbourne Pipe Line enlarged | 12 |
| 19. In Otway District, the main pipe line, 78 miles in length, from Arkins Creek was completed, and water was made available, under agreement, to the City of Warrnambool | 13 |
| 20. Work is proceeding on the tunnel to connect the east and west branches of the Barwon River to augment supplies in the Bellarine Peninsula District, and further work has been carried out on the reconditioning of the steel siphons on the main inlet channel in this district | 13 |

DOMESTIC AND STOCK SUPPLIES.

- | | |
|--|---------|
| 21. During the year, a proposal to divert supplies from the Glenelg River, at an estimated cost of £874,000, to supplement the Wimmera Mallee System was investigated and recommended by the Parliamentary Public Works Committee | Page 19 |
| 22. In an endeavour to reduce sand drift into water supply channels in Mallee Districts, certain works were carried out by the Commission, and a By-law was made enabling the Commission to prohibit the clearing, cultivating or fallowing of land, likely to drift, adjacent to channels | 14 |

PUMPING.

- | | |
|--|----|
| 23. Work has been advanced on the third or final stage of the electrification of the Commission's pumping plant at Merbein | 16 |
| 24. The installation of an additional steam-driven pumping unit is in progress at the Nyah Pumping Station | 16 |

MAIN STORAGES.

- | | |
|--|-------|
| 25. Progress has been made with additional works at Hume Reservoir | 17 |
| 26. All works having been completed, the Yarrawonga Weir was put into operation on 17th July, 1939 | 17 |
| 27. Substantial progress has been made with the construction of the Lauriston Reservoir, and it is anticipated that it will be possible for water to be stored during the winter of 1941 | 17-18 |
| 28. The installation of steel crest gates to increase the capacity of the Malmesbury Reservoir from 12,300 acre feet to 14,400 acre feet has been completed | 18 |

INVESTIGATIONS.

- | | |
|---|-------|
| 29. The comprehensive survey of the Water Resources of Victoria was advanced during the year, when investigations were made as to the possibilities for further storages on the Werribee, Loddon, Avoca and Goulburn Rivers | 20-21 |
| 30. An investigation is being made into the question of the utilization of the Victorian proportion of the waters of the River Murray | 21 |

WATERWORKS TRUSTS.

- | | |
|--|----|
| 31. There are now 116 Waterworks Trusts and 17 Local Governing Bodies operating under the supervision of the Commission | 23 |
| 32. Many works have been put in hand by these Authorities to improve and extend their water supply systems, grants for which on a liberal basis have been made by the Government | 23 |

DRAINAGE.

- | | |
|--|--------|
| 33. Works for the drainage of irrigated lands have been continued. The systems previously completed have operated satisfactorily, and the districts served are showing the benefits of the drainage schemes. At Woorinen, where the drainage scheme has commenced to operate, the production of dried fruits increased from 2,427 tons to 3,295 tons | 25 & 9 |
|--|--------|

SEWERAGE.

- | | |
|---|----|
| 34. There are now 38 Sewerage Authorities in country centres, and schemes are in operation in 17 Sewerage Districts | 27 |
| 35. The installation of sewerage schemes has been facilitated by the action of the Government in granting financial assistance on a liberal basis, but owing to the war situation, it has been found necessary to suspend operations at various towns | 27 |

RIVER IMPROVEMENT WORKS.

- | | |
|--|----|
| 36. Grants made on a contributory basis from the Rivers and Streams Fund, on the recommendation of the Commission, now total 508, amounting in all to £78,000, the number approved during the year being 85 grants totalling £10,000 | 28 |
| 37. The Latrobe and Snowy Rivers improvement works, estimated to cost £46,000 and £23,000 respectively, have been practically completed | 28 |
| 38. Detailed topographical surveys have been completed along certain streams and plans lodged for record purposes with the Department of Lands. Surveys on other streams have been held over during the national emergency | 28 |

SILTATION.

- | | |
|--|----|
| 39. Floods of 1939, following bushfires, washed into the Eildon Reservoir an additional quantity of silt, amounting to approximately 1,000 acre feet | 29 |
|--|----|

IRRIGATION DEVELOPMENT.

- | | |
|---|----|
| 40. The development of irrigation in Kerang and Tragowel Plains Districts in recent years has been most pronounced | 9 |
| 41. The Maffra-Sale District was extended to include an area of 7,850 acres. Excellent returns were obtained, as the result of irrigation, by beet growers in this district | 11 |
| 42. Arrangements have been made to provide facilities in various centres to assist landholders in the preparation and layout of their lands for irrigation | 30 |

43. During the year, a number of farm competitions was conducted, and tours of inspection of other districts were made by irrigators from Cohuna and Pyramid Hill .. 30
44. A complete investigation of the soil types throughout the Murray Valley District has been made, and soil surveys are being carried out in several other districts .. 10 & 30
45. At Red Cliffs and Merbein, a record crop of 34,000 tons of dried fruits was harvested, the previous highest yield being 33,000 tons in 1937-38 .. 9

RESEARCH.

46. Certain new features were introduced during the year by the (1) establishment of a Soil Mechanics Laboratory at Hume Reservoir, and (2) use of Low Heat Portland Cement in connexion with the construction of Lauriston Reservoir .. 32

FINANCE.

47. The net Loan Liability of the State for works of water supply and drainage at 30th June, 1940, was £27,237,306, exclusive of equity in National Debt Sinking Fund .. 79
48. Of the net Loan Liability at 30th June, 1940, £1,950,718 is charged to Waterworks Trusts and other Local Water Authorities, £3,786,396 is debited to districts directly controlled by the Commission, £36,483 is debited to the Plant and Machinery Account, and the balance £21,463,709 is borne by the State .. 79
49. The total Interest Charges for 1939-40, including £110,255 exchange on overseas payment on this liability, amounted to £1,206,973 .. 50 & 51
50. The total receipts for water rates and charges for the financial year 1939-40 amounted to the record sum of £615,277, an increase of £54,598 on the previous year's record .. 52
51. In addition, Waterworks Trusts and Local Water Authorities paid to the Treasury as interest on loans the sum of £84,945 .. 45
52. Interest amounting to £144,870 was paid in respect of 114 districts, the capital liability of which has been adjusted .. 45
53. In these districts the operations for the year resulted in a net surplus of £41,820 after providing for interest, redemption and depreciation .. 47
54. A loss of £60,175 was incurred on operating 34 districts to which the supply was continued by direction of the Governor in Council. This amount was debited to the "Revenue Expenditure Chargeable to the State Account" .. 48
55. The net cost of services of a national character and other miscellaneous charges not debited to districts was £67,097 .. 48
56. The net cost to the State for Interest and Exchange, loss on districts supplied by direction of Governor in Council and services not directly chargeable to water-users was, £1,010,391. Comment is made and this figure analysed .. 49 & 50
57. A sum of £28,948 was paid from Consolidated Revenue for Administration and General Expenditure Charges in connexion with Unemployment Relief Loan Works not directly chargeable to waterusers .. 52
58. The total expenditure during the year on water distribution, maintenance of water supply and drainage works, and administration was £490,160, of which £478,403 was provided from Vote Funds, £3,507 from Special Appropriation and £8,250 from Unemployment Relief (Taxation) Funds .. 50
59. An amount of £9,364 was expended on war precautions under the provisions of the National Security Act 1939, No. 4645 .. 45
60. Water supply and sewerage works have been constructed for a number of military and internment camps. The expenditure (£82,192) incurred during the year on this work was met from Commonwealth Funds .. 45
61. The value of stores and equipment held in the Stores Suspense Account as at 30th June, 1940, was £84,317 .. 46
62. The value of movable Plant and Machinery held in the plant and machinery Account as at 30th June, 1940, was £36,483 .. 46
63. A statement is included showing the details of the Water Supply Works Depreciation Account, and the amounts at credit of the Water Supply Works Depreciation Fund, and Water Supply Plant and Machinery Depreciation Fund respectively .. 69-71
64. A sum of £42,673 was paid into Consolidated Revenue in respect of depreciation payments by Commission's Districts for the year 1939-40 .. 69-71
65. The amount at credit of Water Supply Plant and Machinery Depreciation Fund as at 30th June, 1940, was £4,660 .. 71
66. The arrears of water rates and charges outstanding at 30th June, 1940, were £661,012 .. 80
67. The amount included in the Budget Estimate for 1940-41 for Vote Expenditure on works and services under the control of the Commission is £480,000. This amount is less by £17,332 than the Commission's estimated requirements .. 81
68. A total amount of £3,079,168 has been made available to the Commission from Unemployment Relief Funds since 1st June, 1930. Of this amount £2,973,161 was expended at 30th June, Appendix 1940. The total number of men to whom employment has been provided is 45,237 .. A

PART II.

WORKS CARRIED ON OR COMPLETED DURING THE YEAR.

A description of the various water supply systems and works controlled by the State Rivers and Water Supply Commission throughout the State of Victoria was published in the Thirty-Fourth Annual Report, Year 1938-39.

Statements inserted in this Report for the year 1939-40 show the names of the districts supplied with water; the annual value of the lands and tenements and the number of persons dwelling in these districts; the water rates, irrigation charges and drainage and flood protection rates levied; the area of lands under irrigated culture within the State; and the capacities of the various water storages. Financial particulars relating to the Commission's Works and Districts are also published.

During the year the Commission has carried out, on behalf of the Commonwealth Government, works of water supply, drainage and sewerage for a number of military camps throughout Victoria.

With the limited technical staff at its disposal the Commission has, also, made some progress with the comprehensive investigation of the water resources of Victoria.

The major items of importance regarding the Commission's activities are shown in the following pages:—

WATER SUPPLY.

In Victoria, the total area of land supplied with water for domestic and stock purposes or for irrigation, excluding the metropolitan areas, amounted to 15,118,000 acres.

Owing to heavy rains over the whole of the State during the month of August, 1939, the supply of gravitation water for irrigation in the 1939-40 season did not commence until late in September, 1939, at which time the storages, including Victoria's half share of Hume Reservoir, contained 1,771,990 acre feet. The supply terminated early in June, 1940, when the volume remaining in the storages amounted to 960,060 acre feet.

During the year, a total of 521,588 acre feet of water, including 68,960 acre feet by pumping, was delivered from the Commission's channels to landholders in irrigation districts. In addition, 23,752 acre feet were delivered to lands outside the boundaries of the Commission's Districts, making a total delivery of 545,340 acre feet. This quantity was less than that delivered during the record season of 1937-38 when, in addition to 20,917 acre feet supplied to high-level Waterworks Districts, irrigation deliveries totalled 672,782 acre feet of water, inclusive of 55,944 acre feet by pumping. The year under review, however, shows a greater delivery for all purposes than in the preceding year (1938-39), by 16,724 acre feet, and was 38,905 acre feet greater than the average for the previous ten years.

The irrigation districts of Nyah, Red Cliffs, and Merbein received 49,185 acre feet pumped direct from the River Murray, while the high-level Waterworks Districts of Millewa, Coreena, Carwarp, and Yelta, also involving pumping from the River Murray, received 19,775 acre feet for domestic and stock supplies. In addition, 215 acre feet of water were delivered to lands outside these districts.

The demand for irrigation water at the beginning of the season was slight and interruption of delivery was caused by spring rainfall. Thereafter, the demand increased and extended late into the season resulting in slightly more than 86 per cent of the water rights apportioned throughout the gravitation systems being used, while, in the three districts dependent upon pumped supplies, 87 per cent of water rights was taken.

The Wimmera-Mallee Waterworks Districts received 31,506 acre feet from the Loddon and Goulburn systems, in addition to their usual supplies from the Wimmera-Mallee storages in the vicinity of the Grampians. The volume of water discharged from the Waranga Reservoir amounted to 504,675 acre feet. Of this quantity 197,466 acre feet were delivered to users and, together with 12,802 acre feet passed on to the Wimmera-Mallee Waterworks Districts at the Loddon Weir, gave a delivery efficiency of about 42 per cent.

IRRIGATION SUPPLIES.

GOULBURN SYSTEM.

The year 1939-40 was remarkable for the variation in the seasonal conditions in the Irrigation Districts supplied from this system, an extremely wet winter and spring being followed by a mild summer and a record dry autumn.

During the winter, serious flooding occurred in the Rodney, Shepparton and Tongala-Stanhope areas. These floods were particularly severe in the Shepparton and Tongala Districts where, in addition to serious losses in orchards, a very large area under lucerne and pasture was destroyed. Approximately 9,000 fruit trees in bearing died as a result of the continuous wet conditions.

In the Rodney District, flooding was serious but the area most affected was under natural pasture.

The high level of the Goulburn River prevented the free discharge of flood waters, and caused some breaches to the levee bank system at Loch Garry and at Kanyapella.

Floods also occurred in the Campaspe River, resulting in damage to the Campaspe Weir and serious flooding in the Rochester District. The weir has been repaired and its condition is now more satisfactory than for many years. Irrigation was delayed until late in the spring but once a start was made, the demand for water continued until the end of the autumn. Some indication of the position during the early part of this season may be gathered from the fact that in Rodney District an area of only 329 acres under cereals was irrigated, while in the previous year the area under cereals irrigated was 14,373 acres. This condition was practically the same in all districts. Any reduction of the area under irrigated culture for the year will be found mainly in the area of cereals watered, as in all other classes of irrigation the area under cultivation has been maintained and the quantity of water delivered was well up to the average. Ample supplies were available to meet all requirements.

During the year reconditioning of works was undertaken with Unemployment Relief Funds made available by the Government. In Rodney District, 10 worn-out culverts and several checks were replaced.

The offtake regulator for the Main Wilson Channel from the Goulburn-Waranga Main Channel was reconstructed and the sill lowered 3 feet to enable the maximum draw-off of water at times of minimum flow to the Waranga Reservoir.

In January, 1940, when the demand for water was at its peak, a serious collapse took place in the floor of the No. 2 Flume on the Goulburn-Waranga Main Channel. Temporary repairs were carried out with minimum delay and steps were taken immediately for the preparation of the design of a new structure, the erection of which was commenced before the end of the year.

General maintenance work carried out during the year was increased as the result of the flood damages caused during the winter. Weed growth was much greater and special attention was paid to the removal of cobungi.

This year the Echuca North District was abolished and the adjoining Rochester and Tongala-Stanhope Districts were extended to include portions of the areas previously forming part of the Echuca North District. The amalgamation of the Tongala and Stanhope Districts and the inclusion of part of the Echuca North District will bring about considerable saving in administration costs.

LODDON AND TORRUMBARRY (MURRAY) SYSTEMS.

The irrigation season commenced with normal rainfall conditions, but during the latter half (December to June) little more than two inches of rain was recorded.

During the spring months, therefore, the demand for water for irrigation was below normal, but in the latter part of the summer and the whole of the autumn, because of the lack of rainfall and the abnormally hot and dry weather, the demand increased to such an extent that the carrying capacities of the systems were strained to the limit, and difficulty was experienced, in some districts, in meeting demands. This difficulty was associated chiefly with the silted and weed infested condition of the channel system, which, on account of the insufficiency of funds made available for maintenance, has been drifting into a state of disrepair.

Water rights allotted to districts administered within the Loddon Division total 156,481 acre feet. Deliveries for the year including sales of water, but excluding deliveries to holders of private diversion permits, amounted to 195,644 acre feet.

With the assistance of funds made available under Unemployment Relief conditions, remodelling of some of the worst sections of the channel system was undertaken, the work being carried out mainly by dragline excavators. A total length of 30 miles was treated in this way.

The work of replacing old timber bridges and regulators (constructed some 40 to 50 years ago) by concrete structures was continued, the total replacements for the year being 17 bridges and 20 regulators. In addition, several subways were constructed; and 30 meter outlets (Dethridge type) were installed to replace old timber non-measuring structures.

Attention was given to the repair of a number of meter outlets, bridges, regulators and subways, while, in several miles of channels, weeds were cut. This latter work was most effectively and economically dealt with by means of a narrow steel weed-cutting saw.

A commencement was made with the provision of a direct supply channel from the Gunbower Creek to the Southern Main Channel in the Koondrook District. This work involved, in addition to some 16 chains of channel, the construction of a combined road bridge and regulator and 2 culverts, all in concrete.

The improvement in irrigation technique, particularly in those districts (Kerang and Tragowel Plains) where it was hitherto well below the attainable standard, has been most marked. In the Kerang District alone, an additional area of 4,000 acres of sown pastures was irrigated during the year, while the increase in this type of irrigated culture in the Tragowel Plains District was 3,720 acres, in addition to an increase of 500 acres sown down to lucerne. Associated with these increases was the reclamation of salt affected land, experimental work on which is being continued under the supervision of Mr. A. Morgan, B.Agr.Sc., an Officer of the Department of Agriculture, whose advice on all matters pertaining to irrigated agriculture is freely availed of and is having a marked influence on the progress effected.

Production of butter fat continues to increase, a record quantity of 1,600 tons of butter being manufactured by the Gunbower Butter Factory, most of the supplies to which are obtained from within the Irrigation District, while the Swan Hill Factory manufactured 667 tons as compared with 527 tons in the previous year. A large proportion of the increase in the latter case is directly traceable to the improved conditions of water supply, inasmuch as the reconditioned state of the main channel supplying the dairying area enabled deliveries of water to be made every fortnight instead of every three and four weeks as hitherto.

The output of dried fruits in the Woorinen area increased from 2,427 tons in 1938-39 to 3,295 tons, but in the Nyah area there was a decrease from 3,575 tons to 3,304 tons. It is significant that the Woorinen area is commencing to enjoy the benefits of a drainage scheme, while the Nyah drainage proposal has not yet progressed beyond the stage noted in the last Annual Report.

RED CLIFFS AND MERBEIN DISTRICTS.

These districts are administered from the Red Cliffs Centre.

The 1939-40 season proved one of the best so far experienced for dried fruits, as good winter and spring rains fell and excellent conditions prevailed during the drying season.

A record crop of 34,000 tons of dried fruits was harvested compared with the previous record of 33,000 tons in 1937-38.

Six general irrigations were given to the whole area, but volumes of water pumped for this purpose were some 7,000 acre feet less than in the previous year.

The channel system was maintained in a reasonably efficient condition.

Irrigation supplies from the Red Cliffs pumps were continued to a selected area in the Carwarp District to enable settlers to grow fodder in conjunction with their dry farms. About 50 acres were watered and the results so far have proved satisfactory.

MURRAY VALLEY DISTRICT.

The Murray Valley District, which was constituted in October, 1938, had water made available for the first time from the Yarrawonga Weir. The district at present comprises an area of 26,610 acres in the Parishes of Boosey, Cobram, and Yarraweyah, and is supplied through the Cobram No. 1 Main Channel from the Yarrawonga Canal.

The Cobram No. 1 Main has a capacity of 90 cusecs and supplies 28 miles of spur channels. The whole of the channel works in connexion with the supply of water to the Cobram area was completed during the year. Water was first turned into the Yarrawonga Canal on 3rd October, 1939, and a very satisfactory supply by gravitation was made available.

The area of 1,300 acres formerly supplied by the private Cobram Irrigation Company has been taken over and included in the constituted district, and this area, which is laid down in orchards, lucerne, and fodder crops, serves as an indication of the productive capacity of the district. Now that water for irrigation has been made available to a much larger area, very rapid development of the district is anticipated.

A complete survey and investigation of the soil types throughout the district have been made through the co-operation of the Commonwealth Council for Scientific and Industrial Research, the Department of Agriculture, and the Commission, and the information obtained will be of great value as a guide in the future expansion of irrigation in the Murray Valley area.

Careful supervision is being given to the layout of all properties for irrigation, and lectures and demonstrations on the preparation of land for irrigation were well attended by landholders.

A commencement was made with the channel works for the supply of water to the No. 3 Katamatite area, comprising over 36,000 acres, and excellent progress has been made.

The channel earthworks of this area, together with about 4 miles of the No. 2 Strathmerton Main Channel, are nearing completion.

It is expected that water will be available to a considerable portion of the area at the commencement of the forthcoming irrigation season, and that the whole of the works of the Katamatite area will be completed by the end of the year 1940.

Bridges, regulators, culverts, checks, and a siphon (7 feet in diameter and 9 chains in length) and numerous minor structures, all of steel and reinforced concrete design, have been built, involving the use of more than 3,000 tons of cement.

To date 125 miles of main and spur channels have been completed in the whole system, involving the excavation of approximately 2,500,000 cubic yards of earth.

The estimated total cost of the whole system is £900,000, and the expenditure to date has been approximately £360,000, including £35,000 from Unemployment Relief Funds. The maximum number of men employed at any one time has been 350, with a similar number of horses.

A new office for the Commission has been erected at Cobram.

BACCHUS MARSH AND WERRIBEE DISTRICTS.

Water deliveries for the year under review in the Bacchus Marsh District totalled 4,556 acre feet (water rights 3,255 acre feet and sales 1,301 acre feet, including 226 acre feet delivered from the High Level Channel). The total of the water rights apportioned to the district is 3,332 acre feet.

Through the local District Advisory Board, irrigators have repeatedly expressed the need for additional water storage to ensure adequate supplies, and have been advised from time to time of the progress made with investigations carried out by the Commission in regard to possible new storage sites. Pending the provision of additional storage, irrigators in this district are in favour of the adoption of a scheme for regulating the output of water from existing storages.

Maintenance of channels has been carried out with the funds allotted, but more effective work could be carried out if the greater portion of the money allocated could be made available early in the non-watering period.

The construction of water measuring wheels for use in all districts controlled by the Commission is still being carried out at Bacchus Marsh. During the year, 374 large and 90 small wheels were completed and despatched.

At Pykes Creek Reservoir, 45 acres of pine trees, 15 years old, were thinned out, the timber being cut into lengths and sold to cover the cost of the thinning operations.

In the Werribee District, because of the prolonged dry spell, with late summer heat-waves, 11,752 acre feet of water were delivered to irrigators. The total of the water rights apportioned to this district is 8,155 acre feet.

Land in the Werribee District is eagerly sought by market gardeners, and several sales have been effected at prices ranging up to £95 per acre.

MAFFRA-SALE DISTRICT.

The Maffra-Sale District was extended to include an area of 7,850 acres, to which water rights totalling 2,150 acre feet have been apportioned. Some idea of the adaptation of this additional area to irrigation may be gained from the fact that, although only 717 acre feet were under the compulsory irrigation charge for the first year, 1,580 acre feet of water were actually used—a tribute to the immediate benefits which landholders received from the extension of the Commission's activities in this district. A further area of 250 acres was reticulated and will be included in the district in the coming season.

There is no doubt that the record season which has been experienced by beet growers in this district is largely attributable to irrigation, and excellent returns were obtained from the 1,750 acres of this crop irrigated.

GENERAL.

In addition to the Main Systems and Districts before-mentioned, supplies were made available for the irrigation of limited areas in the Coliban District (8,254 acres), Western Wimmera and Wimmera United Districts (2,519 acres), and Carwarp District (50 acres).

TOWN SUPPLIES.

COLIBAN SYSTEM.

During the year, the policy pursued has been directed towards the completion of the new works in course of construction, and the maintenance of existing works.

The more important of these activities included :—

- (a) The commencement of the laying of a new 27-inch diameter concrete-lined steel welded main from No. 7 Reservoir to Bendigo, a distance of approximately $5\frac{1}{4}$ miles, to improve the supply to the high levels of Bendigo and Eaglehawk, and an 18-inch duplicate main connecting the reservoirs at Crusoe and Specimen Hill, for a total estimated cost of £41,000.
- (b) The completion of minor storages at Cockatoo Hill, Lockwood-Marong, Ironstone Hill and Longlea which proved beneficial in the regulation of supplies during the irrigation period. The approximate total cost of these storages was £17,500. Investigations of other sites of a similar character at Sheepwash Creek and Castlemaine are also proceeding.
- (c) The replacement by reinforced concrete pipes of a number of old timber culverts and worn out steel siphons on the subsidiary channels.
- (d) The restoration of the revetment walls and counterforts and floor of the pool of the overfall in the bywash of the Upper Coliban Reservoir which were damaged by flood waters, the cost of the work being £2,000.

In addition to the foregoing works, further improvements in the nature of replacements and enlargements to the reticulation systems of Bendigo and Castlemaine, amounting to 4 miles 30 chains, have been proceeded with under Unemployment Relief conditions. Approval has been given for similar works to be carried out at Sailor's Gully and Simpson's Road, Eaglehawk, and Campbell's Creek, Castlemaine, at an estimated cost of £2,050.

In order to meet the steady development in the towns supplied from the Coliban System, extensions and replacements totalling 44 chains of 3-inch diameter fibrolite mains have been effected.

During the year, a Register of all lands in the Coliban District irrigated prior to the year 1938-39 was compiled and future supplies of water for irrigation purposes are to be restricted to those irrigators included in the register. A total number of 1,387 "Authorities to Irrigate", aggregating 10,469 acres, is in course of preparation and these will be issued before the coming irrigation season.

The lifting of the Bendigo Emergency Water Supply Pipe Line from the Waranga Western Channel at Tandarra to Specimen Hill has been completed and the pipes returned to the districts for which they were originally intended, while the pumping stations have been dismantled and most of the pumps and motors have been transferred for the supply of water to large military camps at Puckapunyal, Bonegilla, and Darley.

MORNINGTON PENINSULA DISTRICT.

In order to ensure a sufficient water supply to the Mornington Peninsula Waterworks District when the extension of reticulation to the Bayside towns from Dromana to Portsea is brought into operation, it was considered necessary to duplicate the 24-inch diameter siphons on the Bunyip Main Race and to enlarge portion of the Cranbourne Pipe Line. Pipes for these works, which had already been purchased, but were on loan for use in the Bendigo Emergency Pipe Line, have now been returned to the district and their installation has been almost completed.

The main line from Bittern Reservoir to Dromana, some of the pipes for which had also been in use at Bendigo, has been completed and the Dromana Reservoir is ready for service.

Contracts for the supply and laying of the main pipe line along the foreshore from Dromana to Portsea have been let, and the line, which is now in course of construction, has been completed as far as Rosebud.

The installation of a 15-inch diameter pipe line from Frankston to the Humphries-road (South Frankston) Reservoir has been completed. Approval has been given for the enlargement of the 8-inch diameter outlet main from this reservoir and it will be replaced by 25 chains of 12-inch diameter concrete pipe.

Extensions to the reticulation in several of the Urban Districts have been carried out during the year.

At the request of the Commonwealth Government, water supplies have been made available to two extensive military camps at Mount Martha, and a commencement has been made on the work of supplying the Royal Australian Air Force Training School at Somers.

OTWAY DISTRICT.

Early in the year the final section of the main pipe line, from the Tank Hill Reservoir to the City of Warrnambool, was completed, and the entire length of the 78-mile pipe line from the Arkin's Creek catchment was put into full operation, water being supplied to the City of Warrnambool on the 1st November, 1939. The Commission's Agreement with the Warrnambool City Council provides for the supply of some 214,000,000 gallons of water per annum for a minimum annual payment of £7,000, water in excess of that quantity in any one year being paid for at the rate of 7d. per 1,000 gallons.

Minor extensions to the original scheme have already been carried out, including the laying of a supply main to serve the Allansford Factory of the Kraft Walker Cheese Co. Pty. Ltd., and a small extension in Terang.

Tree planting in the Arkin's Creek catchment and at the Tank Hill Reservoir has been proceeded with satisfactorily.

On the completion of the main works, operations in the district consisted almost entirely of general maintenance of the pipe lines and structures.

BELLARINE PENINSULA DISTRICT.

Work on the tunnel to connect the East and West Branches of the Barwon River, commenced during last year, is progressing. The total length of the tunnel will be 1,955 feet of which about half has been driven and the concrete lining in most of this section completed.

The reconditioning of the 54-inch diameter steel siphons on the main inlet channel is being continued. The pipes are being scraped and painted with tar enamel, and in some sections the pipe is being uncovered and placed on concrete piers to reduce corrosion. The completion of this work will add very considerably to the life of this valuable asset.

Temporary military camps, established at Ocean Grove and Torquay, were supplied with water from the district mains.

Some minor extensions were made to the Urban District reticulation systems.

WONTHAGGI DISTRICT.

Supplies to the towns of Wonthaggi, North Wonthaggi and Hicksborough have been maintained satisfactorily throughout the year. Two minor extensions to the reticulation of Wonthaggi have been approved and are now being carried out.

WIMMERA-MALLEE AND OTHER TOWNS.

The 37 townships whose reticulated water supply systems are operated by the Commission and 5 townships controlled by Waterworks Trusts under the supervision of the Commission received full supplies from the Wimmera-Mallee System during the year.

Of these towns, extensions of mains and remodelling of reticulation layouts were carried out to meet developments at Birchip, Beulah, Ouyen, Rainbow and Ultima and enlargements of urban storages were completed at Chinkapook, Manangatang, Patchewollock and Rainbow.

In the Urban Centres of Red Cliffs and Merbein, extensions of reticulation mains were laid to meet developments of the townships, and a chlorinator was installed at Merbein. A reticulated water supply to a workmen's home subdivision at Cliffside, Red Cliffs, is being installed.

At the towns supplied by the Commission from the Goulburn, Loddon, and Torrumbarry (Murray) Systems, certain water supply improvements were effected. In Corop, the gravity supply from the Waranga Western Main Channel has been improved by the provision of a 10-foot windmill and a 5,000-gallon tank erected on a 16-foot stand on the top of the western bank of this channel. This provision will not only improve the pressure of the town supply, but will also enable water to be made available during the period when the supply has to be shut off from the channel.

In order to ensure the service to the Mitiamo Urban District, 11 miles of the supply channel were remodelled by means of a dragline excavator. This work will also prove a benefit to the landholders in the Loddon United Waterworks District.

At Bacchus Marsh, the new fibrolite pipe mains laid in recent years enabled an efficient service to be given. Certain sections of old mains, totalling 120 chains, were scraped during the year.

DOMESTIC AND STOCK SUPPLIES.

WIMMERA-MALLEE SYSTEM.

The 1939-40 watering of this System was carried out in favourable conditions and all demands were met in full. As a result of the previous dry season, the quantities of water held in the Headworks Reservoirs were quite insufficient for requirements, but seasonal rains over the catchments enabled the watering to be commenced without undue delay and also permitted considerable volumes of water to be stored for the 1940-41 watering. As conditions at present are even worse than in 1938-39, the Commission will be faced with a greater shortage of water for the 1941-42 season. It appears that it will be necessary for the watering in that season to be commenced by pumping non-gravitation supplies from some reservoirs to supplement limited flows available by gravitation from other storages. The need for the extension of the headworks of the Wimmera-Mallee System is, therefore, now more urgent than at any previous period, and could be met by the construction of the proposed reservoir on the Glenelg River at Rocklands, near Balmoral, as recommended by the Parliamentary Public Works Committee.

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

During the year, full supplies of water for the irrigation areas adjacent to Horsham and Murtoa were provided for 1,340 acres of orchards, vineyards and market gardens, and for 1,179 acres of permanent pastures and fodder crops.

A commencement has been made with the remodelling of the system which supplies the Quantong irrigation area. The work involves the replacement with a 36-inch diameter concrete pipe, in an improved location, of the existing 27-inch diameter siphon, 50 years old, under the Wimmera River.

About $4\frac{1}{2}$ miles of new channel were constructed to improve the distribution of water by connecting the Murtoa and Bangerang channel systems.

A new meter depot has been established at Murtoa Centre to repair and test, under standard conditions, all urban meters in the Wimmera-Mallee Division.

The installation of this depot will considerably reduce the cost of keeping in efficient order the large number of meters in the various townships.

It is expected that the depot will result in marked savings and that additional revenue will be received as a result of greater accuracy in the measurement of excess water consumption.

BIRCHIP, WYCHEPROOF, LONG LAKE, SEA LAKE, TYRRELL, TYRRELL WEST, AND TYNTYNDER DISTRICTS.

In the above districts, works were confined chiefly to maintenance of existing channels and structures.

Works which were undertaken for the prevention of sand drift into channels comprised—(a) the laying of about 2 miles of 24-inch diameter pipes in deep cuttings through troublesome ridges, (b) the deviating of some 8 miles of channels on to country less likely to drift, and (c) the fencing in of reservations, in sections 3 chains wide, over an approximate length of 6 miles parallel to channels which are subject to more or less constant drift when adjacent land is cultivated. In these reserves, if no natural growth exists, plantings are made of various kinds, the most successful so far being rye corn, which is allowed to re-seed the area and so maintain a permanent cover. This has proved very effective in intercepting sand which would otherwise fill the channel and perhaps block the flowing water.

With a view to effecting some further reduction of sand drift in channels in certain districts, the Commission brought into operation during the year a By-law (No. 3920) enabling it to prohibit the clearing, cultivating or fallowing of land, likely to drift, within one chain of any channel under the control of the Commission.

These measures do not, however, reach the root of the trouble, which can only be overcome at its origin by the proper treatment and cultivation of the land affected.

A new public tank was constructed in Tyntynder District in the Parish of Margooya.

MALLEE DISTRICTS GENERALLY.

An inquiry was made during the year by the Parliamentary Public Works Committee into the "Position of Settlers on Isolated Holdings in Mallee Districts, with Respect to the Problem of Water Supplies". After hearing evidence from a number of settlers and representatives of the Lands Department and the Commission, the Committee made the following recommendations, viz. :—

- (A) That the State Rivers and Water Supply Commission provide water, at no extra charge, to those holdings where the cost of supply is no more than 50 per cent. above the average operating costs in the district concerned.
- (B) That a Committee be constituted of representatives of the State Rivers and Water Supply Commission, the Lands Department, and the Department of Agriculture, to determine the just and economical method of dealing with all other existing cases and all cases that may occur in the future, on the basis of—
 - (1) the provision of an alternative means of supply, such as by artificial catchment or individual pumping ;
 - (2) the transfer of settlers to a more suitable area for wheat growing, or to an irrigated area ;
 - (3) the compensation and removal of settlers from wheat growing.

(Waterworks Districts not part of the Wimmera-Mallee System.)

NORMANVILLE DISTRICT.

During the year the second annual watering was carried out in this new district which receives its supplies from the Waranga Western Extension Channel.

The channel system was completed and a number of structures installed to deal with catchment water.

CARWARP, CARWARP CENTRAL, COREENA, AND YELTA DISTRICTS.

Supplies for these districts which are pumped from the River Murray were given as usual. Considerable areas, which have reverted to the Crown and are now leased for grazing, are supplied with water on a sales basis.

MILLEWA AND MILLEWA CENTRAL DISTRICTS.

Water for these districts is drawn from the River Murray, a series of pumps being necessary to distribute supplies, which were given in full to all settlers. Crown Lands leased for grazing were also supplied under sales by arrangement.

Works were confined to the general maintenance of the systems.

WALPEUP WEST DISTRICT.

The public water services of this district comprise 109 bores which have been maintained for this purpose during the year, no new bores having been sunk.

The majority of landholders now have private bores for the supply of their holdings and the demand on the public bores is decreasing excepting in dry years, when it is difficult to cope with the requirements of travelling stock. The public bores were not intended for this purpose and can hardly be expected to meet such requirements.

WERRIBEE DISTRICT.

The usual supplies of water for domestic and stock requirements were provided in this district.

Additional areas of rateable land have been acquired by the Commonwealth Government, and the question as to the advisability of excising these portions from the district, thereby reducing the annual distribution costs, is receiving the consideration of the Commission.

PUMPING.

The main pumping stations operated by the Commission are those situated on the River Murray to provide water supplies to the important irrigation districts at Red Cliffs, Merbein, and Nyah and to the Millewa, Carwarp and Coreena Waterworks Districts. In addition, there are numerous plants used for pumping supplies for other districts and for many townships.

The main construction work undertaken during the year was on the continuance of operations for the electrification of the old steam-operated pumping plant for the Merbein Irrigation District near Mildura, the main power centre being the Red Cliffs Pumping Station. This change-over was planned to be carried out in three stages as detailed in the last Annual Report. The first and second stages were completed last year and work on the third or final stage is proceeding. On this stage an additional large water-tube boiler has been installed at Red Cliffs and the foundations for the last 600 H.P. motor at Merbein are well advanced. This motor is being imported from England and delivery is expected late in July, 1940. All materials for the pump and new suction mains are on the site. Tenders for the final turbo-alternator for installation at Red Cliffs have been received and are now under consideration.

To secure the Nyah Irrigation District against a possible failure of water supply, the installation of a new complete steam-driven unit of 48 cusecs capacity was approved, and this plant is now in course of erection in the pumping station on the River Murray. Certain items, including a new water-tube boiler, centrifugal pump, and steel framework for buildings, have been let under contract. The main power unit, a triple expansion high speed engine of 700 H.P., will be transferred from Merbein where it has been replaced by an electric motor. This unit will be thoroughly re-conditioned before installation at Nyah. Foundations and general erection of buildings are in hand and about 30 per cent. completed. When this new plant is in operation the old plant of 42 cusecs capacity will be maintained as a spare unit to meet contingencies. The new plant should be ready for load about January, 1941.

MURRAY WORKS AND MAIN STORAGES.

MURRAY WORKS.

Hume Reservoir.

In connexion with the additional works being carried out at this reservoir, typical samples of the earth in the main embankment were obtained and tested in the Commission's laboratories at the works and in Melbourne. For the placing of stone filling on the upstream face of the embankment a quantity of plant was ordered, including power shovels, motor trucks, pontoons, hopper barges, towing launches, workshop machinery and quarry plant. All this plant with the exception of the power shovels is on the works. The amount of stone filling placed during the year was 10,500 cubic yards. The quarry has been opened out and the roadway to the dam completed.

General maintenance was carried out on all parts of the embankments.

Yarrawonga Weir.

The spillway gates, sluice gates, and operating gear for both the New South Wales and Victorian systems were completed, tested, and the contracts finalized. The gates and overhead machinery were painted, the operating gear fitted with covers, and enclosed stairways were installed. These works completed the spillway structures.

The weir was put into operation on 17th July, 1939, and was at full supply level on 12th August, 1939.

The spillway gate system functioned satisfactorily and maintained the desired water level throughout the year. The offtake regulator was completed and was operated to pass irrigation requirements for the Cobram section of the Murray Valley system.

Flood waters in September, 1939, caused some scouring along the downstream toe of the embankment. Repairs were effected and a deflecting stone groyne constructed to prevent a repetition. Stone beaching downstream of the spillway was repaired and extended.

General works included the erection of hand railing over the spillway and embankment.

Road deviations and alterations to the drainage system of Mulwala township in New South Wales were completed. The roadway across the embankment was formed and gravelled.

A ceremony was held at the works on 27th October, 1939, by the residents of Yarrawonga to mark the completion of the construction of the weir.

Weirs and Locks—Torrumbarry and Mildura.

General maintenance was carried out at these works. The trestle weirs at each of these structures have been in the river regulating the flow since the beginning of 1940.

At Torrumbarry Weir, the trestle which was carried downstream and damaged in the flood of March, 1939, was recovered and repaired. A design was completed of steel trestles to replace the existing timber closing-trestle at the right abutment of this weir, and the operation of the structure will be facilitated by this improvement.

MAIN STORAGES.

COLIBAN STORAGES.

Lauriston Reservoir.

A description of this work was given in the last Annual Report. Work proceeded throughout the year on the excavation of overburden and rock in the foundations of the dam. To date 5,800 cubic yards of overburden and 11,700 cubic yards of rock have been excavated.

By January, 1940, the erection of all construction plant and the diversion of the river by means of steel and timber coffer dams were completed. Concreting of the first buttresses in the river commenced on 1st February, 1940, and by 30th June, 1940, work was proceeding on six buttresses. Good progress was made, the concrete placed to 30th June, 1940, being 10,500 cubic yards.

A portion of the permanent 30-inch outlet pipe line through the dam was installed and trash racks were built to protect the outlet valves.

In August, 1939, the construction of the earthen embankment across a saddle in the hills to the west of the main structure was commenced. Particular attention was given to the consolidation of the clay and earth fill, and by the end of June, 1940, the bank was within 6 feet of its completed crest level. The quantities of concrete, earth and stone beaching placed were 400 cubic yards, 14,500 cubic yards and 1,235 cubic yards respectively.

Contracts were let for the supply of sand and stone, tamping roller, outlet regulating valves, outlet pipes and cone valves, and it is expected that work will be sufficiently advanced to enable water to be stored during the winter of 1941.

The area to be submerged was cleared of timber, which has been used for camp firewood.

The number of men employed on 30th June, 1940, was 235.

Malmsbury Reservoir.

The installation of the movable steel crest gates, described in the last Annual Report, to increase the capacity of the Malmsbury Reservoir has been completed, and the reservoir is available to store the additional 2,100 acre feet of water. The total capacity is now 14,400 acre feet.

The works were carried out under Unemployment Relief conditions, and the average number of men employed was 45.

Upper Coliban Reservoir.

Floods of 1939 caused considerable damage to the energy dissipator pool in the spillway channel. One of the buttresses and a considerable portion of the floor were destroyed. This damage has now been repaired, 342 cubic yards of concrete having been placed.

Repairs were carried out to the walkway over the spillway and the floor of the bywash was grouted.

GOULBURN STORAGES.

These consist of Eildon Reservoir, Goulburn Weir and Waranga Reservoir. These works have been carefully maintained, and are in a satisfactory condition.

At Goulburn Weir the gates and gearing were overhauled. A scour in the river below the weir is receiving attention.

At Waranga Reservoir a further section of the back face of the embankment was trimmed, resoiled and planted with grasses.

WIMMERA STORAGES.

These storages comprise Wartook Reservoir, Fyans Lake, Lake Lonsdale, Pine Lake and Taylors Lake.

As far as funds permitted, the works generally have been well maintained during the year. The new outlet gate at Wartook operated satisfactorily. At Taylors Lake and Pine Lake, additional funds are required to bring the works to a satisfactory standard.

Repairs were carried out to the outlet valve system at Lake Lonsdale.

GLENMAGGIE RESERVOIR.

The drainage system has been overhauled and general maintenance carried out.

LAANECORIE RESERVOIR.

Two spillway gates have been repaired, the back of the bank resoiled and repairs to the concrete bywash carried out. The works have been well maintained.

WERRIBEE AND BACCHUS MARSH STORAGES.

Operations at the Melton Reservoir and at Pykes Creek Reservoir and Tunnel were confined to minor works and general maintenance.

LITTLE MURRAY WEIR.

General maintenance was carried out but extra funds are required to bring this structure to the desired standard of efficiency.

INVESTIGATION AND DESIGN OF NEW IRRIGATION AND WATER SUPPLY PROPOSALS.

The activities of the Investigations and Designs Branch have been extended during the year, and have embraced investigations for the further economic development of the existing water supply systems, and the design of dams for new storages, as well as of diversion works, while progress has been made on the comprehensive investigation of the water resources of the State.

Brief descriptions of the more important of these activities are given in the following pages.

CASTLEMAINE WATER SUPPLY.

Alternative proposals to the Golden Point Reservoir enlargement, for the improvement of the water supply to Castlemaine, were considered, and a design for a concrete-lined excavated basin at Kalimna Point, Castlemaine, was prepared. The capacity of this basin is 1,000,000 gallons, and it is to be supplied from the Golden Point to Castlemaine pipe line at Duke-street, by means of a 12-inch concrete lined steel pipe. The site was chosen with a view to the possibility of an additional storage basin and a filter plant being provided at a later date.

OTWAY WATERWORKS DISTRICT.

A topographical survey was completed of the Arkins Creek catchment area, and a site for a storage reservoir has been located for the possible future supplementing of the supply to the Western District towns now fed from diversion weirs constructed on the creeks in this watershed.

GLENELG RIVER DEVELOPMENT—ROCKLANDS HIGH-LEVEL SCHEME.

The increasing demands for water supplies from the existing resources to meet the requirements of the Wimmera and Mallee districts, have made it imperative that consideration be given to the development of the upper Glenelg River catchment.

With a view to augmenting the existing storage facilities, it is proposed to divert water from that river into Taylors Lake by means of a channel via Barton Swamp, converting this latter natural depression into a subsidiary storage, and to construct a main reservoir on the Glenelg River itself in the vicinity of Balmoral.

While the Rifle Butts site, the first selected for investigation, presented certain favourable aspects, continued examination by shaft sinking disclosed that suitable foundations were not to be encountered at economical depth over the greater portion of the site.

At the Rocklands site, about 10 miles upstream, however, most favourable conditions were met with, a formation of dense porphyritic rock extending over the whole of the dam site, close to the surface, constituting good foundation material.

Preliminary designs were prepared for a storage reservoir of 264,000 acre feet capacity.

A channel fed from this reservoir, at a higher level than that supplied by diversion direct from the Glenelg River at Balmoral, showed considerable saving, the route being shortened by carrying the channel through a tunnel, thereby cutting off some 14 miles of river below the dam site and reducing the length of the channel itself by about 10 miles.

A report of the alternative Rocklands high-level scheme was prepared for presentation to the Public Works Committee, which has recommended that the works be carried out at an estimated cost of £874,000.

Final location was decided upon, and the engineering surveys partly completed. The detailed designs of the dam, channel and structures are in course of preparation.

MORNINGTON PENINSULA DISTRICT.

Dromana-Portsea Extension.

The extension of the Mornington Peninsula scheme, to supply the towns bordering Port Phillip Bay from Dromana to Portsea, was further advanced.

Plans for the main supply pipe and reticulations of the several towns were completed, and alternative designs for the storage basins for Sorrento and Portsea were prepared.

A concrete lined excavated tank of 800,000 gallons capacity proved to be the most advantageous for Sorrento. Designs were completed, and the work is now in course of construction.

Bunyip-Beaconsfield Aqueduct.

Plans were prepared for the regrading of the diversion channel from the Bunyip Weir to the Beaconsfield Reservoir, in connexion with the increased inflow to that storage.

Bittern Reservoir.

Designs were completed for an outlet control tower at the Bittern Reservoir for regulating the supply to the Bittern-Dromana-Portsea Extension.

BELLARINE PENINSULA DISTRICT.

Birregurra Township Water Supply.

A report was prepared on the proposed water supply for Birregurra, and alternative schemes for the conveyance by pipe and channel of water from the existing channel above the Pennyroyal Creek siphon to the storage site were considered.

RIVER MURRAY WORKS.

Hume Reservoir—Embankment.

The investigation into the stability of the Hume Reservoir Embankment was continued. A soil mechanics laboratory was constructed and equipped with soil-testing apparatus, some of which was imported from overseas and some was manufactured locally to the Commission's own design. Boring of the embankment was commenced, and a series of tests carried out on samples of the earth fill.

In this connexion, studies of the latest developments in the science of Soil Mechanics have been continued, and an analysis made of the test results in their relation to the stability not only of the Hume Embankment, but of Earth Dams in general.

The establishment of this Soil Mechanics Laboratory at the Hume Reservoir has already enabled valuable knowledge to be gained for application by the Investigation and Designs staff to the design of such dams.

As a result of these analyses, recommendations for the placing of additional rock fill on the Earth Dam at Hume Reservoir can be made, and interim reports embodying such suggestions have been prepared.

Hume Reservoir—Increasing Capacity.

Preliminary investigation into the cost of increasing the capacity of this reservoir to 2,000,000 acre feet has been made. This would involve the raising of Bank No. 2, and constructing Bank No. 3 on the western side of the reservoir, and the protection of the main embankment above the level of the existing upstream slab.

An aerial survey has been made of the township of Tallangatta for the purpose of ascertaining the extent of the encroachment of a raised full-supply level within the township boundary.

WATER RESOURCES INVESTIGATIONS.

Werribee River Basin.

The question of the provision of additional storages in the Werribee River basin to safeguard the Werribee and Bacchus Marsh Irrigation Districts in their present state of development has been further considered, and surveys made of possible storage basins on the Lerderderg River at Blackwood and Darley, on Goodman's Creek near its junction with the Lerderderg, and at Cobbledick's Ford and Vollant's Road on the lower Werribee River.

After geological investigation of the respective sites, foundation conditions were investigated by shafts and bores, and samples of materials taken from selected areas in the vicinity of the dam sites. These samples have been tested with a view to determining their suitability.

Contour surveys of the actual dam sites have been made in each case to enable designs to be prepared for comparison.

A design for a dam on the Lerderderg River near Darley is at present being prepared.

Loddon River.

The waters of the Loddon River were first made use of in about 1882, when domestic and stock supplies were made available by the Loddon United Waterworks Trust, the water being diverted at the Bridgewater and Kinypanial Weirs. Irrigation districts were later constituted, under the control of Trusts, which constructed diversion works to provide these supplies. The State Headworks at Laanecoorie were constructed in 1891, and rapid development took place in the irrigation districts. By 1894 there were 4,660 acres under irrigation, and the areas were extending. Development of irrigation in the Boort District, utilizing Loddon River water only, continued until 1923, when Goulburn River water was made available by the extension of the Waranga-Western Channel to the Loddon River, a distance of 98 miles from Waranga Basin.

With the further extension westward of this channel in 1929, considerable quantities of Loddon River water have been made available for domestic and stock supplies in the Wimmera-Mallee areas. It is with a view to the better utilization of the Loddon River water for irrigation and the increasing of the contribution of that river to the Wimmera-Mallee and Normanville domestic and stock supplies that the investigation of the water resources of the Loddon River is being undertaken.

To enable a more effective use to be made of the fluctuating flows of the Loddon River, the provision of increased storage is required. Possibilities of storage which have been considered are :—

- (a) The diversion of Loddon River water to a storage in a natural basin near Boort, known as Woolshed Swamp.
- (b) Additional storage on the river, above Laanecoorie.

Proposals for the conversion into a storage basin of the Woolshed Swamp, comprising a depression of 1,200 acres (situated about $3\frac{1}{2}$ miles south of Boort), have been investigated and estimates prepared.

The works necessary would include the construction of embankments to impound 58,000 acre feet of water; the conversion of the existing drop-bar control at the Loddon Weir, at Janiember West, to mechanically-operated sluice-gate control; the construction of a diversion channel to the Woolshed Swamp, involving the enlargement of the existing Waranga-Western Channel; and the construction of inlet and outlet works. The investigation showed that the cost would be almost prohibitive in relation to benefits which would be derived, and alternative possibilities along the Loddon Valley are being investigated.

In extending the investigation to the possibilities of additional storage on the main stream, several sites have been examined, and surveys are at present being carried out at Cairn Curran and Baringhup. A geological investigation is being made in connexion with the design of proposed dams at these sites on the Loddon River.

Avoca River.

An investigation into the possibilities of the conservation of water in the Avoca River is in progress.

Numerous sites along that river have been examined, and surveys in the vicinity of Gavoc East are being carried out to determine the suitability of this locality for a storage.

Goulburn River.

The possibility of constructing a storage in the Goulburn River at Mitchellstown, at approximately the upstream extremity of the Goulburn Weir Backwater (Lake Nagambie), is being considered.

Surveys are at present being carried out between Seymour and the proposed dam site.

River Murray.

A comprehensive investigation is now being carried out by the Commission into the question of the utilization of the Victorian proportion of the waters of the River Murray.

MURRAY VALLEY IRRIGATION DISTRICT.

Investigation and designs, involving the drawing of some 279 plans, have been completed for the layout of channels required to serve a further area of 46,473 acres in the Murray Valley Irrigation Scheme.

This section comprises the balance of the No. 1 (Cobram) area, portion of the No. 2 (Strathmerton) area, and the whole of the No. 3 (Katamatite) area, and the channel design provides for 93½ per cent. of the total area to be commanded by gravitation.

The following information in relation to these areas and channels shows the amount of design work involved :—

System No.	Area (Acres).	Channels (Length in Miles).	Capacities (Cusecs).	Earthworks (Cubic yards).	Structures (Number).	Estimated Cost.
Part No. 1 (Cobram)	2,879	5½	16-10	25,100	55	£ 5,806
Part No. 2 (Strathmerton)	6,149	9½	600-10	322,469	77	38,920
No. 3 (Katamatite)	37,445	59½	130-10	642,000	412	85,300
Totals	46,473	74½	600-10	989,569	544	130,026

As a result of investigations, the standardization of each of the main classes of channel structures, viz., Spur Offtake Regulators, Checks and Drops, Culverts, Combined Structures, and Measuring Devices, has been completed, and as an outcome of this work the number of types within each class has been reduced to a minimum, thus enabling a considerable saving to be made in the costs of structures for the Murray Valley Scheme.

MILITARY ENCAMPMENTS.

The rapid expansion of the Australian Military Forces during the past year necessitated the establishment of a number of new camps to accommodate recruits for both the A.I.F. and the Home Defence Forces. Camps for internees have also been established.

Many of the water supplies to these camps have been provided through the Commission's organization, initial contour surveys being made by its surveyors, reticulation plans subsequently prepared, and contracts let for pipes and storage tanks. Most of the work has been done by day labour under the supervision of officers of the Commission.

Water supplies dealt with by the Commission include the Seymour Militia Camp, the A.I.F. Camps at Puckapunyal, Bonegilla and Darley, and the Tatura No. 1 Internment Camp. The reticulation to the Seymour Old Camp was reconstructed and the Southern Command School, close to Seymour Old Camp, was supplied from the Seymour Waterworks Trust's main.

In the huttled camps, viz., the Seymour Command School, the three A.I.F. Camps, and the Tatura Internment Camp, provision was made for fire-service in addition to the ordinary water supply requirements.

In providing pumping units for these camps the Commission was fortunate in having six pumps from the Bendigo Emergency Pumping Scheme available. At short notice these pumps were altered and put into operation at Puckapunyal, Bonegilla and Darley Camps.

Complete sewerage and sewage treatment works were constructed at the Puckapunyal A.I.F. Camp and the Tatura Internment Camp. At Bonegilla and Darley it was decided to provide underground drainage schemes to deal with sullage waters only, but these schemes may later be incorporated in complete sewerage systems.

MISCELLANEOUS.

Goulburn Division.

A design of a bridge and outfall for the Rodney Main Drain at Wells Creek was prepared; also of a siphon on Congupna No. 1 Channel under O'Keefe's Creek Drain; and of a regulator at Yambuna Outfall. A concrete flume was designed to replace No. 2 structure on the Goulburn-Waranga Channel.

General.

Counters and recording apparatus for "Dethridge" water meters have been designed to permit of the use of equipment of Australian manufacture.

WATERWORKS TRUSTS UNDER SUPERVISION OF COMMISSION.

The year under review has been marked by widespread activity in the construction of waterworks by Local Authorities, of which there are now 133, including 116 Waterworks Trusts and 17 Local Governing Bodies.

As the result of the action of the Government in continuing to grant financial assistance on a liberal basis to enable desirable improvements and extensions to be made to existing town water supply schemes and to facilitate the installation of new schemes, many such works have been constructed or are now under construction, while a number of Local Authorities are preparing detailed plans and specifications.

Under this scheme, grants were allocated to 41 Waterworks Trusts and Local Governing Bodies during the year, making the total Authorities to benefit now 86. No less than 42 of these Authorities commenced the construction of works during the year, and of these many have been completed together with works which were commenced in the preceding year. However, owing to the war situation, the commencement of all further works has been deferred pending examination of the position by the Federal Co-ordinator of Works.

The **First Mildura Irrigation Trust** lined with concrete further lengths of the main channels to reduce leakage losses and damage to lands, and also constructed main drainage works in the new Koorlong Drainage Area.

The **Ballarat** Water Commissioners continued the installation of new pipe mains to provide an increased supply to the higher portions of the city.

The **Colac, Euroa, Myrtleford, Nhill, Riddell's Creek, and Sunbury** Waterworks Trusts undertook improvements to their main pipe lines, with the object of increasing the supplies to the respective towns.

The **Donald and Trentham** Waterworks Trusts are constructing additional storage reservoirs to enable increased supplies to be maintained during summer periods.

The **Drouin** Waterworks Trust has constructed a new reservoir and installed new pipe mains to enable an increased supply of improved quality to be maintained to the town and butter factory.

The recently constituted Waterworks Trusts at **Foster** and **Lismore** are constructing the works to supply these towns with water.

The **Hamilton** Waterworks Trust is replacing the remaining section of its main pipe line with larger pipes, thus providing for the development of the town.

The **Lorne** Waterworks Trust is enlarging its main pipe line from the Erskine River and is carrying out extensive improvements to the reticulation to provide for the increasing demand in the town, particularly on the higher levels and at North Lorne.

The **Marysville** Waterworks Trust has installed a new offtake weir at a higher level on the Steavenson River with a new main pipe line to the town, thus providing an increased supply and enabling higher levels to be supplied.

The **Portland** Waterworks Trust has added to its borehole pumping plant, and has installed new mains and a stand-pipe to supply South Portland.

The **Tatura** Waterworks Trust constructed an additional storage basin and carried out improvements to the reticulation to improve the available supply during periods of peak demand.

In many towns the reticulation systems were extended and improved by the installation of larger mains, pumping plants were increased in capacity, and other works of improvement were carried out. Such improvements were undertaken at **Ararat, Bairnsdale, Beaufort, Boort, Charlton, Cobram, Elmore, Leongatha, Maffra, Merrigum, Moe, Morwell, Port Fairy, Rutherglen, Shepparton, St. Arnaud, Swan Hill, Trafalgar, Traralgon, Violet Town, Wahgunyah, Wangaratta, Warburton, Warragul, Wedderburn, and Woodend.**

Plans and specifications have been completed, or are in course of preparation, for proposed improvements to works at Apollo Bay, Benalla, Coleraine, Corryong, Dunolly, Echuca, Healesville, Hepburn, Korumburra, Maryborough, Mildura (Urban District), Orbost, Rochester, Tungamah, Warrnambool and Yarrawonga, while investigations were made in connexion with proposed new town supplies at Cowangie, Dunkeld, Glenthompson, Willaura and Underbool.

TOTAL STORAGES IN STATE.

In 1902 the total capacity of storages in the State was 172,000 acre feet. The present capacity is 1,963,200 acre feet. The Hume Reservoir, designed to contain 2,000,000 acre feet (half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria) now has a capacity of 1,250,000 acre feet. When the final stage of this work has been completed (involving further approval of the interested State Governments), and the Lauriston and Glenmaggie Reservoirs are completed, the combined capacities of Victoria's storages will be 2,399,700 acre feet.

EXISTING STORAGES.

Storage.										Full Supply Reduced Level.	Capacity.	
										Feet.	Acre Feet.	Acre Feet.
<i>Goulburn System—</i>												
Eildon .. .. .	..	..	..	..	..	..	..	..	..	823·00	306,000	
Goulburn Weir .. .. .	..	..	..	..	..	..	..	..	..	408·00	20,700	
Waranga .. .. .	..	..	..	..	..	..	..	..	..	398·00	333,400	
												660,100
<i>Murray-Loddon System—</i>												
Hume Reservoir .. .. .	..	..	..	1,250,000	..					606·00 (a)		
Yarrawonga Weir .. .. .	..	..	..	95,120	..					412·80 (b)		
Torrumbarry .. .. .	..	..	..	28,900	..					285·00 (c)		
Euston .. .. .	..	..	..	31,320	..					159·00 (c)		
Mildura .. .. .	..	..	..	29,360	..					116·00 (c)		
Wentworth .. .. .	..	..	..	38,140	1,472,840					104·15 (c)	736,420	
Kow Swamp .. .. .	..	..	..	..	..	..	..	..	..	272·00	40,860	
Laanecoorie .. .. .	..	..	..	..	..	..	..	..	..	527·00	6,650	
<i>Kerang North-West Lakes—</i>												
Third, Middle, Reedy .. .. .	..	..	..	..	..	..	..	..	..	244·75		
Kangaroo, Racecourse, Charm .. .. .	..	..	..	..	..	..	..	..	..	241·00		
Cullens .. .. .	..	..	..	..	..	..	..	..	..	240·25	69,400	
Lake Boga .. .. .	..	..	..	..	..	..	..	..	..	226·50	29,650	
												882,980
<i>Wimmera-Mallee System—</i>												
Fyans Lake .. .. .	..	..	..	..	..	..	..	..	..	673·00	17,100	
Lake Lonsdale .. .. .	..	..	..	..	..	..	..	..	..	618·25	53,300	
Wartook .. .. .	..	..	..	..	..	..	..	..	..	1,500·00	23,800	
Taylor's Lake .. .. .	..	..	..	..	..	..	..	..	..	482·33	30,000	
Pine Lake .. .. .	..	..	..	..	..	..	..	..	..	475·00	52,000	
Green Lake .. .. .	..	..	..	..	..	..	..	..	..	452·50	6,600	
Dock Lake .. .. .	..	..	..	..	..	..	..	..	..	442·00	4,800	
Moora .. .. .	..	..	..	..	..	..	..	..	..	723·50	5,100	
Lower Wimmera Weirs .. .. .	..	..	..	..	..	..	..	..	..	..	2,870	
Batyo Catyo (Avon Regulator) .. .. .	..	..	..	..	..	..	..	..	..	402·00	5,000	
Lake Whitton .. .. .	..	..	..	..	..	..	..	..	..	375·00	1,300	
Township Reservoirs and Mallee Tanks .. .. .	..	..	..	..	..	..	..	..	..	..	6,400	
												208,270
<i>Maffra-Sale System—</i>												
Glenmaggie .. .. .	..	..	..	..	..	..	..	..	..	244·00	104,500	
Stratford Service Basins .. .. .	..	..	..	..	..	..	..	..	..	..	20	
												104,520
<i>Coliban System—</i>												
Upper Coliban .. .. .	..	..	..	..	..	..	..	..	..	1,652·00	25,700	
Malmsbury .. .. .	..	..	..	..	..	..	..	..	..	1,477·00	14,400	
Spring Gully .. .. .	..	..	..	..	..	..	..	..	..	899·00	2,000	
Subsidiary Reservoirs .. .. .	..	..	..	..	..	..	..	..	..	..	4,700	
												46,800
<i>Werribee System—</i>												
Pykes Creek .. .. .	..	..	..	..	..	..	..	..	..	1,306·00	21,000	
Melton .. .. .	..	..	..	..	..	..	..	..	..	273·00	19,100	
												40,100
<i>Bellarine Peninsula System—</i>												
Wurdee Boluc .. .. .	..	..	..	..	..	..	..	..	..	441·50	10,000	
Service Basins .. .. .	..	..	..	..	..	..	..	..	..	..	760	
												10,760
<i>Mornington Peninsula System—</i>												
Lysterfield .. .. .	..	..	..	..	..	..	..	..	..	221·50	3,400	
Beaconsfield .. .. .	..	..	..	..	..	..	..	..	..	340·00	740	
Frankston .. .. .	..	..	..	..	..	..	..	..	..	255·00	660	
Mornington .. .. .	..	..	..	..	..	..	..	..	..	244·00	260	
Bittern .. .. .	..	..	..	..	..	..	..	..	..	250·00	480	
Service Basins .. .. .	..	..	..	..	..	..	..	..	..	..	260	
												5,800
<i>Otway System—</i>												
Service Basins .. .. .	..	..	..	..	..	..	..	..	..	..		1,080
<i>Miscellaneous—</i>												
Eppalock .. .. .	..	..	..	..	..	..	..	..	..	530·00	1,200	
Wonthaggi .. .. .	..	..	..	..	..	..	..	..	..	238·00	1,550	
Wonthaggi Service Basins .. .. .	..	..	..	..	..	..	..	..	..	..	10	
Newstead .. .. .	..	..	..	..	..	..	..	..	..	806·00	30	
												2,790
Total capacity of existing Storages .. .. .										..	..	1,963,200
ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE OF CONSTRUCTION.												
<i>Coliban System—</i>												
Lauriston .. .. .	..	..	..	..	..	..	..	..	..	1,568·00		16,000
FURTHER STORAGE WHICH COULD BE PROVIDED BY COMPLETION OF EXISTING WORKS.												
<i>Maffra-Sale System—Glenmaggie to 150,000 acre feet</i>										255·00	45,500	
<i>Murray System—Hume Reservoir to 2,000,000 acre feet (half share to Victoria)</i>										626·00	375,000	420,500
Total capacity of Storages when works are completed .. .. .										..	..	2,399,700

(a) One foot below New South Wales Standard Datum.—(b) New South Wales Water Conservation Datum.—(c) River Murray Lock Site Datum.
 All other levels are to Victorian Railways Datum.

DRAINAGE AND FLOOD PROTECTION.

DRAINAGE DISTRICTS.

Works for the drainage of irrigated lands have been continued. In the Rodney District, 7 miles of main drains, as well as many structures, were installed. In Shepparton, 7 miles of minor drains were constructed or remodelled and $1\frac{3}{4}$ miles of the Marionvale Main Drain completed. In Rochester, 4 spur drains on one extension of 3 miles were constructed, and the Main Nanneella Drain was redesigned and enlarged, 3 miles having been completed to date. This system has been overhauled and improved and 93 drainage inlets have been constructed. At Tongala, $5\frac{1}{2}$ miles of new drains were completed, while a dragline excavator has been continually employed cleaning out the main drains.

Work is proceeding on drainage works for the Riverslea area in the Maffra-Sale District.

In all of these drainage districts maintenance operations have been carried out, and, as in the irrigation districts, this work has been increased as the result of the winter floods. The construction of concrete inlets into the drains will materially reduce the siltation of the drains.

In the Kerang East Drainage District, maintenance work was carried on, 15 miles of drains being cleaned out, and silt and weeds removed by means of a dragline excavator.

The reconditioning of drains in the Cohuna Drainage District was further advanced, some 17 miles being completed, making a total of 64 miles of drains which have been deepened and regraded to afford adequate drainage facilities to holdings.

With the exception of a few minor works, the Woorinen drainage system at Swan Hill was completed by the construction during the year of 4 miles of sub-surface drains and 8 miles of open cut drains, together with the necessary structures. Two dragline excavators were engaged on the earthwork portion of the scheme. A commencement has been made with the extension of the Woorinen drainage system to serve an adjoining area of 380 acres, known as the Murrawee area.

In the Tresco area, re-conditioning of the drainage system was carried out, approximately 8 miles of main drains having been deepened and regraded, and 40 chains of sub-surface pipe drains laid.

The sub-surface drainage systems installed in the Red Cliffs and Merbein Districts have operated efficiently since their installation and have proved of great benefit to the areas served. The general improvement, as a result of the construction of these systems, is such that many areas previously affected by seepage are now being replanted.

In the Werribee Drainage District, all drains were effectively maintained and the system functioned satisfactorily throughout the year. An additional 46 chains of drain to connect the Research Farm of the Commonwealth Council for Scientific and Industrial Research to the Main Drain were constructed at the cost of that Council.

FLOOD PROTECTION DISTRICTS.

Kooweerup and Cardinia.

In the Cardinia District the work of remodelling the existing Cardinia and Toomuc Drains for respective distances of $2\frac{1}{4}$ and $2\frac{1}{2}$ miles upstream from the "V" Junction has been completed and similar work is now in progress for the improvement of the old Toomuc Catch Drain.

In the Kooweerup District the construction of the Western Levee Bank of the proposed Yallock Outfall has been completed for a distance of $1\frac{1}{2}$ miles from Western Port Bay. In connexion with this Outfall two large concrete bridges have been erected at the South Gippsland Highway, where the required road alterations within the floodway have also been effected.

The outlet of the North West Main Catch Drain has been improved, and the enlargement of this important drain is now in progress.

During the year, in the two districts approximately 140,000 cubic yards of earthwork were removed, for the most part by three mechanical excavators, and other work, including bridge construction, clearing, fencing, roadwork and concrete work, was carried out.

Maintenance work has comprised repairs to 15 bridges and structures; the cleaning and regrading of drains for a total distance of 138 miles; and the treatment of noxious weeds and vermin along some 34 miles of drainage reserves.

Privately owned suction plants, operating under an arrangement with the Commission, have removed about 19,000 tons of coarse clean sand from the Kooweerup Main Canal and about 18,000 tons from the Cardinia Drain during the year. To date the total output of sand from the Kooweerup Canal is approximately 386,000 tons and from the Cardinia Drain approximately 27,000 tons.

Carrum.

Additional protective work, consisting of timber sheet piling and stone beaching, has been carried out along the northern bank of the Patterson River at Carrum, and this bank of the stream is now reasonably secure against the erosive action of flood and tidal waters.

General maintenance work has comprised minor repairs to structures and the cleaning out of drains totalling about 39 miles in length.

Since the default of the local Trust many years ago, the Carrum District has been controlled and managed successively by the Auditor-General and the State Rivers and Water Supply Commission. The administration of the Trust District in these circumstances is a very difficult problem, which has led the Commission to prepare a comprehensive report on the Carrum Swamp Lands, giving the history of the Carrum Waterworks Trust, with a view to convening a conference of representatives from all the interested Municipalities to discuss the whole matter.

Loch Garry.

The flood protection works of this district proved of great value in minimizing, within the boundaries of the district, the effect of floods from the Goulburn River during the year. Some damage was caused to the levee banks but little or no damage was done to the main work.

Kanyapella.

In this district a record flood at Echuca caused breaks in the old private levee system adjoining the Commission's works, resulting in the flooding of the whole area within the Flood Protection District and subsequent damage to the main embankment in the Warrigal Creek. The level of the water within the district topped the embankment at Warrigal Creek but, apart from some minor scours, the damage was not serious. Repairs were carried out and the embankment topped up and widened. Landholders carried out repairs to the protecting levees not under the control of the Commission.

SEWERAGE.

There are now 38 Sewerage Authorities in country centres, and schemes are in operation in 17 Sewerage Districts.

Of the 3 sewerage schemes under construction at the beginning of the year, the principal sewerage works at **Warracknabeal** were completed and houses are now being connected to the sewers, while at **Kyneton** and **Warragul** the construction of the main schemes is nearing completion.

Following the action of the Government in granting financial assistance on a liberal basis to facilitate the installation of sewerage schemes in the small country centres, the construction of works has commenced in 9 more towns, namely, **Dimboola**, **Kyabram**, **Maffra**, **Mornington**, **Morwell**, **Murtoa**, **Nhill**, **Portland**, and **Yarrawonga**.

Detail surveys have been completed in the case of the remaining 9 Sewerage Authorities, and for most of these schemes the final plans and specifications have been prepared or are nearing completion.

However, during the latter part of the year under review, owing to the increasing gravity of the war situation, requiring the conservation of all resources for war purposes, 7 of these Authorities were advised to suspend operations, as approval to their borrowing the necessary funds could not be recommended. These 7 centres in which the construction of works has been deferred comprise **Euroa**, where tenders had been received for construction of works, **Yarram**, where final plans had been prepared, **Beechworth**, **Lorne**, **Sale** and **Wodonga**, where substantial progress had been made with the preparation of final plans, and **Werribee**, where the detail survey had been completed.

The **Leongatha** and **Traralgon** Sewerage Authorities are completing final plans for works to meet the cost of which funds have been borrowed, but the commencement of construction will be dependent on the decision of the Federal Co-ordinator of Works.

The **Ballarat** Sewerage Authority constructed further extensions to the sewer reticulation and has also completed designs for the sewerage of North Ballarat, but the construction of this major extension has been deferred owing to war conditions.

During the year under review, this Commission, on behalf of the Commonwealth, undertook the design and construction of works for the sewerage of the **Puckapunyal Military Camp** and the **Tatura Internment Camp**. These urgent defence works, which were also designed to relieve unemployment, were carried out partly by day labour and partly by contract. The construction of works at Tatura has been completed and the scheme is about to be put into operation, while at Puckapunyal the main works are practically completed and will be in operation, it is anticipated, early in August, 1940.

A draft was prepared for Regulations with respect to the health and safety of persons employed in sewerage excavations. These Regulations were a direct result of the *Amending Sewerage Districts Act 1938*. The draft was prepared by a Committee consisting of one representative each from the State Rivers and Water Supply Commission, the Mines Department, and the Melbourne and Metropolitan Board of Works, the Commission's representative acting as Chairman. A technical secretary for this Committee was also appointed from the Commission's Staff.

RIVER IMPROVEMENT, CONTROL AND GAUGINGS.

WORKS.

From the Rivers and Streams Fund, 85 grants totalling £10,000 were made to Municipalities and other Authorities during the year, towards the cost of works for removing obstructions from streams and protecting beds and banks from erosion. From 1930, when the Fund was established, until 30th June, 1940, the number of grants approved has been 508 and the total amount granted, £78,000. Rentals for river frontage licences paid into the Rivers and Streams Fund during the year amounted to £9,800.

Two interesting works for river control were undertaken during the year. One was on the Avon River at Stratford, where erosion of the river bank was threatening the railway bridge. Six groynes of stone in wiremesh, with aprons of similar material, were constructed from the eroding river bank to a new channel cut in the river bed. About 30 chains of the steep cliff-like bank were battered down and sown with grass, green willow poles being layered up the lower half. The total cost was £3,400.

The other work of interest was to check an erosion which threatened to turn the River Murray into the lower effluence of Wodonga Creek near Albury, and consists of a steel sheet piling sill, backed with heavy stone, across the creek to stop bedscour, and a deflecting groyne of similar construction in the Murray higher up, to swing the current away from the creek offtake and induce it to scour out the former river-bed. The expenditure here was about £3,600, half of which was contributed by New South Wales Authorities.

The Snowy River improvement works, authorized under the *Snowy River Works Act* 1938, are complete except for some expenditure on protective vegetation and further removal of silt banks.

The Latrobe River works have also been brought to a successful conclusion, and the river handed over to the Shire Councils concerned for maintenance. Drainage Areas have been constituted for this purpose. During the long sustained high discharge of this river from August to December, 1939, the improved carrying capacity resulting from the works was particularly noticeable.

The survey of the Thomson River was completed, but, owing to shortage of the necessary technical staff, surveys of rivers for general improvement works have been held over during the national emergency.

Detailed topographical surveys have now been completed along the following streams and plans lodged for record purposes with the Department of Lands.

No.	Stream.	Length of Valley Surveyed.	No.	Stream.	Length of Valley Surveyed.
		Miles.			Miles.
1	Avon River	17	14	Mitta River	35
2	Bunyip and Tarago Rivers ..	12	15	Murray River (including Ryans Creek, Wodonga Creek and part Kiewa River)	13
3	Cann River	14	16	Ovens River	40
4	Cardinia Creek	12	17	Snowy River	18
5	Fitzroy River	27	18	Tambo River	9
6	Forest and Campbells Creeks ..	12	19	Tarwin River	33
7	Fryers Creek	2	20	Toomuc Creek	7
8	Goulburn River	30	21	Thomson River	33
9	King River	30	22	Yackandandah Creek	16
10	Kiewa River	40	23	Yarra River	28
11	Latrobe River	86	24	Woori Yallock Creek	8
12	Loddon River	43			
13	Mitchell River	34			

MURRAY LEVEES.

The Interstate Committee dealt with 5 applications for permission to erect levees along and near the River Murray. These cases included the proposed partial blocking of breakaways from the Murray and Edwards Rivers into the New South Wales forest areas, which breaches cause loss of water and damage to forests. An investigation of a similar problem in the Barmah State Forest in Victoria was also carried out.

SILTATION OF RESERVOIRS.

A further inspection of the Eildon Basin indicated that the floods of 1939, following the bushfires, had washed into the Eildon Reservoir an additional quantity of silt, amounting to approximately 1,000 acre feet.

From surveys made in 1930, 1933, 1939 and 1940 it is calculated that the quantities of silt deposited in Eildon Reservoir at the times of such surveys were as follow :—

Date of Survey.					Total Silt Deposit.
					Acre feet.
June, 1930 ..	..	..	..	..	556
June, 1933 ..	..	..	..	..	730
February, 1939	..	..	..	..	1,792
April, 1940 ..	..	..	..	..	2,713

MINING AND SLUDGE ABATEMENT.

Alluvial mining activity continues, and the Commission, in conjunction with the Sludge Abatement Board, has investigated a number of applications for mining leases in various parts of the State.

DIVERSION OF WATER.

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, has been strictly exercised. During the earlier summer months, seasonal conditions and stream flows were favourable to the use of water for irrigation. There was, however, a smaller demand by landholders outside irrigation districts for authority to divert water from streams and other natural sources of supply. Nevertheless, the authorized diversions in force are 2,067 compared with 2,648 for the previous year.

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.

During the first six months of the year, the discharge of streams was generally well above normal, and in the the month of August, 1939, the run-off from the majority of the catchments exceeded the average by more than 100 per cent. Owing to the low rainfall experienced in the latter half of the year stream flow declined considerably and approached drought conditions by the end of the year. For the month of June, 1940, the run-off from the Goulburn and Upper Murray Catchments was approximately 30 and 40 per cent. of the average flow, respectively; while in the Werribee and Coliban catchments it was only 7 and 3 per cent. respectively.

During the year automatic recording instruments were installed at the gauging stations on the Yarrawonga Canal, Eastern and Western Channels at Goulburn Weir and the Goulburn River at Shepparton. A new gauging station was established on Yellow Creek at Wangaratta. In connexion with an investigation as to the possibility of providing a water supply to lands in Panton Hill and surrounding districts, gauging stations were also installed on Arthur's Creek at Strathewen and Diamond Creek at St. Andrews North. The number of gauging stations in operation is now 53.

It is proposed to establish a gauging station to obtain reliable information as to the discharge of the Campaspe River at Carlsruhe.

IRRIGATION DEVELOPMENT.

The 1939-40 Season.

In the report for last year, comment was made on the effect of the dry period which extended from the summer of 1937-38 to the autumn of 1939-40. This was followed by six months in which the rainfall throughout northern Victoria exceeded all records and caused severe local flooding. It had, however, a most stimulating effect on production, thus the Northern Dairy Co. at Tongala produced during the year from 1st March, 1939, to 1st March, 1940, 454 tons of butter as compared to 287 tons during the previous year. This increase was common throughout all irrigation districts.

The wet winter and spring reduced the demand for spring watering and, consequently, the area of cereals irrigated dropped to 33,207 acres, as compared with 84,379 acres in 1938-39 and 65,466 acres in 1937-38. On the other hand, the comparatively dry autumn resulted in an increase in the area of pasture irrigated from 251,629 acres to 310,504 acres, which closely approached the record figure of 326,518 acres of pasture irrigated in 1937-38.

Competitions and Tours of Inspection.

During the year competitions for irrigation farmers such as for areas of lucerne, pasture and fodder crops were continued in various districts, and, in addition, a new type for the farm showing the greatest efficiency in the use and control of water was sponsored by the Commission. These competitions were held in co-operation with the Rochester, Echuca and Boort Agricultural Societies and were of distinct educational value.

Tours of inspection of other irrigation and agricultural areas were arranged for irrigators from the Cohuna and Pyramid Hill districts and were most successful, it being generally considered that this is one of the best means of learning the latest agricultural methods.

Field days were also arranged in co-operation with the Department of Agriculture and local Agricultural Societies at Benjeroop, Pyramid Hill, Kerang, Boort and Rochester.

Preparation of Land for Irrigation.

In the past, difficulty has been experienced by irrigators, especially in new districts, in obtaining the contour plans and other information necessary to enable them to grade their land correctly. The Commission has accordingly arranged to station, in various centres, survey officers who, in addition to carrying out normal survey work for the Commission, will be available at a moderate charge to survey irrigators' holdings, prepare plans for the distribution of water, and generally give advice on the question of the preparation of land for irrigation.

In addition, the Commission during last year organized, in the Cobram centre, demonstrations in grading land for irrigation. These were well attended by district farmers whose lands are included in the new Murray Valley Irrigation District.

Soil Surveys.

The Soil Survey in the Murray Valley District has been finalised in collaboration with the State Department of Agriculture and the Council for Scientific and Industrial Research. These two bodies have also completed the Soil Survey of the Mildura Area and are proceeding with that of the Red Cliffs District.

Investigations are being made, in conjunction with the Department of Agriculture, into the loss of fruit trees in the Shepparton District during the winter of 1939, and also into the cause of seepage in the Maffra-Sale District. Preliminary enquiries are being made as to soil conditions in the Boort District.

Appeal Boards—Registers of Lands.

By an amendment of the Water Act in 1937, provision was made for the appointment of Appeal Boards to deal with appeals against the Register of Lands in the various Irrigation and Water Supply Districts. During last year, Boards were constituted and heard appeals in the Shepparton, North Shepparton, South Shepparton, Katandra, Tongala, Rochester, Calivil, Tragowel Plains and Kerang Districts.

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 1939-40.

Name of District.	Area Irrigated (Acres).							
	Cereals.	Lucerne grown for Pasture and Hay.	Sorghum and other Annual Fodder Crops.	Pastures, Native and Sown.	Vineyards.	Orchards or Gardens.	Fallow.	Miscellaneous.
<i>Supplied from Goulburn State Works.</i>								
Katandra .. .. .	..	1,377	70	3,380	..	34	20	..
North Shepparton .. .. .	..	2,532	149	5,759	8	261	22	35
Shepparton .. .. .	..	542	109	3,881	11	9,044	..	22
South Shepparton	140	1,137	..	3,170	1	111	10	..
Rodney	329	17,914	1,319	30,089	250	8,331	349	..
Tongala-Stanhope	909	9,637	665	20,868	34	1,916	392	..
Rochester	771	11,018	361	38,916	13	1,618	284	..
Dingee	90	108	..	3,458	..	16	20	..
Calivil	603	1,922	104	7,117	..	140	..	..
Tragowel Plains	8,206	1,731	2,295	37,072	..	43	388	..
Deakin	14	1,328	42	1,797	..	13	..	..
Boort	2,077	1,016	1,009	8,163	..	..	1,215	..
Totals	13,139	50,262	6,123	169,670	317	21,527	2,700	57
<i>Supplied from River Murray State Works.</i>								
<i>(a) Torrumbarry Weir.</i>								
Leitchville	391	861	79	5,881	..	30	3	..
Cohuna	2,901	2,796	393	33,354	..	186	417	1,698
Koondrook	2,330	1,634	1,191	17,576	10	906	209	752
Swan Hill	2,230	4,560	415	7,930	3,273	902	670	..
Third Lake	589	114	111	1,692	..	6	54	6
Mystic Park	328	186	25	1,823	24	..	..	..
Tresco .. .. .	..	13	36	..	783	298	..	..
Fish Point	198	130	130	2,527	..	..	..	..
Kerang	3,013	1,225	1,214	29,176	8	12	198	625
Dry Lake	100	..	150	490	..	..	..	..
Kerang North-West Lakes	424	205	296	2,249	92	363	..	..
Lands supplied direct (outside Districts)	1,224	2,063	195	6,776	..	137	52	31
Totals	13,728	13,787	4,235	109,474	4,190	2,840	1,603	3,112
<i>(b) Yarrawonga Weir.</i>								
Murray Valley .. .. .	..	323	85	387	..	573	8	..
<i>(c) Direct from River.</i>								
Nyah	34	201	50	35	2,489	154	20	..
Red Cliffs .. .. .	..	185	..	148	10,605	497	..	..
Merbein .. .. .	..	84	45	313	6,850	569	..	73
Totals	34	470	95	496	19,944	1,220	20	73
Totals (River Murray State Works)	13,762	14,580	4,415	110,357	24,134	4,633	1,631	3,185
<i>Supplied from Loddon and other Northern State Works.</i>								
Boort	415	214	190	1,796	..	2	288	..
Coliban	227	362	183	2,421	20	4,916	125	..
Campaspe .. .. .	..	170	..	13	..	6	..	..
Western Wimmera	15	294	57	716	65	1,269	..	6
Wimmera United .. .. .	..	37	27	33	..	..	..	..
Totals	657	1,077	457	4,979	85	6,193	413	6
<i>Supplied from Southern State Works.</i>								
Bacchus Marsh	3	1,148	116	1,864	..	261	32	..
Werribee	61	1,206	300	4,430	..	2,591	100	..
Maffra-Sale	15	1,476	2,002	16,276	..	..	541	1,984
Totals	79	3,830	2,418	22,570	..	2,852	673	1,984
<i>Supplied from other Works.</i>								
First Mildura District .. .. .	..	500	140	..	10,185	987	..	155
Private Diversions—Kerang (outside Districts)	140	31	51	1,011	..	..	..	..
Other Private Diversions throughout the State	5,430	4,273	924	1,917	569	1,487	..	1,338
Totals	5,570	4,804	1,115	2,928	10,754	2,474	..	1,493
Grand Totals 1939-40	33,207	74,553	14,528	310,504	35,290	37,679	5,417	6,725
Grand Totals 1938-39	84,379	76,148	26,942	251,629	35,125	30,012	5,126	5,996

(B) COMPARATIVE STATEMENT OF THE EXTENT OF IRRIGATION 1935-36 TO 1939-40.

Source of Supply.	Area under Irrigation (Acres).				
	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Goulburn State Works	256,184	267,830	311,059	259,676	263,795
River Murray State Works	172,037	176,370	210,084	183,573	176,897
Loddon and other Northern State Works	14,707	14,671	7,315	3,994	13,867
Southern State Works	24,060	29,043	31,444	32,687	34,406
Mildura and Private Diversions	28,847	30,913	30,210	35,427	29,138
Totals	495,835	518,827	590,112	515,357	517,903

MISCELLANEOUS.

RESEARCH AND TESTING.

Certain new features were introduced during the year, notably testing and investigation with reference to—(a) Soil Mechanics; and (b) Use of Low Heat Portland Cement.

The main Soil Mechanics Laboratory has been established at Hume Reservoir. Some pieces of apparatus of a specialized nature had been ordered from abroad and, consequent on the very disturbed international situation, considerable delay occurred in shipment. The laboratory has therefore been functioning during the latter half only of the financial year.

In connexion with additions to the main earth bank at Hume Reservoir, many samples have been examined from shafts and bores sunk in the bank.

The tests for which equipment has been procured and which are being conducted in general are—(1) Mechanical Analysis; (2) Shear and Cohesion, by means of—(a) Aminco Shear Test machine; and (b) Hveem Stabilometer; (3) Proctor compaction tests; (4) Atterberg tests (Liquid Limit, Plastic Limit, Shrinkage); (5) Determination of Soluble Solids Present; and (6) Compressibility and Permeability.

Control of the placing of the earth bank at the new Lauriston Reservoir has been maintained with reference to the proportions of sandy and clayey materials and the water content during compaction. The tests in this connexion indicate that a high degree of uniformity is being attained, and that the physical characteristics of the material being deposited are in conformity with plan.

In addition, tests have been carried out in the laboratory at Melbourne on a considerable number of soil samples from various localities, but mainly from trial pits on the projected site for the proposed Lerderberg Reservoir.

Low Heat Portland Cement has come into prominence in connexion with the construction of the Lauriston Reservoir. The design of the concrete spillway and main wall for this structure is of the massive buttress type, and it was desired to reduce to a minimum any differential shrinkage in the concrete while it matured. As both the use and manufacture of this type of cement were novel in this State, a considerable amount of investigation was undertaken in collaboration with the technical staff of Australian Cement Ltd., who have now produced this specialized form of cement in a grade in conformity with the Commission's requirements.

The work of Research and Testing is summarised with the main items as far as possible grouped in tabulated form, under sub-headings as follow—

(1) *Routine Laboratory Tests.*

	Normal Portland Cement.	Low-Heat Portland Cement.	Concrete Specimens.
	<i>Tons.</i>	<i>Tons.</i>	
For the Commission	2,738	4,131	500
For other Departments	*13,638	..	447
Totals	16,376	4,131	947

*Note—A considerable portion of the cement was for the use of the Grain Elevators Board.

(2) *Routine Outside Tests.*

A considerable portion of this testing was undertaken in connexion with constructional work in the extension of Mornington Peninsula water supply to Dromana and Portsea. Most of the Commission's constructional activities, however, were involved, and some of the materials were employed in the installation of water supply and sewerage at military camps.

Many different sizes and pressure heads were included in the pipes tested. However, for convenience, no reference to these particulars is made in the following grouping—

Material.	Length.	Number.
	<i>Feet.</i>	
Welded steel cement lined pipe	3,000	..
Cast iron pipe	741	..
Asbestos cement pipe	166,582	..
Cement concrete pipe (high pressure)	40,088	..
Sluice valves .. .. .	..	250
Totals	210,411	250

(3) *Inspection of Materials.*

In certain instances, the nature of the raw or fabricated material is such as to make routine testing impracticable, and in these cases careful inspection is made prior to acceptance.

In detail, materials of this class consisted of:—

Material.	Lineal Feet.	Number.	Super Feet.
Cement concrete pipes (low pressure)	23,129	..	..
Glazedware pipes	12,100	..	..
Extruded rubber sealing strip	1,200	..	..
Pipe fittings (cast iron, mild steel and concrete) .. .. .	..	1,788	..
Cast iron gibault joints .. .. .	..	2,324	..
Mild steel fabricated items .. .. .	..	660	..
Rubber rings .. .. .	..	1,741	..
Timber .. .. .	..	..	64,589
Totals	36,429	6,513	64,589

Additional to the above, many other items, including joinery, galvanized iron tanks and steel sections, were inspected.

(4) *Chemical and Physical Examination of Materials.*

Samples of water numbering 145 from various localities were examined with reference to physical and chemical properties and plankton. Analyses were made of bronze samples for valve seatings and tests of nickel-chromium steel alloys to obtain information as to corrosion resistivity.

As already mentioned, a large number of soil samples were examined.

(5) *Research.*

Some attention was devoted to measuring the temperature in the concrete during hardening and curing period at Lauriston Reservoir.

Electrical methods of measurement were devised using copper-constantan thermo-couples and much useful information was obtained.

Experimental work was carried out in regard to the design of concrete mixtures for various works including Lauriston Reservoir.

(6) *Miscellaneous.*

Tests were made on other materials such as protective coating for steel work, particularly Dethridge meter wheels, a number of which were prepared with various protective coatings to obtain practical information as to the best method of prolonging the life of such wheels.

The installation of chlorination apparatus was made on the water supplies to Merbein, and to two military camps of the Seymour group.

Comparatively few cases of algal infestation of reservoirs were reported or investigated. No trouble of this nature occurred at Hume Reservoir. However, in midsummer, the water in Yarrawonga Weir developed a growth of anabaena, which gave the water an objectionable taste and smell. This was considerably reduced by a fairly heavy release of flushing water from Hume Reservoir.

LAND VALUATIONS.

Legislation.

Important amendments to the Water Acts relating to the powers of the Commission in regard to valuations were made by Parliament and embodied in the *Water Act* 1939. These include provision for valuations by the Commission for Rating on Unimproved Land Values; the extension at will of the quinquennial interval between rating valuations up to ten years; the granting of statutory power to make supplementary valuations which had previously been authorized by regulation only; and the curtailment of the period allowed for lodging claims for injury by works and for proceeding to law in this regard.

Rating Valuations.

Valuations were made of the Lower Kooweerup and Cardinia Flood Protection Districts which had previously been rated on an acreage basis. Valuations were also returned for the newly constituted Murray Valley Irrigation and Water Supply District and for the Tyrrell, Tyrrell West, Walpeup West, and Coreena Waterworks Districts.

In addition, 42 Supplementary Valuations were returned in respect of the Commission's Irrigation, Waterworks, Drainage and Flood Protection Districts.

Valuations for Land Compensation.

This branch of the valuation work occupies the major part of the time of the Valuation staff. One hundred and six claims amounting to £38,487 were settled for £16,678, while 280 claims amounting to £137,029 were dealt with and offers of settlement made totalling £52,500.

Claims for Injury.

Six claims for injury to land by flooding were received and dealt with by the Valuations Branch.

General.

The Commission is of the opinion that public authorities, both State and Municipal, should be freed from making valuations for revenue and compensation. It is aware of the confusion resulting from a multiplicity of valuations in regard to the same land, and urges the establishment of a central valuation body to control valuations for all purposes throughout the State.

There is no lack of evidence to support the Commission's views on this subject.

OCCUPATION OF COMMISSION LANDS.

The Commission has again been enabled to secure suitable tenants for lands not required in connexion with works, 1,071 occupancy permits for periods up to 15 years being now in force.

CROWN LANDS.

Numerous applications for alienation or occupation of Crown Lands, including water reserves and creek frontages, were referred by the Lands Department to this Commission for report as to whether such applications could be granted without injury to water supply interests. In dealing with these, it has been necessary for a number of inspections to be made in order to ascertain the value of each area for water supply, or its liability to erosion.

PART III.—ADMINISTRATION AND FINANCE.

LEGISLATION.

WATER ACTS.

An Act to amend the Water Acts was passed by Parliament during the year. This Act, cited as the *Water Act* 1939, No. 4678, came into operation on the 7th December, 1939, and made a number of amendments to the law in regard to water supply matters.

Among the amendments was one providing for the appointment of one of the Commissioners as Deputy Chairman of the Commission. Other amendments dealt with the diversion or utilization of natural waters, the prevention of pollution, and the carrying out by landowners of works for the protection of their land from damage by erosion or flooding.

An amendment dealing with drainage or flood protection districts increased the number of divisions into which lands might be classified for rating purposes from three to four in order to provide for a more equitable basis for the rating of lands benefiting from the works in these districts.

Among amendments dealing with irrigation supplies was an important amendment authorizing the Commission to refuse to supply water to any lands unless the private channels provided for the service of such lands are satisfactorily maintained. This authority will enable the Commission to insist upon more efficient utilization of water supplies.

In connexion with the valuation of lands for rating purposes, an amendment provided that when unimproved capital values are adopted for rating purposes such unimproved capital values should be as defined by the Local Government Act, and also that the Commission might make valuations on this basis. Provision was also made for the extension of the period between valuations to a maximum of 10 years.

The time in which notice of any claim against an Authority for compensation for injury by flooding was reduced to 30 days after the occurrence of such flooding in order that the Authority might have an opportunity of ascertaining conditions at the time of the alleged flooding.

The Act also included a number of other amendments dealing with the constitution of Waterworks Trusts, with rates and charges generally, and with the provision for depreciation accounts in respect of perishable structures.

BARWON RIVER IMPROVEMENT ACT 1939.

During the session of Parliament in 1939 the Barwon River Improvement Act, No. 4657, was passed. This Act vests in the Geelong Waterworks and Sewerage Trust the management and control of that section of the Barwon River which may be generally defined as between prolongations of the eastern boundary of the city of Geelong and the western boundary of the town of Newtown and Chilwell.

COMMISSION.

In accordance with the provisions of the *Water Act* 1939, Mr. W. A. Robertson, M.C.E., M.Inst. C.E., M.I.E. Aust., Commissioner, was appointed by the Governor in Council on 22nd December, 1939, to be Deputy Chairman of the Commissioners of the State Rivers and Water Supply Commission.

STAFF.

Mr. P. J. O'Malley, Secretary to the Commission since 1928, retired on 10th April, 1940. Mr. O'Malley was an officer of the Public Service for 48 years. Appointed to the Public Library on 12th January, 1892, he was later transferred to the Victorian Water Supply Department, and had been in the service of the Commission since its inception in 1906.

Mr. L. Duggan, Chief Clerk and one of the Chief Administrative Officers of the Commission for many years, was appointed as on and from 31st May, 1940, to the position of Secretary to the Commission.

Mr. A. D. Brown, A.I.C.A., Officer in Charge of Debts Adjustment and Rates Recovery Branch, was promoted to the position of Chief Clerk.

In consequence of the promotion of Mr. A. D. Brown to the position of Chief Clerk, Mr. J. A. Aird, B.Sc., B.Ag.Sc., Dip. Com., Chief Irrigation Officer, has been appointed as the Commission's representative on the directorates of the Kyabram Co-operative Fruit Packing Company Limited, and the Goulburn Valley Cannery Proprietary Limited.

Mr. H. B. Lincoln has been appointed Acting Divisional Engineer of the Loddon Division during the absence of Lieutenant-Colonel F. Rogerson, M.C., as Acting Chief Engineer of the Southern Command of the Commonwealth Military Forces.

Mr. E. A. Ryland, who was previously associated with the Commission, and later was engaged with the Lands Department, has been appointed as a Valuer with the Commission.

Following the resignation of Mr. C. T. Stafford, B.C.E., Mr. W. W. D. Minson, B.E. (University of New Zealand), Assoc. M.Inst. C.E., has been appointed Assistant Resident Engineer at Lauriston Reservoir.

Mr. H. J. Davies was appointed Mechanical Engineer in charge of the Red Cliffs and Merbein Pumping Stations during the absence of Lieutenant-Commander F. C. Hodgson with the Royal Australian Navy.

Mr. J. C. R. Sundercombe, B.E., Assistant Engineer, in the Commission's Mechanical Engineering Branch, was granted six months' leave in 1939 to visit Great Britain, and, on his return, submitted a report giving an outline of the engineering experience gained during his absence overseas.

During the year, additional permanent positions for water bailiffs have been created. The undermentioned comparison sets out the position of water bailiffs on the Permanent and Temporary Staffs as at 1926, 1939, 1940 :—

					Year 1926.	Year 1939.	Year 1940.
Permanent Water Bailiffs	..	..	..	..	150	74	119
Temporary Water Bailiffs	..	..	..	..	32	113	75
Totals	..	..	..	..	182	187	194
Percentage of Permanent Bailiffs	..	..	..	..	82%	40%	61%

The Commission records with deep regret the deaths during the year of Mr. J. O'Connell (Officer in Charge Records Branch, Head Office), Mr. F. M. Engel (District Officer, Bacchus Marsh District), Mr. G. Kirk (Clerk, Werrimull), Mr. C. H. Newton (Water Bailiff, Rodney District), Mr. J. Newton (Water Ranger, Hopetoun), Mr. W. Pettit (Reservoir Keeper, Crusoe Reservoir), Mr. R. C. Valentine (Survey Assistant), and Mr. O. C. D. Swindley (Telephone Attendant, Head Office).

In addition to Mr. O'Malley, the following officers have retired from the Commission's service during the year :—Mr. D. P. Mundell (Accounts Branch, Head Office), Mr. J. T. McCurdy (Inspector, Koondrook), Mr. F. L'Huillier, Mr. F. C. Ratcliff, Mr. J. S. Binion, Mr. H. Wood (Water Bailiffs), Mr. J. H. Johnston (Water Ranger), Mr. W. Buby (Reservoir Keeper, Pykes Creek), Mr. J. H. Boucher (Skilled Labourer, Bendigo).

The undermentioned permanent officers have resigned from the Commission's service during the year :—Mr. K. Coventry, Assistant Engineer, Mr. K. G. Irving, Draughtsman, Mr. C. Garrow, Mr. W. G. Coghlan, and Mr. D. A. Brooke, Clerks, and 5 Water Bailiffs and Rangers.

In addition, 10 professional officers, 10 clerks, 5 water bailiffs and rangers have resigned from the Temporary Staff.

The following lists set out the names of officers who have enlisted in the A.I.F., and those who have served with Home Services during the year :—

LIST OF OFFICERS WHO HAVE ENLISTED IN THE A.I.F.

PERMANENT STAFF.

*Hodgson, Frederick Charles.	Graham, Sydney George Elliott.
Drummond, Richard.	Lewis, Geoffrey Wilfred Valentine.
Sundercombe, John Charles Robert.	*Clarke, John.
Crow, Alan Edward.	

TEMPORARY STAFF.

Barlow, Archibald William.	*Phillips, William.
Campbell, John.	Shaw, Stuart Graham.
Chirgwin, William Sydney.	Tancoe, James Whitburn.
Nolan, Michael Mullins.	Wyndham, David Norman.

**These officers served in the 1914-18 War.*

LIST OF OFFICERS WHO HAVE SERVED IN THE A.M.F. DURING THE YEAR.

PERMANENT STAFF.

Allinson, Robert York.	McLean, Gordon Duncan.
Boase, Norman Henry.	McPherson, Cyril John Bennett.
*Clark, Donald.	*Rogerson, Frank.
Creighton, Warwick.	*Rogerson, Stanley Wallace.
*Devereaux, William Leonard.	Robinson, Clifford Charles.
*Field, Herbert Booker.	Ritchie, George.
Gillespie, Phillip Mark.	Rorke, George Henry Patrick.
Grigg, Thomas Peter.	Swanson, Victor George.
*Lawrence, Cyril.	Stafford, Hume Neville.
Mason, Raymond George.	Turner, Kedron Freebairn.
*Murray, Cyril Stewart.	Wyatt, Lewis William Haughton.
*Myers, Robert Ashton.	

TEMPORARY STAFF.

*Abbott, Percival Henry.	*Finley, Hugh Jack.
*Deveson, Edward George.	Morgan, Alexander Mitchell.
*D'Arcy, William.	Thompson, Lionel Bowerman.

** These officers served in the A.I.F. in the 1914-18 War.*

DISTRICT EXTENSIONS AND EXCISIONS.

Portion of the Echuca North Irrigation District was included in the Rochester Irrigation District, and the remaining portion was amalgamated with the Tongala and Stanhope Irrigation Districts to form one district known as the Tongala-Stanhope Irrigation District.

The Boort Irrigation District was extended to include an area of 750 acres supplied with water for domestic and stock use. An area of 50 acres not commanded by gravitation was excised from the District.

An area of 4,020 acres supplied from the works of the Rodney Irrigation District was excised from the Deakin Irrigation District and added to the former District.

The Koondrook Irrigation District was extended to include an area of 1,080 acres of land not previously supplied. Three allotments containing 350 acres not commanded by gravitation were excised from the District.

An area of 10 acres of subdivided land was excised from the Swan Hill Irrigation District and added to the Swan Hill Waterworks Trust District.

Kerang and Merbein Irrigation Districts were extended to include areas of 38 and 15 acres respectively.

The Maffra-Sale Irrigation District was extended to include an area of 7,850 acres, served by extensions of supply channels. An area of 260 acres not commanded by the Commission's works was excised from the District.

An area of 60 acres supplied by works of the Cobram Waterworks Trust was excised from the Murray Valley Irrigation District.

The Normanville Waterworks District was extended to include an area of some 18,500 acres served by the Commission's channels. Of this area 6,500 acres were transferred from the Waterworks District of the Loddon United Waterworks Trust. An area of 10,300 acres which receives supplies from the Avoca River was excised from the District.

The boundaries of the Spring Vale and Drysdale Urban Districts were amended to include urban lands served by extensions of the respective reticulation systems.

The boundaries of the Terang Urban District were amended to exclude lands not served by the reticulation system of the District.

An area of 165 acres benefited by the construction of a protective levee bank was added to the Cardinia Flood Protection District.

The Merbein, Rochester and Maffra-Sale Drainage Districts were extended to include areas of 15, 3,970 and 200 acres respectively benefited by the Commission's drainage works.

Areas of 1,650 and 60 acres not benefited by drainage works were excised from the Kerang East and Shepparton Drainage Districts respectively.

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 general rates, drainage rates, flood protection rates and 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 Murray Valley Irrigation and Water Supply District, and the Urban Waterworks District of Terang.

The Tongala, Stanhope, and portion of the Echuca North Irrigation and Water Supply Districts were united to form one District and called the Tongala-Stanhope Irrigation and Water Supply District, and the remaining portion of the Echuca North District was included in the Rochester Irrigation and Water Supply District.

In 52 Districts the lands were, for the purpose of making and levying rates, arranged in divisions in accordance with the relative benefits derived by such lands from the works as provided by the Water Acts. The Kanyapella Flood Protection District, where the charging is on an acreage basis, was similarly divided into divisions. As heretofore in the Urban portion of the Coliban System, a minimum and tapering rate was made, while the Carrum Waterworks Trust District was, as in past years, arranged in five rating divisions in accordance with the relative benefits derived by the lands from the works.

As provided by the *Water Act* 1939, lands within the Drainage and Flood Protection Districts were divided, for rating purposes, into divisions, not more than four in number, in accordance with the relative benefits derived by the lands from the works, while in the Irrigation and Water Supply and Waterworks Districts, the divisions remain, as in previous years, at not more than three in number.

In accordance with a recommendation of the Royal Commission on Water Supply, 1936, rates in the £1 of the net annual valuation were made for the first time in respect of lands within the Cardinia and Lower Kooweerup Flood Protection Districts, which were heretofore charged on an acreage basis.

Under the powers conferred by Section 62 of the *Water Act* 1928, a minimum annual rate on the basis of £9 12s. per 640 acres was fixed by the Commission on the first division lands of the Birchip, Karkaroc, Long Lake, Sea Lake, Tyntynder, Tyrrell, Tyrrell West, Upper Western Wimmera, Upper Wimmera United, Wimmera United, and Wycheproof Waterworks Districts; in the Carwarp, Carwarp Central, Coreena, Hindmarsh, Millewa, Millewa Central, Normanville, and Yelta Waterworks Districts, the minimum was fixed at £10 13s. 4d. per 640 acres, while in the Walpeup West (Bore) Waterworks District, the minimum was fixed at £4 16s. per 640 acres.

In 25 Districts the Commission made and levied compulsory irrigation charges, in 2 Flood Protection Districts a charge was made, and in 3 Waterworks Trusts Districts, taken over by the Commission, rates were 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, 1940.	Period of Rate.	Estimated Number of Persons dwelling in District.		
IRRIGATION AND WATER SUPPLY DISTRICTS.						
	Valuation by Commission.	Divisions.				
	£	1st.	2nd.	3rd.		
		s. d.	s. d.	s. d.		
1. BACCHUS MARSH ..	15,039	1 0	0 6	..	1st July, 1939, to 30th June, 1940	645
2. BOORT ..	18,374	1 0	0 6	..	.. ..	580
3. CALVIL ..	16,467	1 0	..	..	.. ..	614
4. CAMPASPE ..	8,871	2 0	1 0	0 6	.. ..	180
5. COHUNA ..	37,156	1 9	0 10½	0 5¼	.. ..	1,415
6. DEAKIN ..	45,687	1 8	0 10	0 5	.. ..	1,575
7. DINGEE ..	3,329	1 0	..	..	.. ..	260
8. DRY LAKE ..	279	(No rate made)			.. ..	12
Totals (carried forward)	£145,202					5,281

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, 1940.	Period of Rate.	Estimated Number of Persons dwelling in District.
---	--------------------------------------	--	-----------------	---

IRRIGATION AND WATER SUPPLY DISTRICTS—*continued.*

	Valuation by Commission.	Divisions.				
		1st.	2nd.	3rd.		
	£	s. d.	s. d.	s. d.		
Brought forward ..	145,202	..	..	..	.. ..	5,281
9. FISH POINT ..	1,533	1 0	..	..	1st July, 1939, to 30th June, 1940	55
10. KATANDRA ..	8,222	1 0	..	..	" " "	450
11. KERANG ..	17,637	1 9	0 10½	0 5¼	" " "	790
12. KOONDROOK ..	23,974	1 9	0 10½	..	" " "	1,150
13. LEITCHVILLE ..	9,423	1 9	0 10½	..	" " "	258
14. MAFFRA-SALE ..	58,513	1 0	0 6	..	" " "	2,370
15. MERBEIN ..	49,519	0 6	..	..	" " "	3,000
16. MURRAY VALLEY ..	12,352	0 6	0 3	..	1st Jan., 1940, to 30th June, 1940	240
17. MYSTIC PARK ..	3,337	1 0	..	..	1st July, 1939, to 30th June, 1940	110
18. NORTH SHEPPARTON ..	53,941	1 0	0 6	..	" " "	1,270
19. NYAH ..	8,688	0 6	..	..	" " "	893
20. RED CLIFFS ..	81,066	0 6	..	..	" " "	3,150
21. ROCHESTER ..	67,216	1 0	0 6	0 3	" " "	2,958
22. RODNEY ..	134,798	1 0	0 6	0 3	" " "	5,340
23. SHEPPARTON ..	35,809	1 0	..	..	" " "	2,460
24. SOUTH SHEPPARTON ..	15,362	1 0	0 6	..	" " "	410
25. SWAN HILL ..	30,631	1 0	..	..	" " "	1,888
26. THIRD LAKE ..	2,156	1 9	..	..	" " "	85
27. TONGALA-STANHOPE ..	48,199	1 0	0 6	..	" " "	2,639
28. TRAGOWEL PLAINS ..	44,418	1 0	0 6	0 3	" " "	1,196
29. TRESKO ..	3,571	2 6	1 3	..	" " "	215
30. WERRIBEE ..	21,090	1 0	0 6	..	" " "	1,453
Totals (Irrigation) ..	£876,657					37,661

WATERWORKS DISTRICTS.

31. AXE CREEK ..	1,637	1 9½	..	..	1st July, 1939, to 30th June, 1940	255
32. BIRCHIP ..	41,961	2 1	1 0½	0 6¼	" " "	2,660
33. CARWARP ..	4,775	3 4	1 8	0 10	" " "	520
34. CARWARP CENTRAL ..	790	3 4	1 8	0 10	" " "	100
35. COREENA ..	6,286	3 4	1 8	0 10	" " "	250
36. HARCOURT ..	6,652	1 4	..	..	" " "	600
37. HINDMARSH ..	8,542	2 8	1 4	0 8	" " "	232
38. KARKAROOC ..	129,263	1 11	0 11½	0 5¾	" " "	4,750
39. KERANG N.W. LAKES	7,400	0 5	..	..	" " "	370
40. LONG LAKE ..	72,333	2 6½	1 3¼	0 7½	" " "	2,300
41. MILLEWA ..	19,226	3 4	1 8	0 10	" " "	1,280
42. MILLEWA CENTRAL ..	11,733	3 4	1 8	0 10	" " "	700
43. NORMANVILLE ..	28,783	1 6	0 9	0 4½	" " "	522
44. SEA LAKE ..	63,844	2 5	1 2½	0 7¼	" " "	2,450
45. TYNTYNDER ..	52,378	3 0	1 6	0 9	" " "	2,100
46. TYRRELL ..	39,700	3 0	1 6	0 9	" " "	2,830
47. TYRRELL WEST ..	59,192	3 0	1 6	0 9	" " "	3,540
48. UPPER WESTERN WIMMERA ..	63,883	1 4	0 8	0 4	" " "	1,690
49. UPPER WIMMERA UNITED ..	106,163	1 4	0 8	0 4	" " "	2,750
50. WALPEUP WEST ..	48,262	0 8	0 4	..	" " "	2,130
51. WERRIBEE ..	6,125	1 9½	0 10¾	..	" " "	150
52. WESTERN WIMMERA ..	278,727	1 0½	0 6¼	0 3½	" " "	8,680
53. WIMMERA UNITED ..	313,603	1 0½	0 6¼	0 3½	" " "	7,800
54. WYCHEPROOF ..	75,939	2 1	1 0½	0 6¼	" " "	2,980
55. YELTA ..	2,059	3 4	1 8	0 10	" " "	50
Totals (Waterworks)	£1,449,256					51,689

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, 1940.	Sales of Water Charge per 1,000 gallons.	Period of Rate.	Estimated Number of Persons dwelling in District.
URBAN DIVISIONS AND DISTRICTS— <i>continued.</i>					
	Municipal Valuation.				
	£	s. d.	s. d.		
Brought forward ..	288,291	..	..	.. .. .	28,148
86. FRANKSTON ..	66,208	1 4	1 0	1st July, 1939, to 30th June, 1940	5,842
87. GARFIELD ..	2,424	2 4	1 0	" " "	300
88. HASTINGS ..	2,405	3 0	1 0	" " "	488
89. HEYFIELD ..	4,241	2 6	1 0	" " "	550
90. HICKSBOROUGH ..	416	3 9	1 6	" " "	100
91. HOPETOUN ..	6,496	3 0	1 3	" " "	800
92. JEPARIT ..	8,974	2 1	1 3	" " "	856
93. JUNG JUNG ..	909	3 0	1 6	" " "	169
94. KOONDROOK ..	3,144	2 9	1 3	" " "	595
95. LAKE BOGA ..	2,248	3 0	1 3	" " "	375
96. LALBERT ..	828	5 0	1 6	" " "	125
97. LASCELLES ..	934	5 0	1 6	" " "	150
98. LEITCHVILLE ..	1,979	3 7	1 6	" " "	240
99. LOCKINGTON ..	1,699	2 9	1 6	" " "	200
100. LONGWARRY ..	2,037	2 6	1 0	" " "	260
101. MANANGATANG ..	2,176	3 6	2 0	" " "	310
102. MARNOO ..	1,199	5 0	1 3	" " "	250
103. MARONG ..	832	3 0	1 0	" " "	310
104. MERBEIN ..	10,516	2 9	1 0	" " "	1,500
105. MERINGUR ..	321	5 0	2 6	" " "	65
106. MINYIP ..	6,201	2 10	1 6	" " "	750
107. MORNINGTON ..	37,479	1 6	1 0	" " "	2,300
108. MOUNT MARTHA ..	7,633	2 1	1 3	" " "	240
109. MURRABIT ..	230	5 0	2 0	" " "	60
110. NANDALY ..	290	5 0	2 0	" " "	110
111. NATIMUK ..	3,258	1 6	1 0	" " "	568
112. NEWSTEAD ..	2,964	3 0	1 0	" " "	400
113. NORTH WONTHAGGI ..	3,660	2 0	1 6	" " "	1,000
114. NULLAWIL ..	816	5 0	2 0	" " "	102
115. NYAH ..	686	2 9	1 3	" " "	137
116. NYAH WEST ..	4,320	2 9	1 6	" " "	344
117. OUYEN ..	9,196	3 0	2 0	" " "	1,080
118. PAKENHAM ..	5,662	2 1	1 0	" " "	750
119. PATCHEWOLLOCK ..	519	5 0	2 0	" " "	165
120. PIANGIL ..	1,078	3 6	1 6	" " "	170
121. PORTARLINGTON ..	3,373	2 6	1 0	" " "	550
122. PYRAMID HILL ..	3,414	2 9	1 6	" " "	450
123. QUAMBATOOK ..	3,267	2 10	1 3	" " "	405
124. QUEENSLIFF AND POINT LONSDALE ..	22,187	2 6	1 0	" " "	3,100
125. RAINBOW ..	9,066	1 9	1 3	" " "	1,004
126. RED CLIFFS ..	15,885	2 3	1 0	" " "	1,200
127. RUPANYUP ..	5,674	2 10	1 6	" " "	650
128. SEA LAKE ..	7,509	2 0	1 3	" " "	710
129. SOMERVILLE ..	2,505	2 6	1 0	" " "	304
130. SOUTH FRANKSTON ..	16,709	2 3	1 0	" " "	845
131. SPEED ..	424	5 0	2 0	" " "	60
132. SPRING VALE ..	38,326	1 6	1 0	" " "	3,320
133. STANHOPE ..	1,925	3 0	1 3	" " "	300
134. TEMPY ..	301	5 0	2 0	" " "	90
135. TERANG ..	21,949	3 0	1 3	" " "	2,100
136. TORQUAY ..	6,129	2 6	1 0	" " "	700
137. ULTIMA ..	2,321	3 0	1 3	" " "	340
138. WAITCHIE ..	293	5 0	2 0	" " "	75
139. WALPEUP ..	859	4 6	2 0	" " "	160
140. WATCHEM ..	1,800	3 3	1 6	" " "	320
141. WERRIMULL ..	885	5 0	2 6	" " "	140
142. WONTHAGGI ..	31,079	1 6	1 6	" " "	8,000
143. WOOMELANG ..	1,978	3 6	1 3	" " "	407
144. WOORINEN ..	586	4 0	1 6	" " "	116
145. WYCHEPROOF ..	7,592	2 0	1 3	" " "	775
146. YAAPEET ..	301	5 0	2 0	" " "	70
Totals ..	£698,606	..	..	.. .. .	76,000

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, 1940.	Period of Rate.	Estimated Number of Persons dwelling in District.
COLIBAN SYSTEM.				
Brought forward ..	Municipal Valuation. £ 698,606			76,000
147. COLIBAN ..	401,249	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, 1939, to 30th June, 1940	60,500
Totals (Urban) ..	£1,099,855	.. .. .	.. .. .	136,500
Grand Totals ..	£3,515,108	.. .. .	.. .. .	230,537

DRAINAGE DISTRICTS.

District.	Valuation by Commission.	Divisions—				Period of Rate.	Estimated Number of Persons dwelling in District.
		1st.	2nd.	3rd.	4th.		
	£	s. d.	s. d.	s. d.	s. d.		
148. COHUNA ..	35,066	1 6	1 1½	0 9	0 4½	1st July, 1939, to 30th June, 1940	1,216
149. KERANG EAST ..	16,992	1 8	1 3	0 10	0 5	" " "	765
150. MAFFRA-SALE ..	26,402	1 2	0 10½	0 7	0 3½	" " "	1,125
151. MERBEIN ..	43,625	0 9	0 4½	..	..	" " "	3,000
152. RED CLIFFS ..	71,575	0 9	..	..	..	" " "	2,750
153. ROCHESTER ..	26,474	1 6	1 1½	0 9	0 4½	" " "	1,750
154. RODNEY ..	15,944	1 3	0 11½	0 7½	0 3½	" " "	700
155. SHEPPARTON ..	56,164	1 2	0 10½	0 7	0 3½	" " "	3,345
156. TONGALA-STANHOPE	49,062	1 6	1 1½	0 9	0 4½	" " "	2,674
157. WERRIBEE ..	21,664	0 8	0 6	0 4	..	" " "	1,336
Totals (Drainage) ..	£362,968	..	..	..	..	.. .. .	18,661

FLOOD PROTECTION DISTRICTS.

158. CARDINIA ..	21,082	4 0	3 0	2 0	1 0	1st July, 1939, to 30th June, 1940	850
159. LOWER KOOWEERUP	56,963	2 0	1 6	1 0	0 6	" " "	2,800
	£78,045						
160. KANYAPELLA ..	Acres. 14,494	1st Div. (p. ac.)			0 6	" " "	74
		2nd Div. (p. ac.)			0 3		
161. LOCH GARRY ..	41,681	Per acre			0 5	" " "	200
	56,175 Acres.						3,924

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.
<i>Supplied from Goulburn System.</i>					
1. BOORT	80,138	56,718	11,339	7s.	1st September, 1939, to 30th April, 1940
2. CALIVIL	61,127	32,744	6,548	7s.	" " " "
3. DINGEE	8,878	4,394	4,394	7s.	" " " "
4. KATANDRA	14,174	11,254	7,371	7s.	" " " "
5. NORTH SHEPPARTON	121,530	61,238	13,291	7s.	" " " "
6. ROCHESTER	181,303	56,746	57,186	6s.	" " " "
7. RODNEY	272,664	190,671	61,076	6s.	" " " "
8. SHEPPARTON	24,488	21,367	21,367	6s.	" " " "
9. SOUTH SHEPPARTON	33,615	17,955	4,413	6s.	" " " "
10. TONGALA-STANHOPE	76,176	47,763	48,182	6s.	" " " "
11. TRAGOWEL PLAINS	217,147	148,421	31,156	7s.	" " " "
Totals	1,091,240	649,271	266,323		
<i>Supplied from Torrumbarry System.</i>					
12. COHUNA	71,899	35,465	35,651	6s.	" " " "
13. FISH POINT	6,327	3,756	1,845	6s.	" " " "
14. KERANG	85,232	54,976	18,968	5s.	" " " "
15. KOONDROOK	81,331	22,724	22,724	6s.	" " " "
16. LEITCHVILLE	13,808	12,109	4,258	6s.	" " " "
17. MYSTIC PARK	20,260	7,928	2,690	6s.	" " " "
18. SWAN HILL	36,487	21,868	21,873	6s.	" " " "
19. THIRD LAKE	11,482	3,816	2,543	6s.	" " " "
Totals	326,826	162,642	110,552		
<i>Supplied from Southern State Works.</i>					
20. MAFFRA-SALE	51,621	21,598	21,598	10s.	1st October, 1939, to 30th April, 1940
21. BACCHUS MARSH	6,656	3,332	3,332	22s. 6d.	
22. WERRIBEE	10,135	8,154	8,155	12s.	
Totals	68,412	33,084	33,085		
<i>Supplied direct from River Murray.</i>					
23. MERBEIN	10,354	7,755	19,388	For each 2½ acre feet delivered in six waterings. 62s. 6d.	1st August, 1939, to 30th April, 1940
24. NYAH	3,837	2,834	7,397	53s. 4d.	" " " "
25. RED CLIFFS	30,963	11,269	28,171	70s.	" " " "
Totals	45,154	21,858	54,956		
Grand Totals ..	1,531,632	866,855	464,916		

C.—SALES OF WATER CHARGES.

Irrigation and Water Supply District.	Area of District in Acres.	Unit Charge per Acre foot for Water Supplied as Sales.	Period of Charge.
1. CAMPASPE	19,767	6s.	1st. July 1939, to 30th June, 1940
2. DEAKIN	163,970	6s.	" " " "
3. TRESKO	3,482	20s.	" " " "
Total	187,219		

FINANCE.

(*W. Lambert, B.Com., D.P.A., A.F.I.A., Accountant.*)

REVENUE.

The Revenue Collections for the financial year 1939-40 were in excess of the previous year and again set a new record of total collections. The respective amounts collected during the past three years were £560,241 for 1937-38, £560,679 for 1938-39, and £615,277 for 1939-40.

The amount collected, which included arrears, represented the equivalent of 123 per cent. of the year's assessment (£498,791) for rates and charges. Additional charges for sales of water, interest on arrears, meter rents, &c., were £144,372. The total collectable new money for the year, therefore, was £643,163 of which the actual sum collected (£615,277) represented the equivalent of 96 per cent.

An amount of £110,687 was written off the books of the Commission for the financial year 1939-40 as compared with £101,540 for the previous year. The large amounts written off over the past two years are mainly the result of adjustment of arrears of rates and charges authorized under the provisions of the *Farmers' Debts Adjustment Act* 1935, No. 4326, and the *Water Act* 1937, No. 4513, respectively.

Total adjustments of water-users' accounts under the provisions of the *Farmers' Debts Adjustment Act* involved a remission of £76,924 as at 30th June, 1940, representing 1,174 individual cases. Pursuant to the *Water Act* 1937, No. 4513, adjustments have been made in the accounts of 1,842 water-users, involving the waiving, as at the above-mentioned date, of a sum of £125,446. In addition to the amounts waived under the provisions of both Acts above referred to, water-users have been given extended time to pay the indebtedness as adjusted. The loss attributable to Crown lands which lessees have vacated, leaving no assets, amounted to £5,874 for the year 1939-40.

The arrears of rates and charges were reduced from £748,567 as at 1st July, 1939, to £661,012 as at 30th June, 1940.

EXPENDITURE.

The expenditure for the year on maintenance, water distribution, and management included £28,948 from Revenue for administrative charges on Unemployment Relief Loans Works, and the comparative figures for 1938-39 are set out hereunder:—

	1939-40.	1938-39.
	£	£
From Annual Vote Appropriation	478,403 ..	428,864
From Unemployment Relief (Taxation) Funds	8,250 ..	43,724
	<hr/> 486,653	<hr/> 472,588

An amount of £748,964 was expended during the year on capital construction works, reconstruction, and replacements, and river improvements from funds provided as under:—

Ordinary Loan Funds (Acts Nos. 4612, 4655, and including Treasurer's Advance £12,019)	£
	426,825
Unemployment Relief Loan Funds (Act 4097)	289,764
Commonwealth Defence Works (U.R.) Account	32,375
	<hr/> 748,964

The total expenditure on works carried out or supervised by the Commission for the year 1939-40 from all sources was as set out hereunder :—

	£	£	£
Vote Funds	478,403		
Unemployment Relief (Taxation) Funds	8,250		
		486,653	
Ordinary Loan Funds—			
Commission Works	375,054		
Waterworks Trusts and Local Bodies	51,771		
		426,825	
Unemployment Relief Loan Funds (Act 4097)		289,764	
Commonwealth Defence Works (U.R.) Account		32,375	
Drainage Trust Funds		324	
Water Supply Works Depreciation Fund		1,585	
Special Appropriation		3,507	
Total Expenditure on construction, operation, maintenance, and administration of Commission Works and Water Supply Works supervised by Commission			1,241,033

Expenditure on war precautions under the provisions of the *National Security Act* 1939, No. 4645, amounted to £9,364. This expenditure is additional to that recorded above, and although charged by the Treasury to the annual cost of operations in respect to country water supply works, the expenditure has not been debited direct to water-users.

In addition, water supply and sewerage works have been constructed at the request of the military authorities for a number of military and internment camps. The expenditure (£82,192) incurred during the year on this work was met from Commonwealth Funds.

CAPITAL LIABILITY.

The Capital Loan Liability of the State for Works of Country Water Supply at 30th June, 1940, was £27,237,306, of which amount £21,463,709 is charged to the "Capital Expenditure Borne by the State Account," £1,950,718 is charged to Waterworks Trusts and Local Government Bodies, £36,483 is debited to the Plant and Machinery Account, and the balance, £3,786,396, represents the Capital Liability, after adjustment, debited to Districts and Divisions directly under the control of the Commission. These figures are exclusive of an equity of £1,648,173 in the National Debt Sinking Fund.

The average rate per cent. of Interest for 1939-40 debited by the Treasury on the Capital Liability for works of country Water Supply Works was £3 18s. 11d.

The amounts debited to Country Water Supply Works on account of interest and exchange on overseas interest were :—

	£	s.	d.
Interest	1,096,718	12	9
Exchange on overseas interest	110,255	3	3
	1,206,973	16	0

The amount paid by the Treasury in respect of exchange on overseas interest has not been debited direct to water-users. The following statement shows the approximate Interest payment for 1939-40 in relation to the Capital Liability.

Capital Debited to—	Capital Liability as at 30th June, 1940.	Proportion of Interest Liability (excluding exchange).
	£	£ s. d.
Districts and Divisions under the direct control of the Commission	3,786,396	144,870 9 9
Waterworks Trusts and Local Governing Bodies	1,950,718	84,945 7 0
Plant and Machinery Account	36,483	627 13 1
Capital Expenditure Borne by the State Account	21,463,709	866,275 2 11
	27,237,306	1,096,718 12 9

DEPRECIATION.

The amount standing at credit of the Depreciation Account in the Commission's books as at 30th June, 1940, including interest, was £87,452 18s. 6d. The amount at credit of the Water Supply Works Depreciation Fund kept in the Treasury as at 30th June, 1940, was, however, only £12,462 0s. 4d. The balance, therefore, in the Depreciation Account in the Commission's books not yet credited to the Fund by the Treasury is £74,990 18s. 2d.

While there is sufficient money in the fund to meet estimated commitments for 1940-41, it is desired to point out that expenditure from depreciation must of necessity increase as replacements become more urgent in the near future, and the omission to transfer to the Depreciation Fund moneys actually collected from ratepayers and paid to Consolidated Revenue in respect of Depreciation each year will, when large expenditure is involved in any year, necessitate the transfer from the Commission's revenue in one year of an unusually large sum.

This would have undesirable features in that, as the net revenue shown for the year would be much lower than in previous years, it might appear that the Commission had failed in its duty to collect rates and charges; furthermore the necessity to transfer large sums from the Commission's revenue to meet heavy commitments on the Depreciation Fund may occur in a year which might embarrass the Budgetary equilibrium.

Details of the Water Supply Works Depreciation Accounts are set out on pages 69-71 of this report.

STORES SUSPENSE ACCOUNT AND PLANT AND MACHINERY ACCOUNT.

	£	s.	d.
The value of Stores and Equipment held in the Stores Suspense Account as at 30th June, 1940, was	84,317	4	11
The value of movable Plant and Machinery held in the Plant and Machinery Account as at 30th June, 1940, was	36,483	0	0

Plant and machinery controlled in the Plant and Machinery Account is hired to the particular works on which any of the plant is engaged at rates sufficient to provide interest and redemption on the capital cost of the plant, a reserve fund for major overhauls, and depreciation adequate to renew the plant when it has reached the end of its useful life. Interest (£627 13s. 1d.) and redemption (£39 8s. 10d.) have been paid in full to 30th June, 1940.

The amount of the hire charge representing Depreciation is paid direct to the credit of the Water Supply Plant and Machinery Depreciation Fund which is kept in the Treasury. The amount at credit of this fund, which is interest-bearing, was £4,660 19s. 8d. as at 30th June, 1940.

The hire charge account is in credit to the extent of £1,256 2s. 4d. It is desirable that the hire charges should be kept in credit in order that funds may be available to meet interest and redemption charges, &c., in any year when circumstances may not permit the plant to be employed to full capacity.

REVENUE EXPENDITURE CHARGEABLE TO THE STATE ACCOUNT.

The Commission, by direction of the Governor in Council, has, throughout 1939-40, continued the water supply to 14 Waterworks Districts, 2 Irrigation Districts, 15 Urban Districts, and 3 Urban Divisions, in respect of which Districts and Divisions the works would not produce sufficient revenue to cover the expenses of maintenance and management. Section 6 of the *Water Act* 1937, No. 4513, provides that the annual amount of the loss resulting from the maintenance and management of such works shall be transferred in the books of the Commission to the "Revenue Expenditure Chargeable to the State Account." The amounts so transferred have been—1938-39 £57,185, 1939-40 £62,826. In nineteen of these districts an aggregate cash surplus of revenue over expenditure of £3,467 was obtained after meeting interest charges (£34) in respect to cost of Capital works debited to districts subsequent to the Capital Adjustment. Of this surplus an amount of £815 was transferred to Depreciation Account and £1 to Redemption. The net amount debited to the "Revenue Expenditure Chargeable to the State Account" was £60,175.

The above figures are exclusive of interest due on Capital Liability incurred in respect of works under construction, which has accrued due before the first rate or charge has been made. Such interest charges are, in accordance with the provisions of the *Water Act*, No. 4513, charged to the "Revenue Expenditure Chargeable to the State Account."

FINANCIAL STATEMENTS.

Financial statements in respect of the various districts and divisions controlled and supervised by the Commission are set out on the following pages.

FINANCIAL OPERATIONS 1939-40.

A complete analysis of the Commission's financial operations during the year would involve the division of the Commission's activities into those which might be regarded as "Paying" Districts or business undertakings, as "Non-paying" Districts or subsidized utilities, and as national services respectively.

Pursuant to the *Water Act* 1937, No. 4513, the Capital Liability of Country Water Supply Works was adjusted by debiting to water-users, such amounts of Capital Liability in respect of which interest and redemption could be paid on the basis of existing rates and charges after providing for operating costs, management, and depreciation. The balance of the Capital Liability, including the Capital cost of Free Headworks and other National Works, was transferred to the "Capital Borne by the State Account."

As the water rates and charges in respect of those districts and divisions, the Capital Liability of which has been adjusted, are expected to meet the costs of management and operation in addition to depreciation and interest and redemption on the Capital as adjusted, such districts might be regarded as being within the category of a business undertaking.

"PAYING" DISTRICTS.

The Districts from which revenue is sufficient to meet all operating, maintenance depreciation, interest, and redemption charges on allotted capital are:—

Irrigation and Water Supply Districts.

Bacchus Marsh	Dry Lake	Murray Valley	Shepparton
Boort	Katandra	Mystic Park	South Shepparton
Calivil	Kerang	North Shepparton	Swan Hill
Campaspe	Koondrook	Nyah	Third Lake
Cohuna	Leitchville	Red Cliffs	Tongala-Stanhope
Deakin	Maffra-Sale	Rochester	Tragowel Plains
Dingee	Merbein	Rodney	Werribee

Waterworks Districts.

Axe Creek	Hindmarsh	Normanville	Western Wimmera
Bellarine	Long Lake	Otway	Wimmera United
Peninsula	Mornington	Upper Wimmera	Wycheproof
Birchip	Peninsula	United	
Harcourt	Newstead	Werribee	

Urban Districts and Divisions.

Antwerp	Dooen	Newstead	Waitchie
Barwon Heads and Ocean Grove	Frankston	North Wonthaggi	Walpeup
Berriwillock	Garfield	Nullawil	Watchem
Berwick	Hastings	Nyah	Werrimull
Birchip	Hicksborough	Ouyen	Wonthaggi
Brim	Hopetoun	Pakenham	Woomelang
Bunyip	Jeparit	Pyramid Hill	Woorinen
Camperdown	Lalbert	Quambatook	Wycheproof
Carrum	Lascelles	Queenscliff and Point Lonsdale	Yaapeet
Chillingollah	Longwarry	Rainbow	Bacchus Marsh
Chinkapook	Manangatang	Rupanyup	Cohuna
Cobden	Marnoo	Sea Lake	Dingee
Coliban	Marong	Somerville	Leitchville
Cranbourne	Merbein	South Frankston	Lockington
Crib Point	Minyip	Spring Vale	Red Cliffs
Culgoa	Mornington	Tempy	Stanhope
Dandenong	Mount Martha	Terang	
Dimboola	Nandaly	Torquay	
	Natimuk		

The surplus Revenue over Expenditure in respect of these districts after providing for interest, redemption, and depreciation was	£ 41,820
---	---------	----------

“NON-PAYING” DISTRICTS.

There are, however, certain Districts and Divisions where the revenue from existing rates and charges is insufficient to meet operating costs. The works in such centres may be maintained by direction of Parliament or the Governor in Council, in which case the whole of the Capital Liability is borne by the State, and the loss resulting from the maintenance and management is transferred to the “Revenue Expenditure Chargeable to the State Account.” The supply to these centres might be regarded as a “utility service” as against a “business undertaking.”

The Districts from which estimated Revenue is insufficient to meet operating costs and to which supplies of water are being continued by direction of the Governor in Council are:—

Irrigation and Water Supply Districts.

* Fish Point Tresco

Waterworks Districts.

Carwarp	Kerang North-	*Sea Lake	Upper Western
Carwarp Central	West Lakes	Tyntynder	Wimmera
Coreena	Millewa	Tyrrell	*Walpeup West
Karkarooc	Millewa Central	Tyrrell West	Yelta

Urban Districts and Divisions.

*Corop	*Bittern	*Lake Boga	*Piangil
*Heyfield	*Carwarp	*Meringur	*Portarlington
Murrabit	*Drysdale	*Nyah West	*Speed
*Anglesea	*Jung Jung	*Patchewollock	*Ultima
*Beulah	Koondrook		

* In districts marked “*” the operations for 1939–40 resulted in an aggregate surplus of £3,467. Of this amount a sum of £816 has been applied to depreciation account and redemption.

The net amount debited to the “Revenue Expenditure Chargeable to the State Account” in respect of districts maintained during 1939–40 by direction of the Governor in Council, in which the Revenue would be insufficient to meet operating costs, was £
60,175

NATIONAL SERVICES.

Included in the heading of “National Services” are such items as Contribution by the State of Victoria towards the operation and maintenance of River Murray Works, Maintenance and management of Free Headworks, Administration in respect of expenditure from Unemployment Relief Funds, Expenditure under provisions of National Security (Emergency Powers) Act 4645, Superannuation Charges, Supervision of Waterworks Trusts and Sewerage Authorities, and River Gaugings and Investigations.

The Total Cost of Services of a National Character administered by the Commission during 1939–40 was	£
From this amount may be deducted miscellaneous revenue collected in respect to Diversion permits, rents, &c.	83,901
	16,804
Net Cost of National Services 1939–40	67,097

No contribution is made to the Commission’s revenue to offset the “utility services” and “national services” which the Commission is directed to administer but which are not completely covered by rates or charges.

NET COST TO STATE.

It is indicated on page 21 of the Auditor-General’s Report for 1939–40 that “the net cost to the State for the year in connexion with country Water Supply which has been met from general revenue was £1,010,391 11s. 7d.” (this figure includes the cost of the services above referred to, also the sum of £9,364 expended on war precautions). The equivalent figure stated annually is often incorrectly quoted as a “loss” by water-users, whereas the only amount which, on the existing basis of rates and charges, might be correctly regarded as a “loss” is the amount of £60,175 mentioned above, being the deficiency on Districts in which it was realised that the revenue would be insufficient to meet expenses and to which, as already intimated, the supply of water is continued by direction of the Governor in Council. As against this, the result in other districts controlled by the Commission was a surplus of £41,820.

A summary of the total cost (£1,010,391) to the State for the year is set out hereunder—
a more detailed analysis is set out on page 50 of this report. £

Total Cost to State	..	..	..	..	..	1,010,391
				£	£	
Loss on "Non-Paying" Districts	..	..	..	..	60,175	
Cost of "National Services"	..	..	..	..	67,097	
Interest and Exchange on Headworks, &c., borne						
by State	..	..	..	..	976,530	
Less Interest on Lands sold	..	..	..	..	1,573	
					<u>974,957</u>	
						1,102,229
<i>Deduct</i> amount paid to Revenue in respect of						
Depreciation (£42,673) and Redemption (£7,345)				..	50,018	
						<u>1,052,211</u>
<i>Deduct</i> surplus on "Paying" Districts	..	..	..	..	41,820	
						<u>1,010,391</u>
Net Total Cost to State	..	..	..	..		1,010,391

If the Commission's Estimates each year could be presented to Parliament in a manner separating the cost of the operation of Districts with adjusted Capital Liability from the works maintained in non-paying Districts by direction of the Governor in Council and from services of a national character not directly debitable to water-users, and the operations analysed in like manner in the Auditor-General's Annual Report, it is considered a better interpretation and appreciation of the numerous and important functions controlled and administered by the Commission would result.

It is unfortunate that, when comment is made in respect to the operation of country water supply works, credit is not often given for the large sums involved in continuing supplies to non-paying districts and for the value of the national services rendered to the State. Were an appraisal possible of the indirect value to the State of the extensive works administered and maintained by the Commission, it would, no doubt, be abundantly evident that the contribution by the State of one million pounds for the year would be but a fraction, in terms of money, of the benefits derived—the cost borne by the State represents approximately 10s. per capita of the population of the State of Victoria.

RESULT OF OPERATIONS IN DISTRICTS

Disbursements, 1939-40.

	Operating Expenses.	Interest on Capital Allotted.	Depreciation Paid by Districts.	Redemption Paid by Districts.	Total Disbursements.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Coliban Works	22,589 11 3	16,111 16 5	9,295 10 9	77 12 10	48,074 11 3
Irrigation Districts	171,952 11 6	66,546 7 5	15,699 16 0	4,378 13 5	258,577 8 4
Irrigation Urban Divisions	2,548 8 8	1,542 7 6	827 8 10	151 3 3	5,069 8 3
Waterworks Districts	180,641 14 4	32,587 13 4	1,041 0 9	768 18 8	215,039 7 1
Waterworks Urban Districts	27,811 11 1	27,578 4 7	14,945 18 2	1,582 4 0	71,917 17 10
Flood Protection Districts	5,383 12 7	504 0 6	..	386 4 5	6,273 17 6
Drainage Districts	16,597 16 9	..	863 8 11	..	17,461 5 8
	427,525 6 2	144,870 9 9	42,673 3 5	7,344 16 7	622,413 15 11
Expenditure not chargeable to Districts—					
Free Headworks	9,318 15 10	..	..	..	9,318 15 10
Others	53,316 9 5	..	..	..	53,316 9 5
	490,160 11 5	144,870 9 9	42,673 3 5	7,344 16 7	685,049 1 2

SUMMARY OF OPERATIONS FOR YEAR 1939-40.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
REVENUE, 1939-40—			EXPENDITURE, 1939-40—		
From Districts and other activities under the control of the Commission	615,277 6 4		From—		
Less transfer to State Loans Repayment Fund	376 6 11		Annual Vote ..	478,403 2 3	
			Special Appropriation ..	3,507 3 6	
Add amount available from Unemployment Relief Fund towards maintenance		8,250 5 8		481,910 5 9	
		623,151 5 1	Unemployment Relief Fund ..	8,250 5 8	
					490,160 11 5
Surplus brought down		132,990 13 8	Surplus carried down		132,990 13 8
Interest on Loans paid to Treasury by Waterworks Trusts and Local Governing Bodies		84,945 7 0			623,151 5 1
Interest on Sale of Land	1,573 17 2		Amount debited by Treasury for Pensions and Gratuities		14,191 15 7
Interest Plant and Machinery Account	627 13 1		Expended under Provisions of National Security (War Precautions) Act No. 4645		9,363 10 11
		2,201 10 3	Balance available towards payment of Interest and Exchange, Depreciation and Redemption carried down		196,582 4 5
		220,137 10 11			220,137 10 11
Balance available towards Interest and Exchange	196,582 4 5		Interest on Total Loan Liability		1,096,718 12 9
Balance being net amount borne by the State not chargeable to water users		1,010,391 11 7	Exchange on Interest Payments		110,255 3 3
		1,206,973 16 0			1,206,973 16 0

ANALYSIS OF EXPENDITURE BORNE BY THE STATE, 1939-40.

	£ s. d.	£ s. d.
Services of a National Character—		
Maintenance River Murray Commission Works. Contribution by State of Victoria in accordance with the provisions of the River Murray Waters Acts	9,650 0 0	
Maintenance and Management of Free Headworks	7,030 16 5	
Administration and General Expenditure in respect to Expenditure from Unemployment Relief Funds	28,948 8 5	
Expenditure under provisions of National Security (Emergency Powers) Act No. 4645	9,363 10 11	
Superannuation	14,191 15 7	
River Gaugings and Investigations and Supervision of Waterworks Trusts and Sewerage Authorities, &c.	14,718 1 0	
	83,902 12 4	
Less Revenue from Headworks, Diversions, Permits, &c.	16,804 19 8	
		67,097 12 8
Exchange on Overseas Interest Payments	110,255 3 3	
Interest on Capital Expenditure on Free Headworks, and other Capital Expenditure Borne by the State	866,275 2 11	
	976,530 6 2	
Less Interest on Lands Sold	1,573 17 2	
		974,956 9 0
Total		1,042,054 1 8
Deduct Surplus from operation of Commission Districts—	£ s. d.	
Surplus on operation of Districts the Capital Liability in respect of each of which has been adjusted under Act No. 4513	41,819 11 1	
Amounts paid to Revenue in respect of Depreciation (£41,858 11s. 3d.) and Redemption (£7,343 7s. 11d.)	49,201 19 2	
		91,021 10 3
Less Loss on operation of Districts supplies to which are continued by direction of Governor in Council, Act No. 4513	60,175 1 0	
Less Surplus Revenue over expenditure in certain of these Districts paid to revenue for Depreciation (£814 12s. 2d.) and Redemption (£1 8s. 8d.). Total net surplus revenue was £2,651 5s. 3d.	816 0 10	
		59,359 0 2
		31,662 10 1
Net Expenditure borne by the State		1,010,391 11 7

UNDER CONTROL OF COMMISSION.

Receipts, 1939-40.

	Total Receipts.		Less Transfers to State Loans Repayment Fund.		Total Collections Paid to Consolidated Revenue.		Excess.	
							Receipts over Disbursements.	Disbursements over Receipts.
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Coliban Works	48,527	6 10	..	..	48,527	6 10	452	15 7
Irrigation Districts ..	284,545	17 2	..	..	284,545	17 2	25,968	8 10
Irrigation Urban Divisions ..	7,622	16 8	..	..	7,622	16 8	2,553	8 5
Waterworks Districts ..	144,235	14 2	..	..	144,235	14 2	..	70,803 12 11
Waterworks Urban Districts ..	91,341	18 11	..	..	91,341	18 11	19,424	1 1
Flood Protection Districts ..	8,599	1 0	376	6 11	8,222	14 1	2,325	3 6
Drainage Districts	13,599	11 11	..	..	13,599	11 11	..	3,861 13 9
	598,472	6 8	376	6 11	598,095	19 9	50,723	17 5
Free Headworks	2,823	12 10	..	..	2,823	12 10	..	..
Miscellaneous	13,981	6 10	..	..	13,981	6 10	..	..
	615,277	6 4	376	6 11	614,900	19 5	..	..

Capital Expenditure 1939-40—

Expenditure during the year on Capital Works of Water Supply—	£	s. d.	£	s. d.
Ordinary Loan Funds .. ..	..	..	414,806	6 0
State Unemployment Relief Funds .. ..	..	..	289,763	18 2
Treasurer's Advance .. ..	..	..	12,018	10 9
Total Capital Expenditure from Ordinary Sources. (Details pages 65-67) .. ..	..	..	716,588	14 11
Additional Expenditure on Capital Works from Commonwealth Defence Works Unemployment Relief Funds .. ..	..	..	32,374	14 6
Total Capital Expenditure during year .. ..	..	..	748,963	9 5

Loan Capital Liability—

Net Loan Liability of State for Works of Country Water Supply at 30th June, 1940 ..	26,041,916	1 4
---	------------	-----

Represented by—

Works at Debit of Authorities—

Commission Districts	3,786,395	6 11
Water Supply Plant and Machinery Account	36,483	8 1
Waterworks Trusts and Local Governing Bodies	1,950,718	5 3
	5,773,597	0 3

Capital Expenditure Borne by the State—

Free Headworks	1,226,340	16 8
Capital Works and Charges not apportionable to Districts	1,304,852	9 5
Headworks and Distributary Works	17,689,154	7 6
Waterworks Trusts and Local Governing Bodies	1,101,005	10 9
Free Grants to Local Authorities in early years	142,356	4 11
	21,463,709	9 3

Net Loan Capital Liability of Commission Districts, Divisions and Works under control of the Commission

.. ..	27,237,306	9 6
-------	------------	-----

Less Amount from National Debt Sinking Fund	1,395,390	8 2
---	-----------	-----

25,841,916 1 4

Add Cash on Hand at Treasury	200,000	0 0
------------------------------------	---------	-----

Net Liability Country Water Supply Capital Account in Treasury	26,041,916	1 4
--	------------	-----

Interest and Exchange—

The Total Interest due on the Loan Liability for 1939-40 is	1,096,718	12 9
To which is to be added Exchange payable on Overseas Interest	110,255	3 3
	1,206,973	16 0

Interest Debitable to—

Works at Debit of Authorities—

Commission Districts	144,870	9 9
Trusts	84,945	7 0
Water Supply Plant and Machinery Account	627	13 1
	230,443	9 10

Capital Expenditure Borne by the State—

Free Headworks	49,464	4 3
Capital Works and Charges not apportionable to Districts	52,632	3 9
Headworks and Distributary Works not Debited to Districts	714,027	0 5
Free Grants to Local Authorities and Amounts Written off over 41 years ago	50,151	14 6
	866,275	2 11

1,096,718 12 9

Exchange not apportioned	110,255	3 3
--------------------------------	---------	-----

1,206,973 16 0

RECEIPTS AND DISBURSEMENTS.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1940.

Works.	Receipts (Exclusive of Credits for Urban Water).			Disbursements (exclusive of Interest, Redemption, and Depreciation Charges, and Charges for Rural Water).		
	Total.	Paid to— (a) Depreciation Fund; (b) State Loans Repayment Fund.	Paid to Consolidated Revenue.	From Annual Votes and Special Appropriation.	From Unemployment Relief (Taxation) Fund.	Total.
District Works.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Coliban Works	48,527 6 10	..	48,527 6 10	22,535 1 10	54 9 5	22,589 11 3
Free Headworks—						
Broken River Works ..	..	..	..	..	83 6 1	83 6 1
Goulburn River Works ..	767 3 11	..	767 3 11	4,312 3 1	1,859 5 2	6,171 8 3
Kow Swamp Works ..	1,154 2 5	..	1,154 2 5	1,973 13 4	345 8 2	2,319 1 6
Lake Lonsdale Reservoir ..	223 17 8	..	223 17 8	46 15 5	..	46 15 5
Loddon River Works ..	274 0 11	..	274 0 11	356 10 5	..	356 10 5
North-West Lakes Works ..	404 7 11	..	404 7 11	341 14 2	..	341 14 2
Irrigation Districts ..	284,545 17 2	..	284,545 17 2	167,194 3 10	4,758 7 8	171,952 11 6
Irrigation Urban Divisions ..	7,622 16 8	..	7,622 16 8	2,548 8 8	..	2,548 8 8
Waterworks Districts ..	144,235 14 2	..	144,235 14 2	179,837 10 9	804 3 7	180,641 14 4
Waterworks Urban Districts ..	91,341 18 11	..	91,341 18 11	27,600 15 2	210 15 11	27,811 11 1
Flood Protection Districts ..	8,599 1 0	(b) 376 6 11	8,222 14 1	5,383 12 7	..	5,383 12 7
Drainage Districts ..	13,599 11 11	..	13,599 11 11	16,463 7 1	134 9 8	16,597 16 9
Miscellaneous Expenditure (not directly chargeable to Districts)—						
Loch Garry (proportion of maintenance borne by State) ..	..	..	..	502 9 5	..	502 9 5
Irrigation Branch ..	..	..	..	901 16 5	..	901 16 5
Waterworks Trusts and Sewerage Authorities ..	..	..	..	2,390 7 6	..	2,390 7 6
Cobungi and Water Weed Research—State Grant to Council for Scientific and Industrial Research ..	..	..	..	250 0 0	..	250 0 0
Rivers and Reclamation Division—Surveys, Investigations, &c. ..	..	..	..	7,016 4 2	..	7,016 4 2
Compensation ..	..	..	..	150 0 0	..	150 0 0
River Murray Commission—State contribution towards maintenance River Murray Works ..	..	..	..	9,650 0 0	..	9,650 0 0
Administration of Unemployment Relief Loan Works, &c. ..	..	..	..	28,948 8 5	..	28,948 8 5
Special Appropriation, Act No. 3801, sections 19, 20, Administration ..	..	..	..	3,507 3 6	..	3,507 3 6
Miscellaneous Collections—(Diversion Permits, Rents, &c.) ..	13,981 6 10	..	13,981 6 10	..	..	..
Totals ..	615,277 6 4	(b) 376 6 11	614,900 19 5	*481,910 5 9	8,250 5 8	†490,160 11 5

Net Receipts paid to Consolidated Revenue £ s. d. 614,900 19 5
Total Disbursements from Votes and Special Appropriation 481,910 5 9

Surplus available towards meeting Interest and other Treasury Charges .. 132,990 13 8

*Included in the above figures is an amount of £28,948 8s. 5d., being Administration and General Expenditure Charges, in connexion with Unemployment Relief Loan Works, not directly chargeable to water users.

In addition, the expenditure on services of a national character, not directly chargeable to water users, was £21,409 0s. 5d. This sum is comprised of:—Administration charges under Special Appropriation (£3,507 3s. 6d.); Administration of Waterworks Trusts and Sewerage Authorities (£2,390 7s. 6d.); Maintenance of Free Headworks (£4,207 3s. 7d.); Proportion of Loch Garry Flood Protection District borne by State under Agreement (£502 9s. 5d.); Contribution by State towards maintenance River Murray Works (£9,650); Other Expenditure (£1,151 16s. 5d.).

†Expenditure amounting to £9,363 10s. 11d., under the provisions of the National Security (Emergency Powers) Act (No. 4645) has not been included in the above statement.

COLIBAN SYSTEM.

STATEMENT of Moneys received and disbursed during the year ended 30th June, 1940, and of Interest charged at the rate of 3·978 per cent. on Capital Debts; and also of Depreciation and Redemption charged as at 30th June, 1940.

District.	Receipts.	Disbursements.					Excess Disbursements over Receipts.	Excess Receipts over Disbursements.
		Operating Costs.	Depreciation Charges (See page 70).	Redemption.	Interest.	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Coliban	46,270 11 11	21,763 3 8	9,182 14 5	..	15,324 13 10	46,270 11 11	..	..
2. Axe Creek	331 3 5	225 17 7	..	..	124 9 5	350 7 0	19 3 7	..
3. Harcourt	1,744 1 4	537 14 5	39 0 0	77 12 10	617 14 11	1,272 2 0	..	471 19 2
4. Marong	181 10 2	62 15 7	73 16 4	..	44 18 3	181 10 2	..	..
Totals ..	48,527 6 10	22,589 11 3	9,295 10 9	77 12 10	16,111 16 5	48,074 11 3	19 3 7	471 19 2

DISTRICTS HELD IN TRUST BY THE COMMISSION.

STATEMENT of Receipts and Disbursements for the year ended 31st December, 1939.

Receipts.

Name of Trust.	Bank Balance at 1st January, 1939.	1939.				Grand Total for Year 1939.
		Rates.	Water Sales.	Interest and Miscellaneous.	Total.	
	£	£	£	£	£	£
Carrum	Cr. 40	1,573	..	226	1,799	1,839
Loddon United	Cr. 584	1,832	85	174	2,091	2,675
Loddon United (Mitiamo Urban) .. .. .	..	177	..	244	421	421
Totals	Cr. 624	3,582	85	644	4,311	4,935

Disbursements.

Name of Trust.	Capital Debit, 31st December, 1939.	1939.					Grand Total for Year 1939.	Bank Balance Carried Forward 1st January, 1940.
		Maintenance and Water Distribu- tion.	Manage- ment.	Total.	Interest.	(A) Deprecia- tion : (B) Redemp- tion.		
	£	£	£	£	£	£	£	£
Carrum	24,937	443	112	555	1,200	..	1,755	Cr. 84
Loddon United	1,485	1,340	116	1,456	82	(B) 454	1,992	Cr. 683
Loddon United (Mitiamo Urban)	4,726	148	15	163	198	{ (A) 28 (B) 32 }	421	..
Totals	31,148	1,931	243	2,174	1,480	{ (A) 28 (B) 486 }	4,168	Cr. 767

FLOOD PROTECTION DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st July, 1920, to 30th June, 1940, and of Interest charged at the rate of 3·978 per cent. on Capital Debits, and also of Redemption charged as at 30th June, 1940.

RECEIPTS.

District.	1st July, 1920, to 30th June, 1939.	1939-40.			Grand Total at 30th June, 1940.
		Charge.	Interest and Miscellaneous.	Total.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Cardinia	28,446 8 6	2,598 18 6	89 10 9	2,688 9 3	31,134 17 9
2. Kanyapella	3,871 18 5	260 0 5	32 17 5	292 17 10	4,164 16 3
3. Kooweerup Lower	62,199 14 1	4,793 4 3	252 1 0	5,045 5 3	67,244 19 4
4. Loch Garry	12,114 17 8	558 4 2	14 4 6	572 8 8	12,687 6 4
Totals	106,632 18 8	8,210 7 4	388 13 8	8,599 1 0	115,231 19 8

DISBURSEMENTS AND INTEREST, AND REDEMPTION CHARGED.

District.	Disbursements.					Interest Charged.			Redemption paid to— (A) Redemption Funds; (B) Revenue.	Grand Total at 30th June, 1940.
	1st July, 1920, to 30th June, 1939.	1939-40.			Total at 30th June, 1940.	1st July, 1920, to 30th June, 1939.	1st July, 1939, to 30th June, 1940.	Total at 30th June, 1940.		
		Repairs and Maintenance.	Adminis- tration.	Total.						
	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.
1. Cardinia ..	9,119 6 11	838 19 1	501 13 7	1,340 12 8	10,459 19 7	26,429 1 2	..	26,429 1 2	..	36,889 0 0
2. Kanyapella ..	1,196 17 3	36 19 8	18 8 8	55 8 4	1,252 5 7	2,118 4 0	156 6 3	2,274 10 3	(B) 29 14 6	3,556 10 4
3. Kooweerup Lower ..	16,698 0 7	2,234 19 10	1,250 2 5	3,485 2 3	20,183 2 10	58,969 3 2	..	58,969 3 2	..	79,152 6 0
4. Loch Garry	1,243 3 9	391 7 6	111 1 10	502 9 4	1,745 13 1	6,282 15 0	347 14 3	6,630 9 3	(A) 4,286 12 8	12,062 15 0
Totals ..	28,257 8 6	3,602 6 1	1,881 6 6	5,388 12 7	33,641 1 1	93,799 3 4	504 0 6	94,303 3 10	(A) 4,286 12 8 (B) 29 14 6	132,260 12 1

IRRIGATION AND WATER SUPPLY DISTRICTS.

STATEMENT of Moneys received from 1st May, 1906, to 30th June, 1940.

RECEIPTS.

District.	1939-40.										Grand Total at 30th June, 1940.				
	1st May, 1906, to 30th June, 1939.		Rates.		Compulsory Irrigation Charges.		Water Sales.		Interest and Miscellaneous.			Total.		Urban Water.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.		£	s. d.	£	s. d.
1. Bacchus Marsh	136,344	14 7	772	1 0	3,418	3 7	758	15 9	375	1 8	5,324	2 0	142,213	16 7	
2. Boort	111,016	15 0	968	12 5	2,791	18 4	1,383	16 0	175	8 6	5,319	15 3	116,336	10 3	
3. Calivil	30,894	12 8	841	14 6	1,229	16 11	766	14 11	147	0 6	2,985	6 10	33,879	19 6	
4. Campaspe	24,534	3 0	722	8 2	..	..	33	9 0	53	5 5	809	2 7	25,343	5 7
5. Cohuna	423,878	15 6	3,592	17 6	11,489	8 5	2,750	11 7	648	4 5	18,481	1 11	442,435	17 5	
6. Deakin	136,114	14 4	3,083	17 9	..	..	954	8 11	158	10 2	4,106	16 10	140,314	11 2
7. Dingee	43,845	2 4	155	1 3	1,489	3 1	73	2 11	93	16 3	1,811	3 6	45,661	5 10	
8. Dry Lake	984	5 9	..	..	663	17 3	69	19 5	36	0 8	838	7 4	984	5 9
*9. Fish Point	10,164	15 5	68	10 0	1,381	10 0	1,000	2 5	93	14 9	2,912	2 9	11,003	2 9	
10. Katandra	17,645	13 6	436	15 7	3,105	4 2	3,573	6 2	212	11 6	8,604	8 3	20,557	16 3	
11. Kerang	180,989	9 2	1,713	6 5	6,946	14 8	994	17 5	374	18 9	10,503	14 6	189,593	17 5	
12. Koondrook	244,002	2 7	2,187	3 8	1,331	5 4	1,015	7 7	56	11 2	3,147	3 1	254,589	17 1	
13. Leitchville	34,914	17 5	743	19 0	1,331	5 4	2,522	18 3	636	10 4	16,651	8 0	38,062	0 6	
14. Mafra-Sale..	126,787	16 11	2,950	17 2	10,541	2 3	2,522	18 3	447	6 11	26,538	11 1	143,539	4 11	
15. Merbein	550,932	6 6	1,259	1 3	24,456	1 2	376	1 9	46	8 3	461	5 6	577,990	17 7	
16. Murray Valley	..	..	156	16 0	..	..	258	1 3	46	8 3	461	5 6	461	5 6
17. Mystic Park	17,637	17 6	197	18 0	1,401	0 10	36	11 6	40	6 8	1,675	17 0	19,313	14 6	
18. North Shepparton	42,318	10 8	2,370	17 2	2,468	13 6	502	17 5	207	13 2	5,550	1 3	47,868	11 11	
19. Nyah	168,176	14 7	217	8 3	8,376	14 9	175	11 8	214	8 9	8,984	3 5	177,397	18 0	
20. Red Cliffs	545,820	17 7	2,038	0 6	39,781	14 0	1,186	3 1	2,751	18 7	45,757	16 2	592,176	13 9	
21. Rochester	439,184	3 4	3,176	16 9	15,882	19 8	2,083	2 10	1,096	10 5	22,239	9 8	461,438	13 0	
22. Rodney	756,071	4 3	6,890	7 1	17,182	10 1	2,313	13 3	973	13 1	27,360	3 6	783,431	7 9	
23. Shepparton	186,449	16 4	1,805	14 7	5,726	10 7	139	12 6	247	5 1	7,919	2 9	194,368	19 1	
24. South Shepparton	33,748	14 9	776	6 8	1,279	8 11	104	19 8	69	18 7	2,230	13 10	35,979	8 7	
25. Swan Hill	217,672	2 9	1,674	9 11	7,321	19 10	2,592	8 1	457	0 9	12,045	18 7	229,718	1 4	
26. Third Lake..	13,241	7 8	191	18 5	864	11 0	32	14 10	35	3 3	1,124	7 6	14,365	15 2	
27. Tongala-Stanhope	288,487	14 10	2,239	8 6	11,803	17 1	941	13 4	757	2 8	15,742	1 7	304,249	16 5	
28. Tragowel Plains	348,338	8 11	2,028	19 2	10,738	12 10	1,306	18 4	674	11 8	14,749	2 0	363,129	10 11	
*29. Treco	32,357	3 9	488	9 8	..	..	1,749	2 6	109	16 1	2,347	8 3	34,704	12 0
30. Werribee	140,863	5 11	1,139	11 4	5,398	18 3	1,447	16 3	248	16 5	8,235	2 3	149,098	8 2	
Totals	5,303,418	7 6	44,889	7 8	197,071	16 6	31,144	18 7	11,439	14 5	284,545	17 2	5,590,209	4 8	

* Districts marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance and management thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council, dated 30th July, 1938, under the provisions of section 6, *Water Act 1937*, (No. 4613).)

IRRIGATION AND WATER SUPPLY DISTRICTS.

STATEMENT of Moneys disbursed from 1st May, 1906, to 30th June, 1940, and of Interest charged at the rate of 3.978 per cent. on Capital Debts, and also of Depreciation and Redemption charged as at 30th June, 1940. (Free Headworks excluded.)

DISBURSEMENTS AND INTEREST, DEPRECIATION, AND REDEMPTION CHARGED.

District.	1st May, 1906, to 30th June, 1939.			Disbursements.			Interest Charged.			Depreciation Charges. (See page 69.)			Redemption Paid to— (A) Redemption Funds. (B) Revenue.			Grand Total at 30th June, 1940.		
	1939-40.			Total at 30th June, 1940.			1st May, 1906, to 30th June, 1939.			1st July, 1939, to 30th June, 1940.			Total at 30th June, 1940.					
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1. Bacchus Marsh	37,620	9	1	563	13	0	1,517	8	9	1,555	4	8	3,957	7	4	126,985	17	4
2. Boort	55,790	9	9	961	11	1	1,617	8	9	1,056	5	9	3,635	5	7	58,672	0	2
3. Calvill	13,442	14	11	670	18	11	837	17	5	419	12	4	1,928	8	3	40,099	10	7
4. Campaspe	14,672	3	1	709	13	2	709	13	2	196	5	3	913	16	3	13,769	9	4
5. Cobuna	224,835	19	2	2,705	18	0	2,705	18	0	1,709	11	1	6,226	17	9	218,718	9	3
6. Deakin	51,191	11	5	643	14	10	643	14	10	403	6	9	1,503	14	9	92,638	5	9
7. Dingee	22,353	13	9	411	17	3	411	17	3	216	8	4	939	6	9	28,620	5	5
8. Dry Lake	1	0	0	86	2	11	337	16	7	148	5	6	572	5	0	1,012	7	10
9. Fish Point	7,017	8	1	401	5	3	605	6	9	341	1	8	1,347	13	8	6,734	11	6
10. Katandra	10,144	7	7	1,085	1	10	1,805	19	7	1,033	12	6	3,934	13	11	41,051	11	6
11. Kerang	97,968	1	10										89,044	9	3	91,528	11	7
12. Koondrook	130,973	17	1	1,373	2	1	2,224	11	8	1,224	1	0	4,821	14	9	173,775	15	2
13. Leitchville	10,223	0	1	379	4	1	311	14	4	286	7	5	977	5	10	20,866	16	4
14. Maffra-Sale	58,165	0	1	3,929	9	3	3,929	9	3	2,205	10	5	7,643	9	1	77,024	10	5
15. Merbein	419,682	17	7	14,870	9	10	2,466	6	8	1,961	10	6	19,298	7	0	165,951	3	8
16. Murray Valley				185	14	0	606	8	7	239	1	6	1,031	4	1	525	0	0
17. Mystic Park	11,997	9	5	502	13	0	502	13	0	200	0	9	784	17	5	9,724	8	3
18. North Shepparton	17,770	10	6	877	17	3	1,598	18	1	814	13	8	3,291	9	0	72,967	12	10
19. Nyah	128,985	8	6	1,999	14	0	1,999	14	0	1,123	19	1	8,660	12	9	75,603	5	2
20. Red Cliffs	343,460	5	9	3,482	0	11	3,482	0	11	2,902	17	7	36,427	5	3	213,609	19	1
21. Rochester	191,337	9	3	7,607	0	9	7,607	0	9	2,902	17	7	36,427	5	3	315,644	14	0
22. Rodney	319,658	13	3	6,808	19	7	6,808	19	7	3,711	7	8	13,822	9	10	538,226	0	7
23. Shepparton	74,614	10	6	1,694	17	6	1,694	17	6	1,072	13	4	4,199	19	3	178,680	4	4
24. South Shepparton	8,368	3	1	492	4	0	492	4	0	282	7	5	1,039	17	3	29,505	17	3
25. Swan Hill	4,585	3	8	178	19	5	3,100	18	5	1,430	14	2	5,876	12	5	115,517	10	6
26. Thurl Lake	138,387	14	10	4,531	5	1	4,531	5	1	2,127	12	8	9,443	11	7	12,691	19	3
27. Tongala-Stanhope	144,941	16	0	2,236	1	6	2,236	1	6	1,295	0	8	5,044	9	3	256,935	1	2
28. Traragon Plains	47,588	18	2	715	18	0	715	18	0	516	1	3	9,072	10	11	266,692	17	2
29. Treco	28,965	9	3	742	16	5	1,465	0	10	286	10	6	2,494	7	9	50,656	18	3
30. Werribee																140,195	16	1
Totals	2,720,300	19	9	79,322	3	8	60,440	13	8	32,189	14	2	171,952	11	6	2,901,202	11	3
																3,435,158	9	7
																(A) 4,100	0	0
																(B) 10,236	13	0
																6,450,079	2	4

* Districts marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance and management thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council, dated 30th July, 1938, under the provisions of section 6, *Water Act 1937* (No. 4513).)

WATERWORKS DISTRICTS.

STATEMENT of Moneys received from 1st May, 1906, to 30th June, 1940.

RECEIPTS.

District.	1939-40.						Grand total at 30th June, 1940.						
	1st May, 1906, to 30th June, 1939.		Rates.		Water Sales.			Interest and Miscellaneous.		Total.		Urban Water.	
	£	s. d.	£	s. d.	£	s. d.		£	s. d.	£	s. d.	£	s. d.
1. Bellarine Peninsula	34,419	6 2	4,839	3 9	7,327	5 0	13 15 6	7,341	0 6	185	0 0	41,760	6 8
2. Birchup	..	..	9,121	9 11	..	..	196 8 4	5,035	12 1	287	0 0	767,534	3 2
*3. Sea Lake	..	..	6,286	13 5	..	..	538 3 7	9,659	13 6	86	0 0	..	..
*4. Tyrell	..	..	9,672	17 7	64	13 11	265 6 11	6,562	0 4	1,027	0 0	..	..
*5. Tyrell West	..	..	7,979	10 8	..	..	510 7 10	10,247	19 4	207	0 0	..	..
6. Wycheproof	..	..	1,590	18 7	273	11 5	387 18 8	8,367	9 4	..	0 0	..	..
*7. Carwarp	17,041	13 10	273	0 6	24	15 10	133 4 8	1,897	14 8	16	0 0	19,039	8 6
*8. Carwarp Central	1,846	12 8	404	18 2	..	..	12 6 8	310	3 0	..	0 0	2,172	15 8
*9. Coreena	3,572	8 1	993	15 6	..	..	43 4 8	448	2 10	..	0 0	4,020	10 11
10. Hindmarsh	13,324	3 8	12,056	3 5	11	14 11	46 10 1	1,040	5 7	551	0 0	14,364	9 3
*11. Karkaroc	286,069	1 2	171	8 5	..	..	596 16 5	12,668	14 9	..	0 0	299,316	15 11
*12. Kesang North-West Lakes	4,240	0 7	8,782	17 2	..	..	8 14 2	180	2 7	228	0 0	4,420	3 2
13. Long Lake	217,215	6 5	3,114	3 2	615	2 10	397 0 5	9,179	17 7	50	0 0	226,623	4 0
*14. Millewa	27,480	17 4	1,977	10 0	358	19 1	213 5 9	3,942	11 9	36	0 0	31,473	9 1
*15. Millewa Central	13,872	4 11	83	7 3	3,635	13 1	85 6 6	2,421	15 7	..	0 0	16,330	0 6
16. Mornington Peninsula	68,995	8 1	..	..	30	10 0	149 16 11	3,868	17 3	..	0 0	72,864	5 4
17. Newstead	30	0 0	1,634	5 4	179	12 5	..	30	10 0	..	0 0	60	10 0
18. Normanville	631	12 1	..	..	3,862	6 3	46 12 3	1,860	10 0	..	0 0	2,492	2 1
19. Otway	154	3 6	6,580	1 7	38	19 4	83 18 1	3,946	4 4	193	0 0	4,100	7 10
*20. Tyntinder	127,105	16 0	3,739	12 1	..	..	617 3 2	7,236	4 1	120	0 0	134,535	0 1
*21. Upper Western Wimmera	105,206	14 11	..	..	15	16 6	110 17 1	3,850	9 2	62	0 0	109,177	4 1
22. Upper Wimmera United	172,217	8 9	6,844	4 3	53	7 6	191 7 6	7,051	8 3	..	0 0	179,330	17 0
*23. Walpeup West	36,743	7 0	1,341	12 9	..	..	315 0 7	1,510	0 10	..	0 0	38,253	7 10
24. Werribee	13,143	15 2	596	18 6	4,272	19 9	22 9 6	619	8 0	481	0 0	13,763	3 2
25. Western Wimmera	373,528	18 9	12,093	5 1	1,462	5 4	325 10 8	16,691	15 6	145	0 0	390,701	14 3
26. Wimmera United	412,715	19 5	15,788	19 0	20	17 6	444 0 10	17,695	5 2	..	0 0	430,556	4 7
*27. Yelta	7,645	7 5	455	14 4	..	..	7 6 4	483	18 2	..	0 0	8,129	5 7
Totals	2,663,109	14 6	116,422	10 5	22,248	10 8	5,564 13 1	144,235	14 2	3,674	0 0	2,811,019	8 8

* Districts marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance and management thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council dated 30th July, 1938, under the provisions of section 6, Water Act 1937, No. 4513.)

WATERWORKS DISTRICTS.

STATEMENT of Moneys disbursed from 1st May, 1906, to 30th June, 1940; and of Interest charged at the rate of 3·978 per cent. on Capital Debts; and also Depreciation and Redemption charged as at 30th June, 1940. (Free Headworks excluded).

DISBURSEMENTS AND INTEREST, DEPRECIATION, AND REDEMPTION CHARGED.

District.	1st May, 1906, 30th June, 1939.	Disbursements.										Rural Water.	Total at 30th June, 1940.	Interest Charged.			Depreciation Charges (See page 66.)	Redemption Paid to— (A) Redemption Funds. (B) Revenue.	Grand Total at 30th June, 1940.					
		1939-40.												Total at 30th June, 1940.	1st July, 1939, 30th June, 1940.	Total at 30th June, 1940.								
		Repairs and Maintenance.		Water Distribution.		Administration.		Total.		£	s.									d.				
		£	s.	d.	£	s.	d.	£	s.												d.	£	s.	d.	£	s.	d.
1. Bellarine Peninsula...	9,259	7	6	1,895	10	10	389	15	7	2,285	6	5	11,544	13	11	3,591	18	2	36,926	4	8	46,884	9	4
2. Birchup ..	3,599	15	4	520	2	2	726	8	5	4,845	5	11	584,064	16	8	1,012	0	3	553,112	4	9	1,138,168	5	3
3. Sea Lake ..	6,526	18	5	991	11	11	1,206	5	10	8,724	16	2	57,719	14	10	0	0	0	22,227	18	10	90,533	13	8
4. Tyrrill ..	13,059	15	11	1,370	19	5	1,641	4	2	16,080	19	6	3,264	18	3	1,275	1	2	16,742	19	8	4,564	19	5
5. Tyrrill West ..	27,192	16	0	2,331	1	10	3,126	3	1	32,450	0	11	19,096	5	8	16,742	19	8	8,047	15	5	36,649	5	4
6. Wycheproof ..	2,689	0	0	1,070	15	3	4,463	14	3	5,177	17	6	5,262	14	9	232	17	8	190,827	14	1	864,813	15	10
7. Carwarp ..	1,313	1	1	1,485	0	10	379	15	7	3,165	17	10	250	0	0	38	3	2	22,227	18	10	5,584	9	2
8. Carwarp Central ..	2,899	0	5	1,485	0	10	46	18	0	3,355	17	10	1,533	27	1	335	3	1	1,942	6	9	270,844	7	9
9. Coreana ..	18,226	11	0	630	5	6	187	11	3	19,096	5	8	153,527	10	1	108,677	2	10	109,012	5	11	270,844	7	9
10. Hindmarsh ..	4,399	9	1	57	9	0	2,174	11	7	4,933	8	8	116,777	10	1	35,423	13	7	35,423	13	7	152,201	3	8
11. Kararooc ..	146,359	19	6	860	19	10	2,174	11	7	18,125	2	3	60,042	17	3	26,013	19	7	26,013	19	7	86,956	16	10
12. Kerang North-West Lakes ..	3,367	19	3	118	12	10	63	6	9	274	3	2	11,504	9	6	2,492	8	9	59,807	8	10	72,026	11	1
13. Long Lake ..	141,298	9	4	1,917	9	5	1,520	12	4	12,238	12	6	45	10	0	40	10	0	1,141	19	9	45	10	0
14. Millewa ..	104,313	3	11	6,502	13	3	1,229	14	9	12,494	6	2	1,408	15	10	20	10	0	1,141	19	9	2,575	16	10
15. Millewa Central ..	51,763	9	8	1,865	6	9	1,776	8	1	9,179	7	8	1,425	15	10	1,877	9	1	9,111	18	6	11,190	13	9
16. Mornington Peninsula ..	10,983	17	10	379	12	2	135	0	7	629	11	8	138,009	9	4	19	11	11	145,550	3	4	283,559	12	8
17. Newshead ..	15	0	0	30	10	0	30	10	0	30	10	0	50	0	0	50	0	0	58,125	6	10	58,125	6	10
18. Normanville ..	217	16	0	246	10	8	371	18	4	1,140	19	9	1,408	15	10	400	9	0	1,141	19	9	2,575	16	10
19. Otway ..	1,022	3	4	403	12	6	403	12	6	1,425	15	10	1,425	15	10	7,234	9	1	9,111	18	6	11,190	13	9
20. Tynnynder ..	124,907	17	3	1,073	16	8	1,724	13	7	13,101	12	1	138,009	9	4	145,530	11	5	145,550	3	4	283,559	12	8
21. Upper Western ..	42,468	10	5	3,320	7	7	647	13	7	4,236	16	5	46,705	6	10	58,125	6	10	58,125	6	10	106,936	15	3
22. Upper Western ..	59,218	4	3	3,815	7	9	994	11	3	5,549	16	3	64,768	0	6	113,183	10	5	115,717	15	6	182,924	6	5
23. Walpeup West ..	26,801	15	2	1,033	16	8	268	5	1	1,302	1	9	29,103	16	11	21,068	18	0	1,698	15	1	51,227	5	0
24. Werribee ..	4,067	16	1	47	3	2	59	17	2	195	18	2	4,263	14	3	7	19	6	11,630	15	1	15,935	16	10
25. Western Wimmera ..	173,427	19	6	2,602	11	4	1,826	8	6	11,612	5	8	185,040	5	2	211,004	6	8	217,282	11	7	410,144	16	9
26. Wimmera United ..	142,172	4	4	2,176	6	10	2,176	6	10	12,804	1	0	155,076	5	4	284,712	19	7	275,118	14	9	432,505	0	1
27. Yelta ..	9,086	9	3	686	18	0	1,165	8	0	1,056	16	6	10,257	5	3	3,898	17	10	3,898	17	10	14,156	3	1
Totals	1,647,725	17	10	32,546	17	0	23,277	16	6	180,641	14	4	1,828,787	12	2	1,697,282	1	4	1,929,869	14	8	3,789,914	18	6

* Districts marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance and management thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council, dated 30th July, 1938, under the provisions of section 6, *Water Act 1907* (No. 4513).)

URBAN DISTRICTS.

STATEMENT of Moneys received from 1st May, 1906, to 30th June, 1940.

RECEIPTS.

District.	1st May, 1908, to 30th June, 1939.	1939-40.										Grand Total at 30th June, 1940.						
		Rates.			Water Sales.			Interest and Miscellaneous.			Total.							
		£	s.	d.	£	s.	d.	£	s.	d.	£		s.	d.				
* 1. Anglesea	1,805	3	0	422	5	3	40	16	10	8	14	0	471	16	1	2,276	19	1
2. Antwerp	800	8	6	74	8	0	15	4	6	6	10	11	96	3	5	896	11	11
3. Barwon Heads and Ocean Grove	10,376	18	4	1,645	10	6	307	11	4	48	10	2	2,001	12	0	12,378	10	4
4. Berriwillock	5,954	1	11	267	3	8	21	4	8	26	2	0	314	10	4	6,268	12	3
5. Berwick	10,723	19	9	693	9	0	240	3	0	44	5	1	977	17	1	11,701	16	10
* 6. Beulah	14,146	4	6	432	3	6	89	9	9	39	11	9	561	5	0	14,707	9	6
7. Birchip	28,288	16	9	557	3	10	296	0	4	82	0	0	935	4	2	29,224	0	11
* 8. Bittern	2,203	15	7	94	18	7	70	13	3	4	12	0	170	3	10	2,373	19	5
9. Brim	4,480	17	4	275	18	3	9	8	6	25	4	8	310	11	5	4,791	8	9
10. Bunyip	3,195	10	10	361	5	2	52	4	0	20	14	9	434	3	11	3,629	14	9
11. Camperdown	2,166	5	1	4,657	10	11	506	15	9	150	7	9	5,314	14	5	7,480	19	6
12. Carrum	111,447	1	9	7,008	6	5	1,070	1	5	455	0	3	8,533	8	1	119,980	9	10
* 13. Carwar	459	15	6	33	10	0	..	..	..	0	1	7	33	11	7	493	7	1
14. Chillingollah	1,812	19	10	50	13	2	57	0	9	16	9	8	124	3	7	1,937	3	5
15. Chinkapook	2,193	14	8	140	5	0	20	0	0	0	4	2	160	9	2	2,354	3	10
16. Cobden	179	18	7	1,358	0	0	31	11	8	21	11	6	1,411	3	2	1,591	1	9
17. Cranbourne	9,070	5	7	397	14	10	77	15	0	11	10	3	487	0	1	9,557	5	8
18. Crib Point	4,934	9	2	534	3	7	36	12	0	11	17	5	582	13	0	5,517	2	2
19. Culgoa	6,625	17	9	236	12	5	158	7	0	12	15	10	407	15	3	7,033	13	0
20. Dandenong	86,293	19	2	4,868	1	6	1,269	4	5	357	18	8	6,495	4	7	92,789	3	9
21. Dimboola	51,475	8	11	1,359	6	8	509	14	8	125	8	9	1,994	10	1	53,469	19	0
22. Doon	331	9	1	12	13	7	15	5	0	0	8	10	28	7	5	359	16	6
* 23. Drysdale	2,031	9	2	333	5	4	73	18	8	24	0	0	431	4	0	2,462	13	2
24. Frankston	74,613	4	4	4,985	6	3	1,726	10	10	301	9	10	7,013	6	11	81,626	11	3
25. Garfield	2,606	1	8	292	5	11	38	0	4	23	2	6	353	8	9	2,959	10	5
26. Hastings	4,403	10	3	401	1	1	39	0	7	14	2	1	454	3	9	4,857	14	0
27. Hickeborough	787	11	0	54	1	0	3	15	0	3	17	6	61	13	6	849	4	6
28. Hopetoun	19,631	3	7	899	5	9	166	12	7	61	16	3	1,127	14	7	20,758	18	2
29. Jeparit	21,510	2	4	943	0	5	115	2	9	32	18	10	1,091	2	0	22,601	4	4
* 30. Jung Jung	3,303	10	6	128	6	1	19	6	6	2	16	2	150	8	9	3,453	19	3
* 31. Koondrook	10,621	6	2	375	3	3	27	19	6	6	10	6	409	13	3	11,030	19	5
* 32. Lake Boga	9,259	15	1	289	9	8	22	1	0	23	14	10	335	5	6	9,595	0	7
33. Lalbert	5,015	5	11	258	17	4	75	0	0	7	2	7	340	19	11	5,356	5	10
34. Lascelles	4,221	2	4	211	8	6	28	1	11	250	0	9	250	0	9	4,471	3	1
36. Longwarry	3,800	15	11	237	5	6	380	16	8	13	7	4	631	9	6	4,432	5	5
36. Manangatang	8,479	18	0	439	9	6	95	4	6	10	8	2	545	2	2	9,025	0	2
37. Marnoo	4,813	6	4	335	7	9	75	4	6	5	10	3	416	2	6	5,229	8	10
38. Merbein	24,481	19	1	1,515	8	1	147	3	1	135	14	4	1,798	5	6	26,280	4	7

44. Matimuk	..	53 5 0	..	44 0 4	97 5 4	56 0 0	3,754 13 4	9,978 5 7	158 13 2	10,136 18 9	199 0 0	(A)	750 0 0	14,870 12 2
45. Kowstead	..	121 2 5	..	63 17 11	185 0 4	..	1,307 1 7	1,453 3 9	254 15 1	1,887 18 1	153 0 0	(B)	390 0 1	3,391 8 10
46. North Wonthaggi	..	144 1 4	..	30 0 0	174 0 0	..	1,843 12 11	2,120 17 5	47 13 1	2,918 10 6	452 0 0	(B)	43 9 2	5,223 3 5
47. Nulawil	..	308 18 9	9 3 7	21 11 4	60 16 3	22 0 0	969 10 9	3,271 12 7	124 16 6	2,246 9 1	127 0 0	(B)	23 14 11	3,366 14 3
48. Nyah	..	292 19 4	..	11 13 3	18 12 6	60 0 0	1,024 14 10	9 11 13	6 10 11	918 4 2	121 12 9	(B)	0 8 3	2,065 0 0
49. Nyah West	..	403 4 11	..	38 14 7	524 13 7	177 0 0	4,447 16 10	6,099 5 4	0 16 11	6,100 2 3	987 19 11	(B)	..	11,635 19 0
50. Ouyen	..	293 17 0	601 14 3	240 12 5	1,046 4 12	807 0 0	16,290 0 11	20,547 18 11	228 16 9	20,776 15 8	1,126 0 0	(B)	41 8 1	38,234 4 8
51. Pakemham	..	186 17 0	..	98 0 11	284 17 11	..	2,143 5 1	8,829 18 11	587 9 4	9,417 5 5	1,396 11 9	(B)	..	12,996 2 5
52. Pakewollock	..	196 17 0	0 2 6	60 0 0	32 18 1	31 0 0	7,559 14 6	1,379 11 7	1 1 11	1,379 11 7	627 0 0	(B)	37 0 0	2,406 6 1
53. Piesang	..	61 13 11	151 8 0	79 1 9	292 3 8	60 0 0	2,886 5 8	3,528 18 11	..	3,528 18 11	394 3 9	..	..	7,099 8 4
54. Portkington	..	286 16 4	..	41 18 7	378 5 8	..	1,900 5 1	2,891 10 0	8 10 10	2,960 10 3	337 14 1	(B)	37 17 9	5,138 0 6
55. Pyramid Hill	..	25 0 10	95 10 10	43 16 7	164 17 3	42 0 0	3,412 18 6	4,060 14 5	200 4 10	4,280 19 3	657 0 0	(B)	..	3,368 15 6
56. Queensbatook	..	65 3 0	147 14 2	75 7 7	258 5 2	74 0 0	1,992 16 1	1,328 6 8	125 15 5	1,464 2 1	270 19 1	(B)	11 18 4	3,669 15 7
57. Queensacliff and Point Lonsdale	..	889 1 11	1 15 3	304 0 1	1,194 17 3	..	6,690 9 1	15,769 12 6	1,271 17 1	16,981 9 7	1,542 0 0	(B)	..	26,363 6 2
58. Rainbow	..	181 9 3	..	108 4 8	289 13 11	202 0 0	5,245 12 11	18,482 6 3	428 11 3	18,910 17 6	1,225 0 0	(B)	800 0 0	26,252 7 1
59. Rupunup	..	118 2 11	114 18 1	101 6 4	334 7 4	49 0 0	6,867 11 9	11,861 19 6	359 16 11	12,221 16 5	800 0 0	(A)	400 0 0	20,339 15 7
60. Sea Lake	..	107 19 6	209 16 9	140 15 5	458 11 8	125 0 0	10,874 2 6	16,138 4 6	308 18 9	10,447 3 3	1,649 0 0	(B)	55 17 3	23,026 3 0
61. Somerville	..	26 11 4	..	24 0 2	50 11 6	..	853 8 1	3,719 5 5	190 12 6	3,909 17 11	1,77 0 0	(B)	32 18 3	4,973 4 3
62. South Frankston	..	225 14 4	44 18 11	250 10 8	521 3 11	33 0 0	4,619 0 7	17,565 11 5	1,681 7 6	18,586 18 5	1,436 0 0	(B)	191 7 10	24,843 16 10
63. Speed	..	44 19 2	..	16 14 1	16 13 3	..	830 17 7	1,131 2 2	0 1 6	1,131 2 2	417 0 0	(B)	..	2,278 19 9
64. Spring Vale	..	728 0 8	..	526 6 4	1,954 7 1	..	9,887 17 10	29,417 5 2	1,548 1 6	30,966 6 3	2,595 0 0	(B)	269 5 6	43,224 9 7
65. Tempy	..	53 0 4	..	17 7 7	70 7 11	47 0 0	608 17 2	1,042 8 10	6 6 2	1,042 15 0	383 0 0	(B)	..	2,299 12 2
66. Terang	..	324 19 3	5 1 0	171 10 3	50 10 3	..	801 10 3	3,777 17 11	2,160 13 4	3,903 15 2	436 0 0	(B)	124 6 6	3,222 10 7
67. Torquay	..	296 6 8	..	103 2 8	389 9 4	..	1,974 18 0	6,008 8 10	125 17 1	6,808 10 4	291 0 0	(B)	15 11 5	6,185 4 7
68. Ultima	..	147 5 4	77 16 4	86 7 4	311 9 0	95 0 0	4,253 9 2	3,777 17 11	6 1 6	3,903 15 2	275 0 0	..	..	11,336 19 6
69. Waiteale	..	65 7 4	..	11 18 0	75 5 4	40 0 0	844 3 6	1,198 15 7	31 14 11	1,384 9 11	288 0 0	(B)	..	2,330 19 2
70. Walpeup	..	49 9 4	9 18 4	15 0 0	75 7 8	80 0 0	3 7 6	352 15 0	110 6 7	5,485 7 2	346 0 0	(B)	13 17 10	1,046 18 4
71. Watchem	..	33 8 3	19 13 11	43 0 3	96 2 5	42 0 0	2,916 5 11	5,875 1 7	110 6 7	5,485 7 2	346 0 0	(B)	13 17 10	8,761 10 11
72. Werrinull	..	83 14 3	19 16 7	34 16 1	137 16 11	50 0 0	7,146 16 9	2,339 18 1	23 3 11	2,365 2 0	491 0 0	(B)	3 3 6	4,606 2 3
73. Wonthaggi	..	375 16 3	1,619 18 9	437 0 8	2,482 10 8	..	31,747 7 3	65,444 5 2	633 13 4	66,077 18 6	6,917 9 11	(A)	9,000 0 0	113,782 12 2
74. Woomelang	..	46 12 11	40 10 3	60 16 0	147 19 2	104 0 0	6,184 6 11	11,738 4 0	117 0 0	11,865 4 0	708 0 0	(A)	39 16 6	18,962 5 1
75. Woorinen	..	25 11 9	..	20 16 9	46 8 6	31 0 0	839 16 11	1,164 9 8	51 8 6	1,215 18 2	177 0 9	(B)	14 14 2	2,234 12 4
76. Wycheproof	..	243 7 8	269 1 1	151 0 6	663 8 10	185 0 0	11,973 11 6	10,706 13 3	27 6 2	10,733 19 5	1,344 0 9	(B)	1 16 6	24,054 12 6
77. Yapeet	..	48 12 5	..	17 4 1	65 16 6	20 0 0	518 6 11	915 12 6	29 19 6	945 12 0	294 8 1	(B)	..	1,758 7 0
TOTALS	..	13,008 3 9	5,737 2 10	9,066 4 6	27,811 11 1	4,542 0 0	359,084 13 8	729,768 2 1	27,578 4 7	757,281 6 8	63,136 7 3	(A)	14,204 0 0	1,197,184 7 3
	..	326,681 2 7	..	..	..	..	..	..	..	..	..	(B)	3,527 19 8	..

* Districts marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council, dated 30th July, 1938, under the provisions of section 6, Water Act 1937 (No. 4513).)

URBAN DIVISIONS.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1940; and of Interest charged at the rate of 3·978 per cent. on Capital Debits; and also of Depreciation and Redemption charged as at 30th June, 1940 (Free Headworks excluded).

RECEIPTS.

Division.		1939—40.										Grand Total at 30th June, 1940.												
		1st May, 1906, to 30th June, 1939.				Rates.		Water Sales.		Interest and Miscellaneous.				Total.										
		£	s.	d.	£	s.	d.	£	s.	d.	£			s.	d.									
1.	Bacchus Marsh	..	..	..	£	42,460	1	4	£	1,272	10	4	£	10	17	11	£	1,936	5	3	£	44,396	6	7
2.	Cohuna	..	..	..	£	20,895	12	5	£	995	17	1	£	102	8	10	£	1,357	7	11	£	22,253	0	4
*3.	Corop	..	..	..	£	826	16	3	£	19	14	0	£	0	0	6	£	19	14	6	£	846	10	9
4.	Dingee	..	..	..	£	1,262	12	5	£	70	18	3	£	14	8	3	£	85	6	6	£	1,347	18	11
*5.	Heyfield	..	..	..	£	4,522	9	1	£	531	18	10	£	7	4	6	£	539	3	4	£	5,061	12	5
6.	Leitchville	..	..	..	£	5,348	13	7	£	373	4	1	£	20	17	1	£	479	7	11	£	5,828	1	6
7.	Lockington	..	..	..	£	4,305	9	11	£	247	7	10	£	6	19	6	£	284	17	1	£	4,590	7	0
*8.	Murrabit	..	..	..	£	633	10	8	£	53	14	10	£	20	0	0	£	73	15	0	£	707	5	8
9.	Red Cliffs	..	..	..	£	24,989	6	6	£	2,044	8	8	£	161	4	10	£	2,499	11	5	£	27,488	17	11
10.	Stanhope	..	..	..	£	3,232	19	4	£	334	13	0	£	1	6	9	£	11	8	0	£	3,580	7	1
Totals		..	..	..	£	108,477	11	6	£	5,944	6	11	£	1,319	9	11	£	358	19	10	£	7,622	16	8
		..	..	..	£				£				£				£				£	116,100	8	2

Disbursements and Interest, Depreciation and Redemption Charged.

Division.	Disbursements.					Interest.				Depreciation Charges. (See page 69.)	Redemption Paid to— (A) Redemption Funds. (B) Revenue.	Grand Total at 30th June, 1940.				
	1939-40.					Total at 30th June, 1940.										
	Repairs and Maintenance.		Water Distribution.		Administration.		Total.		Rural Water.				Total at 30th June, 1940.			
	1st May, 1939, to 30th June, 1939.		1st May, 1939, to 30th June, 1939.		1st May, 1939, to 30th June, 1939.		1st May, 1939, to 30th June, 1939.		1st May, 1939, to 30th June, 1939.				1st May, 1939, to 30th June, 1939.			
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1. Bacchus Marsh	10,582	14 6	189	18 0	176	7 6	379	8 6	545	0 0	11,507	3 0	31,841	13 2	32,276	15 2
2. Cohuna	6,274	9 2	257	9 1	181	14 0	524	4 2	51	0 0	6,849	13 4	13,056	13 4	13,415	2 2
3. Corop	405	7 6														
4. Dingee	509	11 8	7	16 9	13	15 9	37	6 9			413	7 6	419	12 10	78	0 0
5. Heyfield	2,238	4 6	102	8 10	94	6 8	250	15 7	5	0 0	551	18 5	2,178	18 0	168	0 0
6. Leitchville	2,623	9 2	93	11 1	39	9 11	132	8 5	100	0 0	2,790	17 7	2,247	0 8	974	0 5
7. Lockington	2,623	7 12	45	13 2	34	17 10	125	9 3	25	0 0	1,075	17 1	2,490	7 5	385	0 0
8. Murrabit	393	8 5	4	3 2	13	8 3	75	3 3	15	0 0	1,473	11 8	337	10 0	564	15 11
9. Red Cliffs	11,192	19 9	343	10 2	186	7 10	916	2 0	348	0 0	12,457	1 9	11,054	1 3	255	10 3
10. Stanhope	996	8 7			29	9 0	83	10 9	20	0 0	1,099	19 4	1,927	1 7	1,399	0 0
Totals	36,152	1 1	984	0 3	743	10 2	2,548	8 8	1,117	0 0	39,817	9 9	65,996	18 8	67,539	6 2

* Divisions marked thus are those whose works will not produce sufficient revenue to cover the expense of the maintenance and management thereof, and where water supplies are being continued by direction of the Governor in Council. The annual amount of loss resulting from the maintenance and management of these divisions has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Order in Council dated 30th July, 1938, under the provisions of section 6, *Water Act*, 1937, No. 4513.)

DRAINAGE DISTRICTS.

STATEMENT of Moneys received and disbursed from 1st July, 1937, to 30th June, 1940; and of Depreciation charged as at 30th June, 1940.

RECEIPTS.

District.	1st January, 1938, to 30th June, 1939.	1939-40.			Grand Total at 30th June, 1940.
		Rates.	Interest and Miscellaneous.	Total.	
1. Cohuna ..	£ s. d. 2,155 4 1	£ s. d. 1,363 4 6	£ s. d. 12 18 0	£ s. d. 1,376 2 6	£ s. d. 3,531 6 7
2. Kerang East ..	1,230 6 1	802 9 11	7 18 11	810 8 10	2,040 14 11
3. Maffra-Sale ..	113 15 1	1,073 16 3	4 4 5	1,078 0 8	1,191 15 9
4. Merbein ..	1,807 11 8	1,556 17 8	21 3 5	1,578 1 1	3,385 12 9
5. Red Cliffs ..	1,871 8 2	1,890 18 2	85 15 7	2,076 13 9	3,948 1 11
6. Rochester ..	1,502 17 1	1,228 8 9	21 11 0	1,249 19 9	2,752 16 10
7. Rodney ..	559 0 8	450 8 4	12 14 7	463 2 11	1,022 3 7
8. Shepparton ..	3,610 7 7	2,208 0 8	10 1 4	2,218 2 0	5,828 9 7
9. Tongala-Stanhope ..	1,302 3 11	1,931 17 0	38 18 0	1,970 15 0	3,272 18 11
10. Werribee ..	764 13 4	765 17 7	12 7 10	778 5 5	1,542 18 9
Totals ..	14,917 7 8	13,371 18 10	227 13 1	13,599 11 11	28,516 19 7

DISBURSEMENTS.

District.	1st July, 1937, to 30th June, 1939.	1939-40.			Total at 30th June, 1940.	Depreciation Charges. (See page 71.)	Grand Total at 30th June, 1940.
		Repairs and Maintenance.	Administration.	Total.			
1. Cohuna ..	£ s. d. 2,657 1 0	£ s. d. 1,082 16 0	£ s. d. 454 5 2	£ s. d. 1,537 1 2	£ s. d. 4,194 2 2	£ s. d. 4,194 2 2	£ s. d. 4,194 2 2
2. Kerang East ..	2,213 6 11	806 1 7	323 14 11	1,129 16 6	3,343 3 5	3,343 3 5	3,343 3 5
3. Maffra-Sale ..	1,597 8 2	1,368 12 7	462 5 7	1,830 18 2	3,428 6 4	3,428 6 4	3,428 6 4
4. Merbein ..	2,224 15 7	906 17 7	294 12 8	1,201 10 3	3,426 5 10	4,271 19 3	4,271 19 3
5. Red Cliffs ..	2,964 16 0	1,320 14 9	269 0 11	1,589 15 8	4,554 11 8	5,141 14 8	5,141 14 8
6. Rochester ..	3,522 11 1	1,297 17 2	334 14 9	1,632 11 11	5,155 3 0	5,155 3 0	5,155 3 0
7. Rodney ..	1,872 12 2	640 8 6	229 5 7	869 14 1	2,742 6 3	2,742 6 3	2,742 6 3
8. Shepparton ..	4,190 11 5	2,165 19 10	603 19 10	2,769 19 8	6,960 11 1	6,960 11 1	6,960 11 1
9. Tongala-Stanhope ..	4,536 13 6	2,755 9 5	747 8 6	3,502 17 11	8,039 11 5	8,039 11 5	8,039 11 5
10. Werribee ..	811 2 4	430 15 6	102 15 11	533 11 5	1,344 13 9	1,344 13 9	1,344 13 9
Totals ..	26,590 18 2	12,775 12 11	3,822 3 10	16,597 16 9	43,188 14 11	1,432 16 5	44,621 11 4

SUB-SURFACE DRAINAGE WORKS.

Extensive Sub-surface Drainage Works have been constructed in the important dried fruit centres of Red Cliffs, Merbein, and Mildura. The cost of the works has been met by grants approved from Unemployment Relief Loan Funds, supplemented by contributions from growers.

A condition of the grants was that settlers would contribute £5 per irrigable acre towards the cost of the respective schemes. Such portion of the contributions, as required, was to be applied to supplement the grants from Unemployment Relief Funds and the balance paid to State Loans Repayment Fund (Unemployment Relief) as part recoup of the moneys made available by the State to carry out the works.

The expenditure to 30th June, 1940, in the respective areas is set out hereunder :—

Area.	Source of Funds.		Total Cost of Scheme to 30th June, 1940.
	Unemployment Relief Loan Funds.	Growers' Contributions during Construction.	
	£ s. d.	£ s. d.	£ s. d.
Red Cliffs Irrigation and Water Supply District ..	151,448 5 4	18,549 0 6	169,997 5 10
Merbein Irrigation and Water Supply District ..	103,030 5 1	9,749 15 1	112,780 0 2
First Mildura Irrigation Trust	210,625 3 10	52,856 15 8	263,481 19 6
Totals	465,103 14 3	81,155 11 3	546,259 5 6

In addition, Sub-surface Drainage Works are now under construction in the Woorinen area. The cost of the work is being met from Unemployment Relief Loan Funds. The expenditure to 30th June, 1940, was £45,810 3s. 2d. No contributions have yet been made by growers in respect of these works.

The following statement shows the position of the payments in respect of growers' contributions to the respective sub-surface drainage schemes.

Area.	Total Amount of Contributions.	Instalments due to 30th June, 1940.	Payments made as at 30th June, 1940.	Arrears of Contributions as at 30th June, 1940.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Red Cliffs Irrigation and Water Supply District	40,856 16 8	40,818 10 0	33,836 12 10	6,981 17 2
Merbein Irrigation and Water Supply District	31,386 0 0	27,628 13 4	25,589 18 9	2,038 14 7
First Mildura Irrigation Trust	53,577 2 6	53,577 2 6	53,577 2 6	..
Totals	125,819 19 2	122,024 5 10	113,003 14 1	9,020 11 9

The First Mildura Irrigation Trust raised the equivalent of the growers' contributions by means of a loan from outside sources. The Trust will recoup itself from the contributions by local growers.

SUMMARY OF UNEMPLOYMENT RELIEF GRANTS MADE TO COMMISSION TO 30TH JUNE, 1940.

Year.	Grants.
	£
1930-32 (Prior to constitution of Employment Council)	166,035
1932-33	281,318
1933-34	313,721
1934-35	489,540
1935-36	319,582
1936-37	371,917
1937-38	423,295
1938-39	412,760
1939-40	301,000
Total	3,079,168
(For Schedule of details of these Grants see Appendix A)	

CAPITAL EXPENDITURE.

STATEMENT OF MONEYS EXPENDED FROM STATE FUNDS UNDER WATER SUPPLY LOAN ACTS AND FROM UNEMPLOYMENT RELIEF FUNDS FOR THE YEAR ENDED 30TH JUNE, 1940.

Works.	Water Supply Loan Funds.				Unemployment Relief Funds Act 4097.
	Act 4655.	Act 4612.	Total Ordinary Loan Funds.	Treasurer's Advance.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<i>Free Headworks.</i>					
Goulburn—Waranga Channel .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	0 5 6
Kow Swamp Works	19 15 6	.. .. .	19 15 6	.. .. .	.. .. .
Loddon Weir .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	7 3 3
Taylor's Lake Channel to Cohuna Channel offtake	.. .. .	.. .. .	.. .. .	.. .. .	166 4 8
<i>River Murray Waters Acts.—Works</i>	46,000 0 0	.. .. .	46,000 0 0	.. .. .	.. .. .
<i>Main Supply Works.</i>					
Melton Reservoir	29 18 6	.. .. .	29 18 6	.. .. .	182 0 9
Pykes Creek Reservoir	6 7 7	.. .. .	6 7 7	.. .. .	Cr. 37 10 7
Waranga Reservoir Enlargement	83 2 8	.. .. .	83 2 8	.. .. .	.. .. .
Waranga Western Main Channel .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	3,295 8 0
Wimmera Storages	1,396 9 0	4 6 3	1,400 15 3	.. .. .	.. .. .
Wimmera Main Channels	5,807 14 5	607 14 3	6,415 8 8	.. .. .	1,250 0 0
Surveys and Investigations	4,825 3 3	200 6 9	5,025 10 0	.. .. .	.. .. .
Plant and Machinery Suspense	31,356 4 0	.. .. .	31,356 4 0	.. .. .	.. .. .
<i>Irrigation and Water Supply Districts.</i>					
Bacchus Marsh	0 19 3	.. .. .	0 19 3	.. .. .	.. .. .
Boort	10 13 10	.. .. .	10 13 10	.. .. .	.. .. .
Calivil	622 11 3	1 3 0	623 14 3	.. .. .	.. .. .
Campaspe	19 13 8	.. .. .	19 13 8	.. .. .	25 17 0
Cohuna	171 11 9	.. .. .	171 11 9	.. .. .	.. .. .
Deakin	91 16 6	.. .. .	91 16 6	.. .. .	.. .. .
Fish Point	4 18 5	.. .. .	4 18 5	.. .. .	.. .. .
Katandra	5 4 11	.. .. .	5 4 11	.. .. .	56 4 6
Kerang	203 16 10	.. .. .	203 16 10	.. .. .	.. .. .
Koondrook	126 16 7	.. .. .	126 16 7	.. .. .	574 11 0
Leitchville	Cr. 4 5 1	3 12 0	Cr. 0 13 1	.. .. .	.. .. .
Maffra—Sale	2,142 15 0	143 15 4	2,286 10 4	.. .. .	7,838 5 11
Merbein	3,108 11 1	1 15 8	3,110 6 9	.. .. .	.. .. .
Murray Valley (under construction)	113,466 7 11	.. .. .	113,466 7 11	12,018 10 9	6,594 9 3
Mystic Park	124 12 0	.. .. .	124 12 0	.. .. .	.. .. .
North Shepparton	72 14 2	40 0 0	112 14 2	.. .. .	196 11 4
Nyah	9,717 5 4	.. .. .	9,717 5 4	.. .. .	.. .. .
Red Cliffs	14,193 11 0	320 14 3	14,514 5 3	.. .. .	.. .. .
Rochester	450 7 1	.. .. .	450 7 1	.. .. .	350 10 10
Rodney	1,014 16 3	8 12 6	1,023 8 9	.. .. .	203 5 7
Shepparton	435 19 3	.. .. .	435 19 3	.. .. .	150 0 3
South Shepparton	29 4 11	.. .. .	29 4 11	.. .. .	32 8 6
Swan Hill	396 10 3	.. .. .	396 10 3	.. .. .	786 6 5
Third Lake	5 18 7	.. .. .	5 18 7	.. .. .	.. .. .
Tongala—Stanhope	1,517 10 2	.. .. .	1,517 10 2	.. .. .	267 16 8
Tragowel Plains	62 13 3	.. .. .	62 13 3	.. .. .	117 13 4
Tresco	8 19 2	.. .. .	8 19 2	.. .. .	.. .. .
Werribee	129 6 7	.. .. .	129 6 7	.. .. .	32 7 8
<i>Urban Divisions of Irrigation and Water Supply Districts.</i>					
Bacchus Marsh .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	42 4 11
Cohuna	102 18 11	28 7 11	131 6 10	.. .. .	.. .. .
Corop .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	57 5 2
Red Cliffs	25 5 8	.. .. .	25 5 8	.. .. .	.. .. .
Stanhope	15 0 4	.. .. .	15 0 4	.. .. .	40 7 9
<i>Waterworks Districts.</i>					
Bellarine Peninsula (including Headworks)	9,226 9 0	202 5 11	9,428 14 11	.. .. .	4,524 1 2
Birchip	168 0 0	7 19 0	175 19 0	.. .. .	.. .. .
Carwarp	6 11 2	.. .. .	6 11 2	.. .. .	.. .. .
Coreena	175 0 0	.. .. .	175 0 0	.. .. .	.. .. .
Hindmarsh	10 7 0	.. .. .	10 7 0	.. .. .	.. .. .
Karkaroc	363 19 10	282 17 11	646 17 9	.. .. .	342 5 4
Kerang North-West Lakes	127 18 7	.. .. .	127 18 7	.. .. .	.. .. .
Long Lake	34 7 4	.. .. .	34 7 4	.. .. .	234 7 6
Millewa	28 3 10	.. .. .	28 3 10	.. .. .	.. .. .
Mornington Peninsula* (including Headworks)	35,177 9 8	105 11 11	35,283 1 7	.. .. .	5,658 15 7
Normanville	2,099 1 11	53 9 4	2,152 11 3	.. .. .	.. .. .
Otway (under Construction)	27,709 15 10	6,723 7 8	34,433 3 6	.. .. .	.. .. .
Sea Lake	42 9 4	.. .. .	42 9 4	.. .. .	1,522 2 6
Tyntynder	265 0 3	.. .. .	265 0 3	.. .. .	1,363 18 9
Tyrrell	17 1 5	.. .. .	17 1 5	.. .. .	2,122 13 1
Carried forward	313,250 14 11	8,735 19 8	321,986 14 7	12,018 10 9	37,998 1 7

CAPITAL EXPENDITURE—continued.

STATEMENT OF MONEYS EXPENDED FROM STATE FUNDS UNDER WATER SUPPLY LOAN ACTS AND FROM UNEMPLOYMENT RELIEF FUNDS FOR THE YEAR ENDED 30TH JUNE, 1940—continued.

Works.	Water Supply Loan Funds.				Unemployment Relief Funds Act 4097.
	Act 4655.	Act 4612.	Total Ordinary Loan Funds.	Treasurer's Advance.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	313,250 14 11	8,735 19 8	321,986 14 7	12,018 10 9	37,998 1 7
<i>Waterworks Districts—continued.</i>					
Tyrrell West	57 2 11	..	57 2 11	..	3,316 15 4
Upper Western Wimmera	56 14 10	..	56 14 10	..	..
Upper Wimmera United	295 0 3	..	295 0 3	..	..
Western Wimmera	88 16 8	..	88 16 8	..	999 6 3
Wimmera United	30 10 10	..	30 10 10	..	711 1 7
Wycheproof	35 7 8	..	35 7 8	..	..
Yelta .. .. .	..	..	..	..	25 0 0
<i>Urban Districts of Waterworks Districts.</i>					
Anglesea	0 2 6	..	0 2 6	..	..
Antwerp	1 3 9	..	1 3 9	..	..
Barwon Heads and Ocean Grove	122 3 4	..	122 3 4	..	..
Berriwillock	3 0 2	..	3 0 2	..	..
Beulah	6 1 10	..	6 1 10	..	174 18 11
Birchip	12 16 4	..	12 16 4	..	204 15 9
Brim	57 7 9	..	57 7 9	..	..
Carrum	149 10 1	0 4 0	149 14 1	..	..
Chillingollah .. .. .	..	..	..	..	100 14 0
Chinkapook .. .. .	..	..	..	..	1,023 19 0
Cobden	75 9 7	..	75 9 7	..	..
Coliban	28,620 14 1	12 10 1	28,633 4 2	..	161,672 13 10
Culgoa	1 14 10	..	1 14 10	..	..
Dandenong	142 3 5	0 7 6	142 10 11	..	..
Dimboola	46 0 8	..	46 0 8	..	..
Doon	25 16 11	6 17 8	32 14 7	..	..
Drysdale	794 2 7	..	794 2 7	..	..
Frankston	769 7 7	0 3 0	769 10 7	..	..
Hopetoun	10 16 10	..	10 16 10	..	..
Jeparit	50 12 7	44 13 1	95 5 8	..	..
Jung Jung	4 18 9	..	4 18 9	..	2 17 3
Koondrook	82 17 11	..	82 17 11	..	62 19 9
Lake Boga .. .. .	..	..	..	..	69 2 3
Lalbert	68 11 9	..	68 11 9	..	..
Lascelles	6 2 6	..	6 2 6	..	..
Manangatang	1 13 3	..	1 13 3	..	1,124 10 10
Marnoo	2 4 3	..	2 4 3	..	..
Merbein	70 6 1	Cr. 0 5 3	70 0 10	..	..
Minyip	7 10 4	..	7 10 4	..	23 6 6
Mornington	450 0 5	..	450 0 5	..	..
Mount Martha	316 14 5	..	316 14 5	..	..
Natimuk	9 19 8	..	9 19 8	..	..
Newstead	1 0 7	..	1 0 7	..	..
Nullawil	1 10 4	..	1 10 4	..	..
Nyah .. .. .	..	..	..	..	93 11 3
Nyah West .. .. .	..	..	..	..	170 7 8
Ouyen	117 10 10	..	117 10 10	..	..
Patchewollock .. .. .	..	..	..	..	958 12 7
Piangil	54 15 5	..	54 15 5	..	..
Pyramid .. .. .	..	..	..	..	11 6 4
Quambatook	5 5 0	..	5 5 0	..	..
Queenscliff and Point Lonsdale	115 3 5	..	115 3 5	..	..
Rainbow	770 6 10	738 16 4	1,509 3 2	..	..
Rupanyup	16 0 8	..	16 0 8	..	141 4 0
Sea Lake	14 5 10	..	14 5 10	..	..
South Frankston	233 11 0	0 4 6	233 15 6	..	..
Speed	3 16 7	..	3 16 7	..	Cr. 4 7 6
Spring Vale	1,828 16 11	410 17 0	2,239 13 11	..	..
Tempy	15 6 4	..	15 6 4	..	..
Terang	243 12 6	59 1 10	302 14 4	..	..
Torquay	79 13 11	..	79 13 11	..	..
Ultima	3 13 11	..	3 13 11	..	131 17 10
Waitechie .. .. .	..	..	..	..	100 19 7
Watchem	6 6 0	..	6 6 0	..	..
Wonthaggi	62 13 6	..	62 13 6	..	..
Woomelang	6 6 8	..	6 6 8	..	..
Woorinen	1 0 0	..	1 0 0	..	..
Wycheproof	11 5 2	..	11 5 2	..	..
Yaapeet	1 0 0	..	1 0 0	..	..
Carried forward	349,317 13 8	10,009 9 5	359,327 3 1	12,018 10 9	209,113 14 7

CAPITAL EXPENDITURE—continued.

STATEMENT OF MONEYS EXPENDED FROM STATE FUNDS UNDER WATER SUPPLY LOAN ACTS AND FROM UNEMPLOYMENT RELIEF FUNDS FOR THE YEAR ENDED 30TH JUNE, 1940—continued.

Works.	Water Supply Loan Funds.				Unemployment Relief Funds Act 4097.
	Act 4655.	Act 4612.	Total Ordinary Loan Funds.	Treasurer's Advance.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	349,317 13 8	10,009 9 5	359,327 3 1	12,018 10 9	209,113 14 7
<i>Flood Protection Districts.</i>					
Cardinia	1,968 16 7	..	1,968 16 7	..	4,977 1 2
Kanyapella .. .. .	..	..	..	..	68 2 4
Kooweerup Lower	81 4 1	..	81 4 1	..	2,324 15 1
<i>Drainage Districts.</i>					
Cohuna	64 11 10	1 4 1	65 15 11	..	10,373 6 3
Kerang East	23 4 8	8 19 6	32 4 2	..	3,297 15 9
Maffra-Sale	48 7 5	7 10 0	55 17 5	..	47 11 8
Merbein	0 12 10	..	0 12 10	..	..
Red Cliffs	74 1 4	..	74 1 4	..	..
Rochester	314 12 0	2 11 0	317 3 0	..	3,054 13 6
Rodney	401 19 5	..	401 19 5	..	7,953 7 10
Shepparton	283 16 8	..	283 16 8	..	8,262 8 1
Tongala-Stanhope	408 11 9	..	408 11 9	..	4,067 0 10
Werribee	1 16 8	..	1 16 8	..	..
Woorinen	15 17 0	..	15 17 0	..	17,816 14 10
<i>Proposed Drainage Districts.</i>					
Nyah .. .. .	..	..	..	..	4 13 4
Tresco .. .. .	..	..	..	..	2,492 12 6
Waterworks Trusts and Local Governing Bodies ..	46,257 1 1	5,514 5 0	51,771 6 1	..	..
<i>Miscellaneous.</i>					
Carrum .. .. .	..	..	..	..	61 8 4
River Improvements .. .. .	..	..	..	..	15,848 12 1
TOTALS	399,262 7 0	15,543 19 0	414,806 6 0	12,018 10 9	289,763 18 2

* Is exclusive of £32,374 14 6 expended on Capital Works from Commonwealth Unemployment Relief Funds (Commonwealth Defence Works Unemployment Relief Account).

SUMMARY.

	£	s.	d.
Ordinary Loan Funds (Acts 4655 and 4612)	414,806	6	0
Treasurer's Advance	12,018	10	9
Unemployment Relief Funds	289,763	18	2
Total Capital Expenditure from State Funds for 1939-40	716,588	14	11

CONTRACTS.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1940.

No.	Name of Contractor.	Work or Supply.	Amount (Loan and Vote).		
			£	s.	d.
3115	Australian Cement Ltd.	2,000 tons Portland Cement, Works Generally	7,483	6	8
3116	Thompson's Engineering and Pipe Co. Ltd.	Replacement Parts for 36-inch Pump, Merbein Pumping Station	946	0	0
3117	Ruston and Hornsby (Aust.) Pty. Ltd.	Two 2½ cubic yards Quarry Shovels, Hume Reservoir	27,520	14	3
3118	Alfred T. Harman and Sons Pty. Ltd.	Two 2½ cubic yards 60 feet radius Excavators, Kooweerup	24,300	0	0
3119	Alfred T. Harman and Sons Pty. Ltd.	One ¾ cubic yard Dragline Excavator, Kooweerup	4,120	0	0
3120	J. Botterill and Fraser	Two Towing Launches, Hume Reservoir	4,681	0	0
3121	Hume Pipe Co. (Aust.) Ltd.	Laying, jointing, and maintaining 21,054 feet 21-inch diameter Reinforced Concrete Pipes, Dromana-Portsea Extension	1,403	12	0
3122	Wilson Electric Transformer Co. Pty. Ltd.	One 1,000 K.V.A. step-down Transformer, Merbein Pumping Station	789	0	0
3123	Graham Campbell Ferrum Co. Pty. Ltd.	30-inch Cast Iron Outlet Pipes, Lauriston Reservoir	674	6	0
3124	A. Challingsworth Pty. Ltd.	Two bottom dump steel Barges, Hume Reservoir	12,344	0	0
3125	Australian General Electric Ltd.	One 600 H.P. slipring induction Motor with switch gear, Merbein Pumping Station	2,000	0	0
3126	Australian Cement Ltd.	2,000 tons Low heat Portland Cement, Lauriston Reservoir	7,708	6	8
3127	Malcolm Moore Ltd.	Eight 5 cubic yards Motor truck tipping Bodies, Hume Reservoir	1,780	0	0
3128	Fowler Road Maintenance Co. Pty. Ltd.	Tamping Roller, Lauriston Reservoir	1,197	18	0
3129	Australian General Electric Ltd.	Blading for Nos. 1 and 2 Turbines, Red Cliffs Pumping Station	1,801	10	0
3130	Hume Pipe Co. (Aust.) Ltd.	66,700 feet of 15-inch diameter reinforced concrete Pipes, Dromana-Portsea Extension	29,404	13	11
3131	Rocla Ltd.	18,200 feet of 18-inch, 16,580 feet 12-inch reinforced concrete Pipes, Dromana-Portsea Extension	11,860	4	0
3132	G. T. Gahan	Unloading and carting 9,000 tons Cement from Kyneton to Lauriston Reservoir	866	5	0
3133	R. G. Minns	14,000 cubic yards ¾-inch Screenings, 28,000 cubic yards 2-inch Stone, Lauriston Reservoir	18,431	17	6
3134	T. W. Needs	Supply and delivery 10,000 cubic yards coarse Sand, Lauriston Reservoir	4,125	0	0
3135	A. Warburton and Co. Pty. Ltd.	60 steel sheet Covers for Operating Gear, Yarrowonga Weir	422	19	0
3136	A. T. Harman and Sons Pty. Ltd.	One ¾ cubic yard Excavator with back-ditcher, Works Generally	3,100	0	0
3137	Reinforced Concrete and Monier Pipe Construction Co. Pty. Ltd.	Erection of Sewage Pumping Station, Puckapunyal	1,997	12	0
3138	Marfleet and Weight Pty. Ltd.	Two 30-inch diameter Cone Valves, Lauriston Reservoir	2,572	18	0
3139	Southern States Drilling Co. Pty. Ltd.	Drilling 1,400 feet of 5-inch diameter Well Holes in granite, Hume Reservoir	1,699	10	0
3140	J. A. Black	Unloading and carting 8,000 cubic yards Fine Sand, Lauriston Reservoir	751	13	4
3141	G. E. Handley	Construction of Sewage Treatment Plant, Puckapunyal	8,274	5	0
3142	Thompson's Engineering and Pipe Co. Ltd.	Sewage Pumping Plant, Puckapunyal	1,060	0	0
3143	Tuke and Bell (Aust.) Pty. Ltd.	Cast Iron Pipework, Valves and Siphons, Puckapunyal	1,660	0	0
3144	Tuke and Bell (Aust.) Pty. Ltd.	Supply and erection of two Sewage Distributors, Puckapunyal	420	0	0
3145	Associated Quarries Pty. Ltd.	Graded aggregate for filter beds, Puckapunyal	2,286	10	0
3146	Australian Cement Ltd.	2,000 tons Low Heat Portland Cement, Works Generally	7,733	6	8
3147	Australian Cement Ltd.	2,000 tons Portland Cement, Works Generally	7,483	6	8
3148	J. Morell	3,200 cubic yards Beaching Stone Spalls, Waurin Ponds Basin	1,261	6	8
3149	Geo. W. Kelly and Lewis Ltd.	One 48 cusec Centrifugal Pump, Nyah Pumping Station	1,310	0	0
3150	Babcock and Wilcox Ltd.	Water tube Boiler and Equipment, Nyah Pumping Station	7,126	0	0
3151	Siemens (Aust.) Pty. Ltd.	Two Outlet Regulating Valves, Lauriston Reservoir	1,320	0	0
	Contracts at Piecework Rates—				
	Channel construction	Murray Valley District	36,432	19	0
	Firewood Supplies	Pumping Plants	10,593	3	3
	Miscellaneous		6,448	9	2
		Total	267,391	12	9

DIRECT LABOUR 1939-40.

The construction of the larger works is still being mainly carried out by "Direct Labour," and the Statement hereunder shows the respective Funds from which this expenditure has been met. The principal payments during the year were:—

Works.	Loan Funds.		Unemployment Relief Funds.	
	£		£	
River Murray Storages	7,754	..	..	..
Otway District Towns (Camperdown, Terang, Warrnambool, Cobden)	10,579	..	..	..
Lauriston Reservoir	264	..	49,094	..
Coliban System	47	..	20,187	..
Coliban Emergency Supply	8,262	..	92	..
Murray Valley District	40,903	..	3,628	..
Wimmera Mallee System	4,507	..	9,750	..
Merbein, Mildura, and Red Cliffs Districts	2,128	..	..	..
Rivers and Reclamation Division—				
River Improvements	..	..	13,078	..
Kooweerup and Cardinia Flood Protection Works	13	..	3,272	..
Main Urban Supplies Division—				
Mornington Peninsula District	5,927	..	4,997	..
Bellarine Peninsula District	5,174	..	2,780	..
Gippsland and Goulburn Division—				
Deakin, Rochester, Rodney, Shepparton, Stanhope, and Tongala Districts	712	..	15,363	..
Maffra-Sale District	587	..	3,683	..
Bacchus Marsh and Werribee Districts	..	..	99	..
Loddon Division—				
Boort, Tragowel Plains, Nyah, Swan Hill, Cohuna, Kerang, Kerang Lakes, Koondrook, Mystic Park, and Tresco Districts	818	..	19,044	..
Miscellaneous	1,027	..	..	..
	88,702	..	145,067	..
Grand Total	£233,769	..		

WATER SUPPLY WORKS DEPRECIATION ACCOUNTS AS AT 30TH JUNE, 1940.

Name of District.	Balance at 1st July, 1939.	Amounts Paid into Account 1939-40.	Interest Credited 1939-40.	Total.	Expenditure 1939-40.	Balance in Account at 30th June, 1940.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
IRRIGATION AND WATER SUPPLY DISTRICTS.						
Bacchus Marsh .. ..	.. ..	54 0 0	.. ..	54 0 0	.. ..	54 0 0
Boort	54 16 3	27 0 0	1 12 10	83 9 1	.. ..	83 9 1
Calivil	26 0 0	13 0 0	0 15 7	39 15 7	.. ..	39 15 7
Cohuna	193 0 11	.. ..	.. ..	193 0 11	.. ..	193 0 11
Dingee	20 6 0	10 0 0	0 12 2	30 18 2	.. ..	30 18 2
Katandra	24 0 0	12 0 0	0 14 5	36 14 5	.. ..	36 14 5
Maffra-Sale	263 18 0	130 0 0	7 18 4	401 16 4	.. ..	401 16 4
Merbein	123 11 9	5,679 19 10	.. ..	5,803 11 7	.. ..	5,803 11 7
North Shepparton	52 0 0	.. ..	1 11 3	53 11 3	.. ..	53 11 3
Nyah	116 7 2	385 12 3	3 9 7	505 9 0	.. ..	505 9 0
Red Cliffs	11,618 19 4	8,109 3 11	215 6 4	19,943 9 7	.. ..	19,943 9 7
Rochester	235 6 8	117 0 0	7 1 2	359 7 10	.. ..	359 7 10
Rodney	256 0 0	128 0 0	7 13 7	391 13 7	.. ..	391 13 7
Shepparton	94 0 0	47 0 0	2 16 5	143 16 5	.. ..	143 16 5
South Shepparton	20 0 0	10 0 0	0 12 0	30 12 0	.. ..	30 12 0
Swan Hill	1,196 10 6	340 0 0	20 14 0	1,557 4 6	.. ..	1,557 4 6
Tongala-Stanhope	136 0 0	184 0 0	4 1 7	324 1 7	.. ..	324 1 7
Tragowel Plains .. ..	.. ..	207 0 0	.. ..	207 0 0	.. ..	207 0 0
Tresco .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Werribee .. ..	.. ..	246 0 0	.. ..	246 0 0	.. ..	246 0 0
Totals	14,430 16 7	15,699 16 0	274 19 3	30,405 11 10	.. ..	30,405 11 10

URBAN DIVISIONS OF IRRIGATION AND WATER SUPPLY DISTRICTS.

Bacchus Marsh	252 0 0	126 0 0	7 11 2	385 11 2	.. ..	385 11 2
Cohuna	85 9 0	112 11 0	0 17 0	198 17 0	57 0 0	141 17 0
Corop	12 3 7	6 0 0	0 7 3	18 10 10	.. ..	18 10 10
Dingee	35 7 10	14 0 0	0 17 0	50 4 10	.. ..	50 4 10
Heyfield	232 5 7	115 0 0	6 19 5	354 5 0	.. ..	354 5 0
Leitchville	84 13 0	90 0 0	1 7 9	176 0 9	.. ..	176 0 9
Lockington	221 3 9	53 8 5	3 4 10	277 17 0	.. ..	277 17 0
Murrabit	25 10 3	.. ..	0 15 4	26 5 7	.. ..	26 5 7
Red Cliffs	403 1 4	275 9 5	9 14 2	688 4 11	14 5 9	673 19 2
Stanhope	128 0 6	35 0 0	2 2 7	165 3 1	Cr. 0 11 3	165 14 4
Totals	1,479 14 10	827 8 10	33 16 6	2,341 0 2	70 14 6	2,270 5 8

WATERWORKS DISTRICTS.

Carwarp .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Carwarp Central	6 19 7	.. ..	.. ..	6 19 7	.. ..	6 19 7
Coreena .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Harcourt .. ..	.. ..	39 0 0	.. ..	39 0 0	.. ..	39 0 0
Hindmarsh	477 9 0	4 2 3	8 9 2	490 0 5	.. ..	490 0 5
Long Lake .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Millewa .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Millewa Central .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Mornington	377 11 7	186 0 0	11 6 6	574 18 1	.. ..	574 18 1
Otway .. ..	.. ..	642 19 5	.. ..	642 19 5	.. ..	642 19 5
Tyntynder .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Tyrrell .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Tyrrell West .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Upper Western Wimmera	169 1 2	.. ..	.. ..	169 1 2	.. ..	169 1 2
Walpeup West .. ..	.. ..	207 19 1	.. ..	207 19 1	.. ..	207 19 1
Western Wimmera .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Wimmera United .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Totals	1,031 1 4	1,080 0 9	19 15 8	2,130 17 9	.. ..	2,130 17 9

WATER SUPPLY WORKS DEPRECIATION ACCOUNTS AS AT 30TH JUNE, 1940—continued.

Name of District.	Balance at 1st July, 1939.	Amounts Paid into Account 1939-40.	Interest Credited 1939-40.	Total.	Expenditure 1939-40.	Balance in Account at 30th June, 1940.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
URBAN DISTRICTS OF WATERWORKS DISTRICTS.						
Anglesea	108 1 0	59 19 0	3 4 10	171 4 10	..	171 4 10
Antwerp	9 1 8	2 0 0	0 2 5	11 4 1	..	11 4 1
Barwon Heads and Ocean Grove	493 13 9	279 0 0	13 7 11	786 1 8	47 2 1	738 19 7
Berriwillock	32 9 7	16 0 0	0 19 6	49 9 1	..	49 9 1
Berwick	528 1 7	263 0 0	15 16 10	806 18 5	..	806 18 5
Beulah	69 5 9	23 0 0	1 8 0	93 13 9	..	93 13 9
Birchip	127 18 6	151 19 4	3 15 6	283 13 4	30 0 0	253 13 4
Bittern	69 0 5	34 0 0	2 1 5	105 1 10	..	105 1 10
Brim	125 8 4	22 14 10	3 4 7	151 7 9	44 14 0	106 13 9
Bunyip	290 13 3	144 0 0	8 14 5	443 7 8	..	443 7 8
Camperdown .. ..	..	574 0 0	..	574 0 0	..	574 0 0
Carwarp	60 10 10	5 15 4	0 7 2	66 13 4	..	66 13 4
Carrum	3,000 12 9	4,019 7 3	90 0 4	7,110 0 4	..	7,110 0 4
Chillingollah	22 11 11	..	..	22 11 11	..	22 11 11
Chinkapook	63 0 11	..	..	63 0 11	..	63 0 11
Cobden .. ..	..	167 0 0	..	167 0 0	..	167 0 0
Coliban	2,838 7 11	9,182 14 5	76 1 6	12,097 3 10	302 11 10	11,794 12 0
Cranbourne	205 0 7	101 0 0	6 3 0	312 3 7	..	312 3 7
Crib Point	223 10 10	174 0 10	6 12 5	404 4 1	78 1 1	326 3 0
Culgoa	64 19 11	18 0 0	1 1 11	84 1 10	..	84 1 10
Dandenong	2,833 10 7	1,560 7 10	85 0 1	4,478 18 6	..	4,478 18 6
Dimboola	95 10 7	155 0 0	2 17 4	253 7 11	..	253 7 11
Doon	18 18 2	14 8 5	0 11 4	33 17 11	..	33 17 11
Drysdale	166 0 0	83 0 0	4 19 7	253 19 7	..	253 19 7
Frankston	2,183 12 8	1,189 6 6	58 14 4	3,431 13 6	226 8 3	3,205 5 3
Garfield	224 13 0	111 0 0	4 5 7	339 18 7	81 19 1	257 19 6
Hastings	254 7 3	229 1 0	7 12 5	491 0 8	..	491 0 8
Hicksborough	26 2 7	6 0 0	0 7 3	32 9 10	..	32 9 10
Hopetoun	123 16 7	61 0 0	3 14 3	188 10 10	..	188 10 10
Jeparit	108 2 6	39 0 0	2 6 10	149 9 4	..	149 9 4
Jung Jung	90 0 0	..	2 14 0	92 14 0	..	92 14 0
Koondrook	37 18 10	0 0 2	..	37 19 0	37 19 0	..
Lake Boga	165 8 6	..	..	165 8 6	..	165 8 6
Lalbert	1 7 9	..	..	1 7 9	..	1 7 9
Lascelles	13 6 11	49 13 1	0 8 0	63 8 0	..	63 8 0
Longwarry	229 7 10	58 13 9	6 17 8	294 19 3	..	294 19 3
Manangatang	248 6 5	..	2 0 2	250 6 7	..	250 6 7
Marnoo	225 3 4	33 0 0	2 0 2	260 3 6	..	260 3 6
Marong	7 2 0	73 16 4	0 4 3	81 2 7	..	81 2 7
Merbein	283 8 2	137 0 0	8 6 11	428 15 1	..	428 15 1
Meringur	67 16 11	5 3 7	0 15 7	73 16 1	..	73 16 1
Minyip .. ..	..	75 0 0	..	75 0 0	..	75 0 0
Mornington	1,293 14 4	915 8 0	38 0 0	2,247 2 4	166 8 1	2,080 14 3
Mount Martha	330 17 10	163 0 0	9 18 6	503 16 4	..	503 16 4
Nandaly	78 10 7	6 0 3	0 10 11	85 1 9	..	85 1 9
Natimuk	101 10 0	50 0 0	3 0 10	154 10 10	..	154 10 10
Newstead	103 10 7	51 0 0	3 2 1	157 12 8	..	157 12 8
North Wonthaggi	178 11 10	44 0 0	2 13 7	225 5 5	..	225 5 5
Nullawil	47 7 2	10 0 0	0 12 2	57 19 4	..	57 19 4
Nyah	17 19 2	27 12 9	0 6 1	45 18 0	..	45 18 0
Nyah West	429 1 5	..	6 6 10	435 8 3	..	435 8 3
Ouyen	446 11 0	111 0 0	6 15 2	564 6 2	..	564 6 2
Pakenham	517 17 4	313 14 5	8 17 9	840 9 6	..	840 9 6
Patchewollock	110 19 10	17 0 0	1 0 5	129 0 3	..	129 0 3
Piangil	189 13 11	4 3 9	..	193 17 8	149 16 2	44 1 6
Portarlinton	125 0 2	212 13 11	3 15 0	341 9 1	..	341 9 1
Pyramid Hill	217 13 11	39 0 0	2 7 6	259 1 5	..	259 1 5
Quambatook	89 3 10	34 19 1	2 12 4	126 15 3	..	126 15 3
Queenscliff and Point Lonsdale	1,035 15 11	514 0 0	31 1 6	1,580 17 5	..	1,580 17 5
Rainbow	97 8 10	48 0 0	2 18 5	148 7 3	..	148 7 3
Rupanyup	166 11 1	57 0 0	3 9 5	227 0 6	..	227 0 6
Sea Lake	549 9 11	75 0 0	4 11 4	629 1 3	..	629 1 3
Somerville	119 15 5	59 0 0	3 11 10	182 7 3	..	182 7 3
South Frankston	772 16 10	312 0 0	19 7 6	1,104 4 4	266 8 9	837 15 7
Speed	116 11 0	40 17 4	0 9 8	157 18 0	..	157 18 0
Carried forward	22,873 2 0	22,223 11 2	582 6 4	45,678 19 6	1,431 8 4	44,247 11 2

WATER SUPPLY WORKS DEPRECIATION ACCOUNTS AS AT 30TH JUNE, 1940—*continued.*

Name of District.	Balance at 1st July, 1939.	Amounts Paid into Account 1939-40.	Interest Credited 1939-40.	Total.	Expenditure 1939-40.	Balance in Account at 30th June, 1940.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
URBAN DISTRICTS OF WATERWORKS DISTRICTS—<i>continued.</i>						
Brought forward ..	22,873 2 0	22,223 11 2	582 6 4	45,678 19 6	1,431 8 4	44,247 11 2
Spring Vale ..	1,755 19 0	865 0 0	52 13 7	2,673 12 7	..	2,673 12 7
Terang ..	..	436 0 0	..	436 0 0	..	436 0 0
Tempy ..	107 9 1	26 7 1	0 14 11	134 11 1	..	134 11 1
Torquay ..	194 7 5	97 0 0	5 16 7	297 4 0	..	297 4 0
Ultima ..	76 14 2	..	..	76 14 2	65 15 0	10 19 2
Waitchie ..	..	..	..	..	..	..
Walpeup ..	..	39 0 0	..	39 0 0	..	39 0 0
Watchem ..	101 14 9	35 0 0	2 2 7	138 17 4	..	138 17 4
Werrimull ..	145 7 5	42 0 0	2 10 5	189 17 10	..	189 17 10
Wonthaggi ..	1,768 7 5	189 9 11	22 11 2	1,980 8 6	16 17 0	1,963 11 6
Woomelang ..	131 19 0	65 0 0	3 19 2	200 18 2	..	200 18 2
Woorinen ..	37 18 11	41 0 9	..	78 19 8	..	78 19 8
Wycheproof ..	524 18 0	143 0 0	8 14 2	676 12 2	..	676 12 2
Yaapeet ..	107 9 7	..	1 0 11	108 10 6	..	108 10 6
Totals ..	27,825 6 9	24,202 8 11	682 9 10	52,710 5 6	1,514 0 4	51,196 5 2
DRAINAGE DISTRICTS.						
Merbein ..	469 2 7	376 10 10	14 1 6	859 14 11	..	859 14 11
Red Cliffs ..	100 4 11	486 18 1	3 0 2	590 3 2	..	590 3 2
Totals ..	569 7 6	863 8 11	17 1 8	1,449 18 1	..	1,449 18 1
Grand Totals ..	45,336 7 0	42,673 3 5	1,028 2 11	89,037 13 4	1,584 14 10	87,452 18 6

RECONCILIATION OF WATER SUPPLY WORKS DEPRECIATION ACCOUNT WITH WATER SUPPLY WORKS DEPRECIATION FUND (ACT 3801 AS AMENDED BY ACT 4513).

<i>Water Supply Works Depreciation Account.</i>				<i>Water Supply Works Depreciation Fund (in Treasury).</i>			
	£	s.	d.		£	s.	d.
Balance from 1938-39 ..	45,336	7	0	Credit Balance as at 30th			
Paid into Account 1939-40 ..	42,673	3	5	June, 1939 ..	3,832	13	7
				Less Expenditure 1939-40 ..	1,584	14	10
	88,009	10	5				8,247 18 9
Interest Credited ..	1,028	2	11	Amount invested in Sundry			
	89,037	13	4	Investments Account ..	4,090	9	0
Less Expenditure 1939-40 ..	1,584	14	10	Interest earned 1939-40 ..	123	12	7
Balance in Account 30th June, 1940 ..			87,452 18 6				4,214 1 7
			87,452 18 6	Balance amount paid to Consolidated			
				Revenue, but not yet transferred to			
				Fund ..			74,990 18 2
							87,452 18 6

WATER SUPPLY PLANT AND MACHINERY ACCOUNT (ACT 4655).

SUMMARY OF FIRST YEAR OF OPERATIONS TO 30TH JUNE, 1940.

	£	s.	d.		£	s.	d.
Amounts charged on moneys authorized for carrying out construction and maintenance of Commission works on which plant and machinery was engaged:—				Interest paid to Revenue No. 2, Interest to 30th June, 1940 ..			627 13 1
Interest with respect to Capital Liability of—				Redemption paid to Revenue No. 9, Miscellaneous, to 30th June, 1940 ..			39 8 10
At 30th June, 1939, nil.				Water Supply Works, Plant and Machinery Depreciation Fund (in Treasury) ..			4,660 19 8
At 30th June, 1940, £36,522				Costs of operation maintenance and repairs			8,842 11 1
16s. 11d. ..	1,291	15	8	Stores Suspense Account Reserve for:—			
Redemption ..	80	19	7				
Depreciation ..	4,660	19	8	Interest ..	664	2	7
Costs of operation maintenance and repairs	9,393	0	1	Redemption ..	41	10	9
				Costs of operation main- tenance and repairs ..	550	9	0
							1,256 2 4
							15,426 15 0
			15,426 15 0				

LOAN CAPITAL LIABILITY.

WORKS UNDER CONTROL OF COMMISSION.

The following statement gives a brief description, summary of Loan Liability for expenditure under Loan Application Acts, and other particulars relative to the undermentioned works.

A.—FREE HEADWORKS.		Expenditure.		Net Loan Capital Liability at 30th June, 1940.	
		£	s. d.	£	s. d.
Broken River Works. —Casey's Weir and offtake, with about 59 chains of channel to the Broken Creek; Gowangardie Weir with offtake sluice	..	14,852	15 0		
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)	..	739,525	8 1		
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, Racecourse Lake, Cullen's Lake, Kangaroo Lake, and Lake Tutchewop, and to the Little Murray River, with water storage works at these lakes	..	26,619	17 3		
Kow Swamp Works. —Intake from the River Murray 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	..	187,964	7 3		
Lake Lonsdale Reservoir. —Reservoir at Lake Lonsdale, on the Little Wimmera River, near Ledcourt	..	49,057	4 2		
Loddon River Works. —Laanecoore Weir, on the Loddon; Bridgewater Weir, on the Loddon; Kinypanial Weir, on the Loddon	..	172,351	14 3		
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	..	27,305	18 5		
Lower Wimmera Compensation Works. —Drung Drung Weir, on the Wimmera, near allotment 29, parish of Longerenong; Dimboola Weir, on the Wimmera, near Dimboola township; Antwerp Weir, on the Wimmera, at Antwerp Station homestead; Jeparit Weir, on the Wimmera, near Jeparit township	..	8,663	12 3		
				1,226,340	16 8
B.—CAPITAL WORKS AND CHARGES NOT APPORTIONABLE TO DISTRICTS.					
Geelong (inclusive of Loan Flotation Expenses)	..	160,609	0 11		
Eppalock Reservoir	..	111,704	2 4		
Goulburn Levees	..	30,797	0 4		
Lang Lang River Works	..	48,543	8 9		
Surveys and Preliminary Investigations	..	197,543	18 5		
Loan Flotation Expenses	..	755,654	18 8		
Plant and Machinery Suspense	..	36,483	8 1		
				1,341,335	17 6

C.—HEADWORKS—EXCLUSIVE OF FREE HEADWORKS.
IN RESPECT OF IRRIGATION AND WATER SUPPLY DISTRICTS AND WATERWORKS DISTRICTS.

Goulburn and Loddon Storages (exclusive of Free Headworks)—				£	s.	d.	£	s.	d.
Investigations ..	..	..	..	6,534	7	4			
Eildon Reservoir ..	..	..	..	1,889,975	5	11			
Waranga Reservoir Enlargement ..	..	..	..	609,576	17	1			
Laaneocorie Weir Improvements ..	..	..	..	2,509	9	3	2,508,595	19	7
Goulburn Main Channels—									
East Goulburn Main ..	..	..	..	363,963	11	1			
Goulburn-Waranga ..	..	..	..	6,922	8	4			
Waranga-Western Main ..	..	..	..	1,047,469	10	0			
Main Distributaries ..	..	..	..	10,635	13	0	1,428,991	2	5
Total Goulburn and Loddon Works (exclusive of Free Headworks)				..			3,937,587	2	0
Less Debited to Wimmera-Mallee				..			99,867	10	6
									3,837,719 11 6
Bacchus Marsh and Werribee Schemes—									
Ballan Tunnel ..	..	..	..	..			21,677	14	8
Pykes Creek Reservoir ..	..	..	..	..			142,230	16	1
Melton Reservoir ..	..	..	..	..			99,174	8	10
Lerderberg River Flats ..	..	..	..	..			330	0	8
									263,413 0 3
Bellarine Peninsula Waterworks District (exclusive of cost of Urban Reticulation, £41,339 9s. 11d.)				..			455,633	16	9
Less Redemption paid to Revenue				..			413	10	9
									455,220 6 0
Mornington Peninsula Waterworks District (exclusive of cost of Distributary Works and Urban Reticulation, £224,644 5s. 11d.)				..			969,683	13	4
Less Redemption paid to Revenue				..			156	12	9
									969,527 0 7
Mastra-Sale Scheme—Glennaggie Reservoir				..			..		678,357 6 11
River Murray Agreement Works (Victorian Contributions under River Murray Waters Acts)				..			..		2,957,745 13 8
River Murray State Works—Surveys, &c.				..			..		7,506 18 7
Otway Waterworks District (under Construction) (exclusive of cost of Urban Reticulation, £87,703 0s. 7d.)				..			..		251,846 3 6
Wimmera-Mallee—Main Channels and Storages inclusive of £99,867 10s. 6d. from Goulburn Works				..			..		946,333 4 9
									10,367,669 5 9
									12,935,345 19 11
							Carried forward	..	

Net Loan Capital
Liability at
30th June, 1940.

£ s. d.
12,935,345 19 11

LOAN CAPITAL LIABILITY—continued.

Name of District.	Loan Liability (including Treasurer's Advance, £12,018 10s. 9d.).						Capital Expenditure Borne by the State Account.						Brought forward ..					
	Headworks.			Distributory Works.			Headworks.			Distributory Works.			Total.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.			
	D.—IRRIGATION AND WATER SUPPLY DISTRICTS.																	
1. Bacchus Marsh ..	82,649	2	8	95,942	10	4	178,591	13	0	72,229	16	3	82,168	16	0	106,361	16	9
2. Boort ..	170,293	0	0	79,616	19	1	249,909	19	1	14,275	15	9	170,292	0	0	235,634	3	4
3. Calivil ..	81,654	0	0	112,960	3	0	194,614	3	0	8,913	8	2	81,653	0	0	185,700	14	10
4. Campaspe ..	5,031	0	0	12,283	0	8	17,314	0	8	..	..	..	5,031	0	0	17,314	0	8
5. Cohuna ..	427,138	0	0	284,672	6	11	711,810	6	11	193,148	3	8	427,138	0	0	518,662	3	3
6. Deakin ..	36,922	6	11	58,381	4	7	95,303	11	6	28,632	12	6	36,922	6	11	66,670	19	0
7. Dingee ..	58,278	0	0	15,471	12	2	73,749	12	2	11,256	7	3	58,278	0	0	62,493	4	11
8. Dry Lake ..	1,965	0	0	718	16	9	2,683	16	9	718	16	9	1,965	0	0	1,965	0	0
9. Fish Point ..	21,468	0	0	15,798	11	10	37,266	11	10	..	..	..	21,468	0	0	37,266	11	10
10. Katandra ..	76,272	0	0	107,385	16	1	183,657	16	1	14,792	4	5	76,271	0	0	168,865	11	8
11. Kerang ..	246,783	0	0	127,271	8	4	374,054	8	4	62,319	16	1	246,783	0	0	311,734	12	3
12. Koondrook ..	245,136	0	0	217,787	6	10	462,923	6	10	86,351	0	9	239,639	0	0	376,572	6	1
13. Leitchville ..	67,853	8	1	42,744	10	10	110,597	18	11	30,827	11	3	67,853	8	1	79,770	7	8
14. Maffra-Sale ..	678,357	6	11	578,132	1	4	1,256,489	8	3	98,572	19	0	678,352	6	9	1,157,916	9	3
15. Merbein ..	193,605	0	0	253,320	12	8	446,925	12	8	52,292	19	6	193,605	0	0	394,632	13	2
16. Mystic Park ..	38,985	19	8	17,471	6	5	56,457	6	1	6,707	8	1	38,985	19	8	49,749	18	0
17. North Shepparton ..	157,158	0	0	198,018	18	0	355,176	18	0	70,095	1	3	157,157	0	0	285,081	16	9
18. Nyah ..	74,034	0	0	120,912	13	9	194,946	13	9	4,397	4	1	74,034	0	0	190,549	9	8
19. Red Cliffs ..	280,035	0	0	791,196	12	2	1,071,231	12	2	45,761	7	10	280,035	0	0	1,025,470	4	4
20. Rochester ..	844,868	11	3	339,517	3	3	1,184,385	14	6	193,668	8	2	844,863	11	3	990,717	6	4
21. Rodney ..	908,267	12	9	576,735	15	0	1,485,003	7	9	155,394	19	0	908,261	12	9	1,329,608	8	9
22. Shepparton ..	287,430	0	0	197,195	2	8	484,625	2	8	71,158	5	1	287,428	0	0	413,466	17	7
23. South Shepparton ..	58,936	19	10	59,583	11	11	118,520	11	9	17,582	5	7	58,936	19	10	100,938	6	2
24. Swan Hill ..	290,207	0	0	184,983	11	8	475,190	11	8	68,490	18	11	290,207	0	0	406,699	12	9
25. Third Lake ..	25,355	0	0	25,206	19	10	50,561	19	10	4,646	12	5	25,355	0	0	45,915	7	5
26. Tongala-Stanhope ..	644,991	0	0	296,063	8	0	941,054	8	0	146,196	2	9	644,987	10	0	794,858	5	3
27. Tragowel Plains ..	507,617	0	9	259,193	19	10	766,811	0	7	116,317	13	4	507,614	0	9	650,493	7	3
28. Tresco ..	25,675	0	0	90,860	14	10	116,535	14	10	..	..	..	25,675	0	0	116,535	14	10
29. Werribee ..	180,763	17	7	119,092	1	10	299,855	19	5	118,721	18	6	180,727	17	11	181,134	0	11
30. Murray Valley ..	6,717,730	6	5	5,278,519	0	7	11,996,249	7	0	1,693,469	16	4	6,711,688	9	11	10,302,779	10	8
Under Construction—	887,417	4	6	328,243	7	11	1,215,660	12	5	26,392	12	3	887,417	4	6	1,189,268	0	2
Totals ..	7,605,147	10	11	5,606,762	8	6	13,211,909	19	5	1,719,862	8	7	7,599,105	14	5	11,492,047	10	10
Less Treasurer's Advance ..	..	..	..	12,018	10	9	12,018	10	9	..	..	..	..	..	..	12,018	10	9
Loan Liability ..	7,605,147	10	11	5,594,743	17	9	13,199,891	8	8	1,719,862	8	7	7,599,105	14	5	3,880,923	5	8
																11,480,029	0	1

LOAN CAPITAL LIABILITY—continued.

Net Loan Capital Liability at 30th June, 1940.

£ s. d.
21,313,038 2 8

Name of District.	Loan Liability.			Allotted to District.			Capital Expenditure Borne by the State Account.											
	Headworks.			Distributory Works.			Headworks.			Distributory Works.			Total.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.						
G.—URBAN DISTRICTS OF WATERWORKS DISTRICTS.																		
1. Anglesea ..	8,621	15	11	9,740	19	6	18,362	15	5	116	15	10	8,591	8	2	18,245	19	7
2. Antwerp ..	..	..	..	709	0	1	709	0	1	709	0	1	..	..	..	..	..	..
3. Barwon Heads and Ocean Grove ..	32,062	17	1	7,226	7	0	39,289	4	1	16,037	11	3	23,251	12	10	23,251	12	10
4. Berrinlock ..	..	..	..	5,199	4	3	5,199	4	3	1,946	4	9	3,252	19	6	3,252	19	6
5. Berwick ..	13,733	4	8	8,652	7	3	22,385	11	11	2,012	11	8	13,729	4	8	20,373	0	3
6. Beulah ..	..	..	..	7,584	6	3	7,584	6	3	6	1	10	7,578	4	5	7,578	4	5
7. Birchip ..	..	..	..	12,489	13	1	12,489	13	1	1,675	8	11	..	..	..	10,814	4	2
8. Bittern ..	1,671	1	8	1,207	0	0	2,878	1	8	..	..	..	1,671	1	8	2,878	1	8
9. Brim ..	..	..	..	3,562	19	4	3,562	19	4	3,076	16	5	..	..	..	486	2	11
10. Bunyip ..	5,382	2	7	5,891	0	8	11,273	3	3	172	12	2	5,380	19	7	5,719	11	6
11. Camperdown ..	28,813	0	0	48,471	6	1	77,284	6	1	77,284	6	1	..	..	..	11,100	11	1
12. Carrum ..	170,680	16	9	43,412	17	9	214,093	14	6	41,757	19	3	170,529	5	4	172,335	15	3
13. Carwar ..	..	..	..	633	3	6	633	3	6	..	..	..	..	..	..	633	3	6
14. Chillingollah ..	..	..	..	2,482	3	1	2,482	3	1	1,529	0	0	..	..	..	953	3	1
15. Chinkapook ..	..	..	..	2,551	11	7	2,551	11	7	588	0	0	..	..	..	1,963	11	7
16. Cobden ..	6,213	0	0	14,212	1	3	20,425	1	3	20,425	1	3	..	..	..	..	..	..
17. Coliban ..	..	..	..	1,648,225	9	8	1,648,225	9	8	385,292	5	10	..	..	..	1,262,933	3	10
18. Cranbourne ..	6,614	0	11	2,750	12	8	9,364	13	7	3,542	2	0	5,822	11	7	5,822	11	7
19. Crib Point ..	8,766	18	0	3,029	0	0	11,795	18	0	6,520	0	0	5,275	18	0	5,275	18	0
20. Culgoa ..	..	..	..	4,424	1	9	4,424	1	9	4,052	7	9	..	..	..	371	14	0
21. Dandenong ..	95,869	19	5	39,794	11	2	135,664	10	7	40,711	10	4	94,269	13	8	683	6	7
22. Dimboola ..	..	..	..	17,893	7	3	17,893	7	3	17,893	7	3	..	..	..	..	..	..
23. Doon ..	..	..	..	681	4	0	681	4	0	..	..	..	..	..	..	681	4	0
24. Drysdale ..	11,277	8	1	2,159	11	9	13,436	19	10	857	9	6	11,236	8	1	1,343	2	3
25. Frankston ..	92,882	19	10	16,079	3	8	108,962	3	6	74,000	19	2	34,961	4	4	..	..	..
26. Garfield ..	4,188	16	4	4,487	18	2	8,676	14	6	914	8	2	4,187	16	4	3,574	10	0
27. Hastings ..	7,403	4	5	6,273	9	1	13,676	13	6	1,025	9	1	7,401	4	5	5,250	0	0
28. Hickborough ..	..	..	..	989	2	2	989	2	2	329	19	5	..	..	..	659	2	9
29. Hopetoun ..	..	..	..	10,304	5	4	10,304	5	4	1,925	0	11	..	..	..	8,379	4	5
30. Jeparit ..	..	..	..	13,386	13	2	13,386	13	2	13,386	13	2	..	..	..	..	..	..
31. Jung Jung ..	..	..	..	3,340	6	5	3,340	6	5	..	..	..	..	..	..	3,340	6	5
32. Koondrook ..	..	..	..	5,689	0	6	5,689	0	6	58	16	0	..	..	..	5,630	4	6
33. Lake Boga ..	..	..	..	5,517	1	2	5,517	1	2	..	..	..	..	..	..	5,517	1	2
34. Lalbert ..	..	..	..	4,651	6	10	4,651	6	10	4,397	11	9	..	..	..	253	15	1
35. Lascelles ..	..	..	..	4,263	19	10	4,263	19	10	1,059	16	6	..	..	..	3,204	3	4
36. Longwarry ..	6,740	15	11	5,072	8	5	11,813	4	4	11,810	4	4	3	0	0	..	..	..
37. Manangatang ..	..	..	..	5,110	19	6	5,110	19	6	5,110	19	6	..	..	..	..	..	..
38. Marnoo ..	..	..	..	4,070	19	10	4,070	19	10	4,070	19	10	..	..	..	..	..	..
39. Marong ..	..	..	..	2,100	0	0	2,100	0	0	1,129	0	0	..	..	..	971	0	0

[illegible]

LOAN CAPITAL LIABILITY—continued.

Name of District.	Loan Liability.					Allotted to District.	Capital Expenditure Borne by the State Account.														
	Headworks.		Distributory Works.		Total.		Headworks.		Distributory Works.		Total.										
	£	s. d.	£	s. d.	£		s. d.	£	s. d.	£	s. d.										
I.—DRAINAGE DISTRICTS.																					
EXPENDITURE IN RESPECT TO ACQUISITION OF LAND FOR DRAINAGE WORKS. CONSTRUCTION CARRIED OUT FROM UNEMPLOYMENT RELIEF LOAN FUNDS.																					
1. Cohuna	675	19	7	..	..	675	19	7	675	19	7						
2. Kerang East	116	0	2	..	..	116	0	2	116	0	2						
3. Mafrá-Sale	215	3	2	..	..	215	3	2	215	3	2						
4. Merbein	267	17	9	..	..	267	17	9	267	17	9						
5. Red Cliffs	143	0	1	..	..	143	0	1	143	0	1						
6. Rochester	997	16	8	..	..	997	16	8	997	16	8						
7. Rodney	1,311	0	1	..	..	1,311	0	1	1,311	0	1						
8. Shepparton	674	15	1	..	..	674	15	1	674	15	1						
9. Tongala-Stanhope	767	10	3	..	..	767	10	3	767	10	3						
10. Werribee	13	2	2	..	..	13	2	2	13	2	2						
11. Woorinen	15	17	0	..	..	15	17	0	15	17	0						
Totals, Loan Liability	5,198	2	0	..	..	5,198	2	0	5,198	2	0						
Totals, Commission's Districts (Statements D, E, F, G, H, and I.)																					
	10,367,669	5	9	11,107,880	8	8	21,475,549	14	5	3,786,395	6	11	9,759,644	12	10	7,929,509	14	8	17,689,154	7	6

SUMMARY STATEMENT OF LOAN LIABILITY AS AT 30th JUNE, 1940.

Reference to Preceding Statements.	Works.	Total Loan Capital Expenditure.			Deduct Redemption Paid.			Net Loan Capital Liability.			At Debt of Authorities and Borne by Districts.			Capital Expenditure Borne by the State.		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
A	Free Headworks	1,226,831	14	8	490	18	0	1,226,340	16	8	..	..	..	1,226,340	16	8
B	Capital Works and Charges not Apportionable to Districts ..	1,664,731	8	1	323,395	10	7	1,341,335	17	6	36,483	8	1	1,304,852	9	5
C	Headworks Costs in respect of Irrigation and Water Supply Districts and Waterworks Districts	10,442,655	4	3	74,985	18	6	10,367,669	5	9	608,024	12	11	9,759,644	12	10
D	Irrigation and Water Supply Districts, exclusive of Headworks Costs ..	5,678,852	9	3	84,108	11	6	5,594,743	17	9	1,713,820	12	1	3,880,923	5	8
E	Urban Divisions of Irrigation Districts	63,437	14	4	1,391	2	8	62,046	11	8	38,706	12	8	23,339	19	0
F	Waterworks Districts, exclusive of Headworks Costs	2,766,323	6	11	45,421	13	7	2,720,901	13	4	561,228	10	11	2,159,673	2	5
G	Urban Districts of Waterworks Districts, exclusive of Headworks Costs	2,386,325	11	1	29,663	19	11	2,356,661	11	2	852,691	15	7	1,503,969	15	7
H	Flood Protection Districts	374,415	4	4	6,086	11	7	368,328	12	9	11,923	2	9	356,405	10	0
I	Drainage Districts	5,198	2	0	..	..	..	5,198	2	0	..	..	..	5,198	2	0
J	Waterworks Trusts and Local Governing Bodies	3,844,980	12	7	650,900	11	8	3,194,080	0	11	1,950,718	5	3	1,243,361	15	8
		28,453,751	7	6	1,216,444	18	0	27,237,306	9	6	5,773,597	0	3	21,463,709	9	3
	Deduct National Debt Sinking Fund not credited to Districts and Works ..	..	..	..	1,648,172	18	5									
	Less Redemption paid by Districts, Waterworks Trusts &c. and credited by Treasury to Revenue				252,782	10	3	1,395,390	8	2						
	Net Loan Liability of State for Works of Country Water Supply (Exclusive of £200,000 cash in hand held by Treasury)	..	..	..	..	..	..	25,841,916	1	4						

STATEMENT OF REVENUE SETTING OUT ARREARS AS AT 1ST JULY, 1939, AND AS AT 30TH JUNE, 1940, RESPECTIVELY.

	Total. 2	General Rate.		Irrigation Charge.		Drainage Rate.		Flood Protection Charge.		Sales of Water. 11	Meter Rent. 12	Miscellaneous. 13
		Rate. 3	Interest. 4	Charge. 5	Interest. 6	Rate. 7	Interest. 8	Charge. 9	Interest. 10			
Arrears at 1st July, 1939 ..	£ 748,567	£ 349,257	£ 82,877	£ 193,779	£ 29,892	£ 11,203	£ 454	£ 15,571	£ 3,458	£ 55,818	£ 837	£ 5,421
Assessments, 1939-40 ..	498,791	272,513	..	200,654	..	17,308	..	8,316	..	..	..	..
Additional Water Sales, Meter Rents and Interest Charges to 30th June, 1940 ..	144,372	..	16,257	..	8,034	..	741	..	796	89,042	3,846	25,656
Total Amount Collectable 1939-40 ..	1,391,730	621,770	99,134	394,433	37,926	28,511	1,195	23,887	4,254	144,860	4,683	31,077
Deduct—												
(i) Revenue Collected 1939-40	615,277	269,005	6,529	197,072	5,715	13,372	187	8,210	341	87,908	3,638	23,300
(ii) Credits Absorbed ..	6,514	260	2	5,083	..	27	..	1	..	185	258	698
Balance ..	769,939	352,505	92,603	192,278	32,211	15,112	1,008	15,676	3,913	56,767	787	7,079
Add Amounts Overpaid ..	1,761	303	4	140	..	305	1	6	..	148	11	843
Total = Gross Arrears at 30th June, 1940 ..	771,700	352,808	92,607	192,418	32,211	15,417	1,009	15,682	3,913	56,915	798	7,922
Deduct Amounts recommended for Writing Off, 1939-40 ..	110,688	45,943	31,946	13,181	11,017	1,166	34	1,277	601	3,858	4	1,661
Net Arrears as at 30th June, 1940	661,012	306,865	60,661	179,237	21,194	14,251	975	14,405	3,312	53,057	794	6,261

This Statement is subject to Audit and minor adjustments.

ESTIMATES 1940-41.

PROPOSED DISBURSEMENTS.

	Estimated Requirements.	Amount provided in Budget.
	£	£
Coliban Works	6,653	6,008
Free Headworks	4,386	4,386
Irrigation Districts	89,187	88,187
Waterworks Districts	140,881	132,526
Flood Protection Districts	4,546	4,546
Drainage Districts	10,198	10,198
Administration*	194,356	187,024
General Expenditure*	34,625	34,625
River Murray Works—Contribution by State	12,500	12,500
	<u>497,332</u>	<u>480,000</u>

* To be apportioned over the above Districts.

ESTIMATED RECEIPTS.

	£
Coliban Works	46,000
Waterworks Districts	224,000
Irrigation Districts	284,000
Flood Protection and Drainage Districts	23,000
Other	18,000
	<u>595,000</u>
Estimated amount available to meet Interest on basis of Budget provision	115,000
Add estimated Revenues from Other Authorities—	
Waterworks Trusts	60,300
Local Bodies	24,000
	<u>84,300</u>
Total Estimated amount available from Revenues of all Authorities to meet Interest	<u>199,300</u>

Dated at the Office of the State Rivers and Water Supply Commission, Treasury Gardens,
Melbourne, the day of November, 1940.

L. R. EAST, Chairman.

W. A. ROBERTSON, Commissioner.

H. HANSLOW, Commissioner.

L. DUGGAN, Secretary.

APPENDIX A.

SCHEDULE OF UNEMPLOYMENT RELIEF GRANTS TO 30TH JUNE, 1940.

Since the commencement of Relief Works in 1930, a total amount of £3,079,168 has been made available to this Commission from Unemployment Relief Funds for expenditure on works providing employment in country districts. Of this amount, £166,035 was allocated prior to the constitution of the Employment Council in July, 1932. Details are as follow :—

SCHEDULE OF GRANTS, 1ST JUNE, 1930, TO 11TH JULY, 1932.

Locality.	Works.							Grant.	
	HEADWORKS.							£	£
Goulburn Main Channels	East Goulburn .. ..	..	..	..	..	..	..	6,000	
	West Goulburn .. ..	..	..	..	..	..	..	5,000	
	East and West Goulburn .. ..	..	..	..	..	..	..	5,100	
Mornington Peninsula	Lysterfield Reservoir .. ..	..	..	..	..	..	..	12,400	
Campaspe River	Eppalock Weir .. ..	..	..	..	..	..	..	6,000	
Wimmera Mallee	Lake Lonsdale Reservoir .. ..	..	..	..	..	..	..	5,000	
									39,500
	IRRIGATION DISTRICTS.								
Maffra-Sale	Channel Lining .. ..	..	..	..	..	..	..	15,000	
Bacchus Marsh	Channel Lining .. ..	..	..	..	..	..	..	19,000	
Cohuna	Channel Construction .. ..	..	..	..	..	..	..	5,665	
Kerang	Channel Construction .. ..	..	..	..	..	..	..	4,575	
Tragowel Plains	Channel Construction .. ..	..	..	..	..	..	..	2,260	
									46,500
	WATERWORKS DISTRICTS.								
Coliban	Channel Lining .. ..	..	..	..	..	..	..	20,000	
Millewa	Channel Lining .. ..	..	..	..	..	..	..	10,000	
Northern Mallee	Channel Construction .. ..	..	..	..	..	..	..	14,000	
Bellarine Peninsula	Ironclad Catchments .. ..	..	..	..	..	..	..	5,000	
	Town Supplies .. ..	..	..	..	..	..	..	10,000	
									59,000
	FLOOD PROTECTION DISTRICTS.								
Kooweerup	Drains .. ..	..	..	..	..	..	..	15,000	
Carrum	Drains and Banks .. ..	..	..	..	..	..	..	2,000	
									17,000
	MISCELLANEOUS.								
Canned Fruits	Shepparton—Processing .. ..	..	..	..	..	..	..	4,035	
									4,035
Total of Grants from 1.6.30 to 11.7.32								..	166,035

SCHEDULE OF GRANTS, 12TH JULY, 1932, TO 30TH JUNE, 1940.

Locality.	Works.				Grant.	
	HEADWORKS.				£	£
Wimmera-Mallee	Lake Lonsdale—Increased Storage ..	1932-33			2,500	
	Mt. Zero Channel and Basin ..	1932-33			6,000	
	Fyans Lake—Tree planting ..	1932-33			350	
	Longerenong Weir	1933-34			700	
	Moora Reservoir—Construction ..	1934-35			4,750	
	Pine Lake, Taylors Lake, &c. ..	1936-37			5,000	
	Waranga Western Channel Floodways..	1939-40			3,500	
Loddon River	Laanecoorie Weir	1933-34			1,250	22,800
	Serpentine Weir—Reconstruction ..	1935-36			800	
Goulburn River	Goulburn - Waranga Channel—Re-conditioning	1934-35			5,000	2,050
Campaspe River	Eppalock Weir	1932-33			4,500	5,000
Werribee River	Melton Dam—Raising	1934-35			3,500	4,500
	Raising Diversion Weir	1938-39			6,500	
Kerang North-West Lakes	Main Channels, Swan Hill and Kerang	1932-33			14,500	10,000
	Main Channels, Kerang and Kerang North-West Lakes	1933-34			10,350	
	Tutchewop Channel	1934-35			3,000	
Pykes Creek Reservoir	Lining Tunnel	1937-39			8,500	27,850
Total (Headworks)					8,500	80,700

APPENDIX A—continued.

SCHEDULE OF GRANTS 12TH JULY, 1932, TO 30TH JUNE, 1940—continued.

Locality.				Works.				Grant.	
				IRRIGATION DISTRICTS—WATER SUPPLY.				£	£
Bacchus Marsh	..	..	..	Channel Lining	..	..	1932-35	31,350	31,350
Werribee	..	..	..	Channel Lining	..	..	1932-35	38,700	
Mystic Park and Tresco	..	..	..	Channels (also £2,000 for Tresco drains, q.v.)	..	..	1933-34	2,500	38,700
Red Cliffs and Merbein	..	..	..	Channel Construction, Red Cliffs and Merbein	..	..	1932-35	15,000	2,500
Maffra-Sale	..	..	..	Channel Construction	..	..	1932-34	7,850	17,850
				Riverslea Extension	..	..	1938-39	7,000	
				Riverslea Extension	..	..	1939-40	3,000	
Rodney	..	..	..	Channel Construction	..	..	1932-33	7,000	7,000
Cohuna	..	..	..	Channel Cleaning	..	..	1932-33	300	2,800
				Channel Siphon	..	..	1933-34	1,000	
				Channel Construction	..	..	1933-34	1,500	
Deakin	..	..	..	Channel Construction	..	..	1934-35	2,405	2,405
Nyah	..	..	..	Channel Lining	..	..	1934-35	540	540
Swan Hill	..	..	..	Channel Lining, Woorinen	..	..	1935-36	650	650
Shepparton	..	..	..	Channel Construction—Bunbartha	..	..	1938-39	1,500	1,500
Murray Valley	..	..	..	Channel Construction	..	..	1938-39	35,000	35,000
Koondrook	..	..	..	Channels	..	..	1938-39	1,000	1,600
				Channels	..	..	1939-40	600	
				Total (Irrigation Supply Works)					156,895
				IRRIGATION DISTRICTS—DRAINAGE.					
Maffra-Sale	..	..	..	Drainage	..	..	1933-39	30,300	32,800
				Drainage	..	..	1939-40	2,500	
Cohuna	..	..	..	Drainage, Leitchville and Cohuna	..	..	1932-37	30,500	71,500
				Drainage, Cohuna	..	..	1937-39	25,000	
				Drainage, Cohuna and Leitchville	..	..	1937-38	5,000	
				Drainage, Cohuna and Leitchville	..	..	1939-40	11,000	
				Barr Creek, Enlargement	..	..	1932-37	24,280	24,280
Swan Hill	..	..	..	Drainage, Woorinen, and Swan Hill	..	..	1933-36	10,095	59,095
				Drainage, Woorinen	..	..	1937-39	30,000	
				Drainage, Woorinen	..	..	1939-40	19,000	
Rodney	..	..	..	Drainage	..	..	1933-39	73,455	83,955
				Drainage	..	..	1939-40	10,500	
Deakin	..	..	..	Drainage	..	..	1934-35	5,060	5,060
Tongala-Stanhope	..	..	..	Drainage	..	..	1932-36	69,500	77,000
				Drainage	..	..	1939-40	7,500	
Nyah	..	..	..	Drainage	..	..	1933-38	6,300	6,300
Shepparton	..	..	..	Drainage	..	..	1932-39	78,575	87,575
				Drainage	..	..	1939-40	9,000	
				Carried forward					447,565

APPENDIX A—continued.

SCHEDULE OF GRANTS 12TH JULY, 1932, TO 30TH JUNE, 1940—continued.

Locality.	Works.	Grant.	
	IRRIGATION DISTRICTS—DRAINAGE—continued.	£	£
	Brought forward		447,565
Werribee	Drainage 1933-37	3,750	
Bacchus Marsh	Drainage 1936-37	1,250	3,750
Mildura	Subsurface Drainage 1934-38	208,541	1,250
Red Cliffs and Merbein	Subsurface Drainage, Red Cliffs, Merbein, and Mildura—Surveys, &c. 1933-34	10,000	208,541
	Red Cliffs and Merbein Subsurface Drainage 1933-37	234,653	
	Merbein, Subsurface Drainage 1937-38	12,000	
Tragowel Plains	Drainage 1933-39	22,000	256,653
	Drainage 1939-40	3,000	
Rochester	Drainage 1933-39	71,420	25,000
	Drainage 1939-40	5,500	
Kerang	Drainage, Kerang East 1934-36	77,436	76,920
Tresco	Drainage, see under Water Supply, £2,000 for drainage out of £4,500 1933-34	2,000	
	Drainage 1937-39	6,000	
	Drainage 1939-40	1,000	
			9,000
	Total (Irrigation Drainage Works) ..		1,106,115
	WATERWORKS DISTRICTS.		
Wimmera-Mallee	Channel Construction 1932-33	15,000	
	Tanks and Bores 1932-33	3,000	
	Mt. Zero Channel Construction 1932-33	9,000	
	Channels and tanks 1932-33	1,250	
	Channels—Sand Drift 1933-39	134,000	
	Channels—Sand Drift 1939-40	10,000	
	Enlargement and Lining of Channels 1936-37	6,000	
	Urban Storages 1936-37	4,500	
	Mallee Towns—Improvement 1937-39	24,000	
	Donald East Channel 1937-38	780	
	Pimpinio High Lands 1937-38	8,400	
	Murtoa—Channel Construction 1938-39	1,000	
	Taylors Lake Outlet Channel 1938-39	19,000	235,930
Millewa	Outlets, Clay Lining Channels 1932-33	4,000	
Coreena	Clay Lining Channels 1932-33	800	4,000
Yelta	Watering 1933-34	500	800
Long Lake	Channel Construction 1934-35	1,230	500
Tyrrell West	Ironclad Catchments, Baring North and Patchewollock 1933-34	3,500	1,230
Tyrrell West	Road Construction, Patchewollock North 1933-34	300	3,500
Loddon United	Serpentine Weir 1933-34	765	300
			765
	Total (Rural Works)		247,025

APPENDIX A—continued.

SCHEDULE OF GRANTS 12TH JULY, 1932, TO 30TH JUNE, 1940—continued.

Locality.				Works.				Grant.	
				WATERWORKS DISTRICTS—URBAN.				£	£
Newstead ..	..	..	..	Channel Construction ..	..	1932-33	2,000		2,000
Walpeup ..	..	..	..	Water Tower ..	..	1933-34	1,250		1,250
Nyah ..	..	..	..	Reticulation Improvements ..	..	1933-34	1,000		1,000
Koondrook ..	..	..	..	Reticulation Improvements ..	..	1935-36	230		230
Leitchville ..	..	..	..	Storage and Reticulation ..	..	1935-36	1,000		1,000
Lake Boga ..	..	..	..	Improved Supply ..	..	1935-36	1,500		1,500
Jeparit ..	..	..	..	Reticulation Improvements ..	..	1935-36	2,500		2,500
Rainbow ..	..	..	..	Reticulation Improvements ..	..	1935-36	500		500
Mornington Peninsula ..	..	..	..	Channel (Dromana-Sorrento) ..	..	1932-33	10,000		
				Lysterfield Reservoir ..	..	1932-33	7,800		
				Service Basin, Garfield ..	..	1932-33	2,300		
				Cranbourne-Bittern Channel ..	..	1932-33	9,000		
				Beaching Mornington Reservoir ..	..	1932-33	2,080		
				Enlargement of Mornington Reservoir ..	..	1933-34	3,200		
				Lysterfield Reservoir, Raising ..	..	1934-35	4,000		
									38,380
Dromana-Sorrento Extension ..	..	..	..	Instalment of £55,000 ..	..	1935-36	5,000		
				Instalment of £55,000 ..	..	1937-38	25,000		
				Instalment of £55,000 ..	..	1939-40	15,000		
									45,000
Bellarine Peninsula ..	..	..	..	Urban Supplies ..	..	1932-35	29,050		
				Barwon River Tunnel ..	..	1938-39	7,500		
				Barwon River Tunnel ..	..	1939-40	4,000		
									40,550
Western District Scheme ..	..	..	..	Instalment of £93,700 ..	..	1935-37	62,750		
				Instalment of £93,700 ..	..	1937-38	30,950		
									93,700
Coliban ..	..	..	..	Channel Lining ..	..	1932-36	96,468		
				River Diversion (Ashbourne) ..	..	1934-35	7,950		
				Eaglehawk Main ..	..	1935-36	12,000		
				Bendigo and Castlemaine Reticulation Improvements and Channel Lining (1st and 2nd Instalments, £200,000) ..	..	1936-38	132,000		
				(3rd and 4th Instalments, £200,000) ..	..	1938-39	57,000		
				(5th Instalment, £200,000) ..	..	1939-40	6,000		
				Malmsbury Reservoir—Enlargement ..	..	1937-39	31,500		
				Malmsbury Reservoir—Enlargement ..	..	1939-40	5,000		
				New Storages ..	..	1937-38	15,000		
				Bendigo Emergency Supply ..	..	1938-39	25,000		
				Lauriston Reservoir ..	..	1938-39	60,000		
				Lauriston Reservoir ..	..	1939-40	127,000		
				Minor Storages ..	..	1939-40	2,500		
				Upper Coliban Reservoir ..	..	1939-40	1,000		
									578,418
Wimmera-Mallee ..	..	..	..	Various Urban Systems ..	..	1939-40	5,000		
									5,000
				Total (Urban Works) ..	..				811,028
				FLOOD PROTECTION.					
Kooweerup and Cardinia ..	..	..	..	Drains and Levees ..	..	1932-33	22,000		
				Drains and Levees ..	..	1934-35	65,000		
				(Includes £25,000 from Commonwealth) ..	..			
				Cardinia Outfall ..	..	1936-39	20,000		
				Yallock Outfall ..	..	1936-38	15,000		
				Yallock Outfall ..	..	1939-40	13,000		
				Flood Relief ..	..	1937-38	2,000		
									137,000
Lake Meering ..	..	..	..	Levees ..	..	1933-34	790		
									790
				Carried forward ..	..				137,790

APPENDIX A—continued.

SCHEDULE OF GRANTS 12TH JULY, 1932, TO 30TH JUNE, 1940—continued.

Locality.	Works.	Grant.
	FLOOD PROTECTION—continued.	
		£ £
	Brought forward	137,790
Various Districts	1934 Flood Damage—Repairs .. 1933-34	20,000
	1939 Flood Damage—Repairs .. 1938-39	5,000
		25,000
Carrum	Eastern Contour Drain 1932-33	8,000
	Drains and Levees 1933-36	17,450
	Pillars Bridge—Flooding 1936-37	2,000
	Flood Relief 1937-38	4,500
		31,950
Swan Hill and Kerang	Pental Island 1932-33	170
	Little Murray Levees, Fish Point .. 1933-34	6,430
	Little Murray Levees, Benjeroop .. 1933-34	7,500
	Murray River Levees, Swan Hill .. 1935-38	7,000
	Murray River Levees 1937-38	3,000
	Loddon River Levees 1937-38	3,000
		27,100
Dandenong	Levee Bank, Stud Road 1934-35	700
		700
Rodney and Tongala	Flood Repairs 1939-40	400
		400
	Total (Flood Protection Works) ..	222,940
	RIVER IMPROVEMENTS.	£ £
Mitchell River	Snagging—Bairnsdale 1932-33	350
		350
Goulburn River	Cribwork—Acheron Breakaway .. 1932-34	1,000
		1,000
Rivers Generally	Snagging—	
	Avoca, West Barwon, Broken, .. { 1934-37	46,500
	Fitzroy, Gellibrand, Goulburn, .. {	
	King, Kiewa, Latrobe, Loddon, .. { 1937-38	5,000
	Macalister, Mitchell, Ovens, .. {	
	Powlett, Rubicon, Snowy, Tambo, .. {	
	Tarra, Tarwin, Thomson, and Yarra .. {	
	Rivers; Gunbower and Woori .. {	
	Yallock Creeks 1938-39	9,000
		60,500
Snowy River, Orbost	Improvements 1933-39	27,580
	Improvements 1939-40	1,000
		28,580
Latrobe River	Improvements 1936-39	37,000
		37,000
Avon River	Improvements 1939-40	1,000
		1,000
	Total (River Improvements)	128,430
	GENERAL.	
Districts Generally	Noxious Weeds—Destruction .. 1936-37	1,000
		1,000
	Reconditioning Works 1934-39	125,000
	Reconditioning Works 1939-40	25,000
		150,000
	Total (General)	151,000
	Total of Grants from 12.7.32 to 30.6.40 ..	£2,913,133
	GRAND TOTAL OF GRANTS FROM	
	1.6.30 TO 30.6.40	£3,079,168

NOTE.—The total expenditure of Unemployment Relief Funds as from 1st June, 1930, to 30th June, 1940, was £2,973,161, the total number of men to whom employment was provided being 45,237.

APPENDIX B.

STATE RIVERS AND WATER SUPPLY COMMISSION.

WATER SUPPLY STATISTICS.

1939-40.

SUMMARY RELATING TO WATER SUPPLY IN VICTORIA.

Victoria—Area	..	..	..	..	..	..	87,884 square miles (56,000,000 acres)
Rainfall	..	..	..	..	..	..	10 inches to 80 inches
Under 15 inches	..	..	..	..	18,701 square miles	= 21.3 per cent. of area of State	
15 inches to 20 inches	..	..	..	..	13,800	" " = 15.7	" " "
20 " 25 "	..	..	..	..	13,551	" " = 15.4	" " "
25 " 30 "	..	..	..	..	14,528	" " = 16.5	" " "
30 " 40 "	..	..	..	..	15,802	" " = 18.0	" " "
40 " 50 "	..	..	..	..	6,671	" " = 7.6	" " "
50 " 60 "	..	..	..	..	2,660	" " = 3.0	" " "
Over 60 inches	..	..	..	..	2,171	" " = 2.5	" " "

Total 87,884 " "

Expenditure Country Water Supply to 30th June, 1940—(a) Borne by the State £21,463,709 9 3
(b) Borne by the Districts £5,773,597 0 3

Total .. £27,237,306 9 6

Channels—Length—

Irrigation Supply	..	..	..	..	..	..	4,233 miles
Domestic and Stock Supply	..	..	..	..	..	..	8,288 miles
Drainage	..	..	..	..	..	..	2,054 miles
Total	..	..	..	..	..	..	14,575 miles

Area of lands in Victoria artificially supplied with water for domestic and stock purposes by channels, tanks, and bores 15,118,000 acres

This represents over one-quarter of the total area of the State—actually two-fifths of the agricultural lands

Area commanded by irrigation channels	..	..	..	..	..	..	2,124,600 acres
Area Irrigated—1939-40	..	..	..	..	..	..	517,903 acres
Area benefited by Flood Protection Works	..	..	..	..	..	..	160,600 acres

Storages—

Present capacity	..	..	..	..	..	..	1,963,200 acre feet
Additional storage being provided by works in course of construction	..	..	..	..	..	..	16,000 acre feet

Rural Districts administered by Commission—

Irrigated Districts—Water supplied for cultivation	..	..	..	..	..	..	30 districts
Domestic and Stock Districts—Water supplied to fill excavated storage tanks	..	..	..	..	..	..	32 districts
Flood Protection Districts	..	..	..	..	..	..	4 districts

Waterworks Trusts and Local Governing Bodies supervised by Commission 135 districts

Sewerage Authorities supervised by Commission 38 districts

Country Towns—Reticulated pipe supplies for domestic use—

Administered by Commission	..	..	..	..	..	..	120 towns
" " Waterworks Trusts	..	..	..	..	..	..	113 towns
" " Local Governing Bodies	..	..	..	..	..	..	16 towns

Total Population in Country Towns supplied with water 445,400 persons