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VICTORIA

STATE RIVERS AND WATER SUPPLY COMMISSION

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ANNUAL REPORT  
1954-55

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# STATE RIVERS AND WATER SUPPLY COMMISSION

100-110 Exhibition-street,

Melbourne, C.1,

26th March, 1956

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## ANNUAL REPORT, 1954-55

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In compliance with the provisions of the Water Acts, the State Rivers and Water Supply Commission has the honour to present to Parliament the following Report and Statement for the Financial Year 1954-55, and Estimates for the ensuing year.

L. R. EAST, C.B.E., Chairman.

M.C.E., M.I.C.E., M.ASCE, M.I.E.Aust.

H. W. McCAY, Commissioner.

B.C.E., M.I.E.Aust., M.I.W.E.

J. A. AIRD, Commissioner.

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# ANNUAL REPORT

OF THE

## STATE RIVERS AND WATER SUPPLY COMMISSION

FOR

YEAR ENDED 30TH JUNE, 1955.

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### SUMMARY OF REPORT.

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The State Rivers and Water Supply Commission was constituted on 1st May, 1906, under the provisions of the Water Act 1905.

#### WATER SUPPLY.

In 1906 the total capacity of Victorian storages was approximately 200,000 acre feet. Today the total capacity of water storage controlled by the Commission is 4,808,950 acre feet, including Victoria's half share of River Murray storages.

The total area of lands in Victoria supplied with water for domestic and stock purposes or for irrigation by channels, tanks, bores and pipe line is 14,855,360 acres.

Total water deliveries for the year from the Commission's irrigation systems were 1,070,433 acre feet. Water deliveries to the Commission's Irrigation Districts totalled 865,211 acre feet.

The number of diversions from streams authorized under long-term licences and annual permits totalled 4,284.

#### DOMESTIC AND STOCK SUPPLIES.

The Wimmera-Mallee Waterworks System supplies water for domestic and stock purposes to almost the whole of the region known as the Wimmera, and to large portions of the Mallee districts, serving in all some 11,000 square miles of land used for wheat farming and pastoral pursuits.

The Wimmera-Mallee system was taken over by the State Rivers and Water Supply Commission in 1908, at which time it served only a limited area in the Wimmera and lower Mallee, largely by utilising natural waterways. The channel system has been reconstructed and extended, and now has a total length of 6,500 miles.

#### IRRIGATION PRODUCTION AND DEVELOPMENT.

The area irrigated during the year was 863,563 acres, and production from irrigated lands for year 1953-54 was valued at £39,725,000, both of which are all-time records. In comparison, production from the 105,000 acres irrigated in 1906 was valued at £500,000.

#### WATER CONSERVATION PROJECTS.

Construction of Big Eildon Dam, the largest so far built in the Southern Hemisphere, and one of the large earth dams of the world, has been completed.

Construction of Cairn Curran Dam on the Loddon River has been resumed and should be completed in the coming year. Good progress is being made on the transfer of Tallangatta township to its new site at Bolga, and on the construction of the Tarago River diversion works which will increase water supplies to the Mornington Peninsula.

Duplication of the Goulburn-Waranga Channel is nearing completion.

#### TOWN SUPPLIES.

Towns in the State having a reticulated water supply number 273 with a total population of 654,810. Of these towns, 130 are administered by the Commission and the balance, 143, by local governing bodies.

### SOLDIER SETTLEMENT.

Extension of the Robinvale Soldier Settlement of 246 blocks is in the final stage, and 216 blocks are now occupied. In the Murray Valley Irrigation District, the Soldier Settlement area is being increased by an additional 41 blocks. Water was supplied to seventeen new Soldier Settlement blocks in the Central Gippsland Irrigation District during the year.

### FINANCE.

The total receipts for water rates and charges for the financial year 1954-55, amounted to a record of £1,713,165, the previous highest collection being £1,657,209 in 1953-54. Other receipts amounted to £819,781.

The net Loan Liability of the State for works of water supply and drainage at 30th June, 1955, was £80,918,141 exclusive of the equity in National Debt Sinking Fund.

Of the net Loan Liability at 30th June, 1955, £4,167,697 is charged to Waterworks Trusts and other Local Governing Bodies ; £2,980,746 is debited to districts directly controlled by the Commission and to the Central Plant Workshops, Bendigo ; £1,497,342 is debited to the Plant and Machinery Account ; £41,030 to River Improvement Trusts ; £559,569 to Latrobe Valley Drainage ; and the balance, £71,671,757 is borne by the State.

The total Interest Charges for 1953-55 amounted to £2,904,199.

Waterworks Trusts and Local Governing Bodies paid to the Treasury as interest on loans the sum of £123,387.

In addition, Interest amounting to £63,649 in respect of Districts and Divisions under its control was met by the Commission.

In districts, the capital liability of which has been adjusted, the operation for the year resulted in a net loss of £132,997 after providing for interest, redemption, and depreciation.

A loss of £250,467 was incurred in operating districts to which the supply was continued by direction of Governor in Council. This amount was debited to the "Revenue Expenditure Chargeable to the State Account."

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 £3,002,178.

The value of stores and equipment held in the Stores Suspense Account as at 30th June, 1955, was £1,133,042.

The value of moveable plant and machinery held in the Plant and Machinery Account as at 30th June, 1955, was £1,497,342.

A sum of £120,475 was paid into Consolidated Revenue in respect of depreciation payments by Commission's Districts for the year 1954-55.

The amount at credit of Water Supply Plant and Machinery Depreciation Fund as at 30th June, 1955, was £633,633.

The arrears of water rates and charges outstanding at 30th June, 1955, was £304,978.

The amount included in the Budget Estimate for 1955-56 for Vote Expenditure on works and services under the control of the Commission is £3,013,800. This amount is £250,600 less than the Commission's estimated requirements.

### RATING.

The total net annual valuation of properties within Irrigation and Waterworks Districts and Urban Districts and divisions thereof, including the Coliban System, amounted to £7,127,013.

The total number of rating assessments in the districts supplied with water by the Commission is 96,240, and the total number of assessments in Drainage and Flood Protection Districts is 7,302.

## PART I.—GENERAL.

The Water Act of 1905, under which the State Rivers and Water Supply Commission was constituted, came into operation on 1st May, 1906.

The Commission constituted under the provisions of that Act was probably the first corporate body of its kind ever set up to investigate, develop, and control the water resources of a sovereign State.

The Commission has since its constitution followed a vigorous policy of water conservation and in its 50 years of operation very great progress has been made. When the Commission came into existence upon the passing of the 1905 Water Act, the total storage capacity of the State's reservoirs, apart from those controlled by the Melbourne and Metropolitan Board of Works, was in the vicinity of 200,000 acre feet. To-day the Commission's storages have a capacity of no less than 4,808,000 acre feet, and when works now under construction are completed, the total capacity will considerably exceed 5,000,000 acre feet. The water is stored in 37 large and 240 subsidiary reservoirs.

The capital expenditure on country water supplies in all categories has increased from £6,000,000 in 1905 to £84,000,000 to-day, and during the same period the expansion of rural water supplies has progressed so well that now more than 14 million acres of the State's 56,245,760 acres are artificially supplied with water for domestic, stock or irrigation purposes. In 1905 the area irrigated was 105,000 acres. To-day it has reached 864,000 acres, the production from which is worth approximately £40,000,000 per year.

Another extremely important phase of the Commission's work has been the provision of reticulated supplies to country towns throughout the State, either directly or through waterworks trusts, and to-day 273 towns with a combined population of over 600,000 have assured domestic water supplies.

The Commission supervises also the Authorities responsible for the installation of sewerage systems in country towns, and, although this work is in its early stages, 60 country towns either have sewerage systems operating or partly operating, or have Authorities constituted to install sewerage. The population of these towns is 350,000.

The Commission has been continuously engaged upon the carrying out of surveys and gaugings to ascertain the nature and extent of available water resources, the investigation and development of new projects of water conservation and distribution, the furnishing of advice to occupiers of farmlands with regard to water supply, irrigation and drainage, better water use, weed control, and many other matters associated with water conservation and distribution.

It has also done a considerable amount of work on drainage and flood protection and, with local Trusts, on river improvement throughout the State.

The work of the Commission since its establishment has always been developmental, but from time to time it has carried out works which have been so spectacular that they have highlighted the Commission's operations.

The first major storage completed after the constitution of the Commission was the Waranga Reservoir in 1909 which had been started some years earlier by the Water Supply Department. It was in 1909 also that the Commission introduced a policy in water supply which has proved outstandingly successful, that is, compulsory charges for water for irrigation whether it is used or not.

Mr. Elwood Mead who was then Chairman of the Commission, and had been for the eight years previous to his appointment to the Commission, Chief of the Irrigation Investigations Bureau in the U.S. Department of Agriculture, stated that a compulsory charge for water and apportioned water rights together with closer settlement was the most potent influence to make men learn how to use available water properly. This system compelled those owning lands in irrigation areas to make use of their advantages or to sell to those who would and thus put an end to land holding practices which left vast tracts undeveloped for speculative purposes.

Mr. Mead also insisted that the irrigation authority should have control of the acquisition and subdivision of land in the irrigation area because of the intimate connexion of this work with the construction of water supply projects.

From 1913 to 1933 the Commission was the statutory Closer Settlement Authority for irrigated areas in Victoria, and during that period irrigated closer and soldier settlements were established at Merbein, Tongala, Rochester, Shepparton, Stanhope, Werribee, Central Gippsland, and elsewhere. In 1921 the largest soldier settlement in Australia, and probably one of the most successful in the world, was established by the Commission at Red Cliffs.

The original Eildon Reservoir was completed in 1927. Glenmaggie Reservoir in Gippsland was brought into full use in 1926, and during the period 1920 to 1929 the Commission commenced the supply of water for domestic purposes to the Bellarine and Mornington Peninsulas on either side of Port Phillip Bay, and in 1937 to the important Western District Towns from a catchment in the Otway Ranges. In 1941 came the important reservoir at Lauriston to safeguard the Coliban water supply system against periods of low rainfall.

More recently Rocklands Dam on the headwaters of the Glenelg River was completed, thus safeguarding against drought the vast domestic and stock water supply system of the Wimmera and Mallee.

It is fitting, however, that the Commission's greatest work, the new Eildon Dam, should have been completed just 50 years after the passing of the 1905 Water Act. This colossal dam, the largest so far built in the Southern Hemisphere and one of the large earth dams of the world, has more than doubled the reservoir capacities of this State and is a worthy achievement to mark the completion of the first 50 years of the work of the State Rivers and Water Supply Commission.

#### RIVER MURRAY COMMISSION.

The River Murray Commission was constituted under the River Murray Agreement which was ratified in its original form in 1915. The Agreement was made between the Commonwealth and the States of New South Wales, Victoria, and South Australia for the purpose of conserving and utilizing to the best advantage the waters of the River Murray.

The Commission consists of four members representative of the Governments which are parties to the Agreement. Mr. L. R. East has represented the State of Victoria on the River Murray Commission since 1st November, 1936.

Responsibility of the River Murray Commission is to implement the provisions of the Agreement with regard to the construction, maintenance, and operation of specified water conservation works on the River Murray. The works constructed under the Agreement comprise the Hume Dam, the Lake Victoria Storage, the Murray Mouth Barrages, thirteen weirs and locks on the Murray from Blanchetown, South Australia, to Torrumbarry, the Yarrawonga Diversion Weir, and two flood diversion weirs on the lower Murrumbidgee River which is also included in the Agreement.

At the end of June, the total amount expended by the River Murray Commission through the various States acting as constructing authorities was £13,860,000. This expenditure has been met in equal parts by the four Governments concerned.

#### *Hume Reservoir Enlargement.*

The Hume Reservoir which was commenced in 1919 was originally completed to a storage capacity of 1,250,000 acre feet in 1936, with provision in its design for later enlargement to 2,000,000 acre feet. The enlargement to 2,000,000 acre feet was authorized by an amendment to the River Murray Agreement in 1948, and the necessary works on the Hume embankments involving the enlargement of the main embankment profile and the construction of two new embankments across the saddles on the Victorian side have been completed. Storage of water to the 2,000,000 acre feet level cannot, however, be effected before the completion of certain road and railway deviations adjacent to the reservoir, together with the removal of Tallangatta township to a position above the new water supply level.

In 1954, the River Murray Agreement was amended to provide a further enlargement of the Hume Reservoir to 2,500,000 acre feet which is considered to be the maximum capacity economically justifiable for irrigation development, including drought protection to the irrigation areas on either side of the River Murray downstream from the reservoir.



The spillway crest of the dam has already been raised to a sufficient height to enable an intermediate storage capacity of 1,382,000 acre feet to be obtained. The necessary works to increase the storage capacity to 2,500,000 acre feet will be carried out as a continuous operation following upon the works for the 2,000,000 acre feet capacity. The dam's subsidiary embankments will be raised and the main embankment will be widened with rockfill. A concrete parapet wall will be constructed along the crest of the dam to provide necessary additional freeboard. The spillway crest will be raised and vertical lift gates approximately 24 feet high will be installed on the crest of the dam to hold water at the new full supply level (R.L. 636 feet) which will be 20 feet above the level storing 1,250,000 acre feet. Those works are being carried out by New South Wales which is also constructing, on behalf of New South Wales and Victoria, a hydro-electric power station at Hume to house two 25,000 kw. turbo generators.

#### *Tallangatta Township Removal.*

As referred to more fully in another part of this report, the State Rivers and Water Supply Commission is carrying out the work of transferring the township of Tallangatta from its original site, which will be submerged by the waters of the enlarged Hume Reservoir, to a site at Bolga  $4\frac{1}{2}$  miles distant.

### INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE.

The International Commission on Irrigation and Drainage, constituted in 1950, is an international organization for the purpose of pooling experience in the engineering, economic, and social aspects of irrigation and drainage for the mutual benefit of the participating countries. More than twenty countries, including Australia, have been admitted to membership.

The constitution of the International Commission provides for the setting up of National Committees within the member countries, and accordingly an Australian National Committee was set up in 1953 comprising representatives of Statutory Authorities, Government Departments, firms, and individuals actively interested in irrigation and drainage. The State Rivers and Water Supply Commission is a member organization and is represented on the Committee by Mr. L. R. East.

At the annual meeting of the Australian National Committee held in Melbourne in October, 1954, Mr. R. A. Young, Commissioner of the Water Conservation and Irrigation Commission of New South Wales, reported on the Second Congress of the International Commission on Irrigation and Drainage held in Algiers in April, 1954, which he attended as official Australian representative.

Mr. K. A. Murley, an assistant engineer of the State Rivers and Water Supply Commission, also attended this Congress as an official observer whilst on leave of absence, and his report on the proceedings and the study tours which followed has now been printed as a Technical Bulletin of the State Rivers and Water Supply Commission.

The Sixth Meeting of the International Executive Council was held in Montreaux, Switzerland, on the 31st May, 1955, and was attended by Mr. C. L. Sanders, Chief Constructional Engineer of the Commission, as the official Australian representative.

At the meeting eight more countries were accepted as members, bringing the total number of participating countries to over 30.

The executive Council Meeting was followed by a one-day tour of irrigation and drainage works in the Upper Rhone Valley.

Arrangements are being made for the Third Congress to be held in the United States of America in 1957. The sessions will be held in San Francisco with the closing session at Los Angeles. Study tours will follow the Congress.

### SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME ADVISORY COUNCIL.

Pending finalization of an agreement between the Governments concerned in the Snowy Mountains Hydro-Electric Scheme, a co-ordinating Interim Advisory Council was set up in 1953 comprising representatives of the Commonwealth, the States of New South Wales, and Victoria, and the Snowy Mountains Hydro-Electric Authority.

The Chairman of the State Rivers and Water Supply Commission, Mr. L. R. East, is one of the two members representing the State of Victoria on the Interim Advisory Council which has met on a number of occasions during the year to consider and report on important matters associated with the development of the project.

### LATROBE VALLEY WATER AND SEWERAGE BOARD.

The Latrobe Valley Water and Sewerage Board was constituted on 1st July, 1954, to construct and manage water supply works and an outfall sewer in the Latrobe Valley.

Prior to that date the planning of the water supply had been carried out by the State Rivers and Water Supply Commission following the initial work undertaken by the State Electricity Commission. Planning of the main outfall sewer was commenced by Messrs. Candy, Scott, and Furphy, Consulting Engineers, under the direction of the State Rivers and Water Supply Commission.

The members of the Board are Mr. J. B. Mulvany, Manager and Chairman; Mr. A. D. Sambell, State Electricity Commission (appointed by the Governor in Council); Mr. T. P. Jensen, Gas and Fuel Corporation (appointed by the Governor in Council); Mr. I. G. Baker, State Treasury Department (appointed by the Governor in Council); Mr. A. G. Burnett (elected by the Latrobe River Improvement Trust); Mr. J. T. Riley (elected by Waterworks Trusts); and Mr. P. P. Kelly (elected by Sewerage Authorities).

The Board is responsible for large scale water supplies to governmental instrumentalities and to industries in the Latrobe Valley and for the provision of works for the disposal of industrial and domestic wastes. The preparation of plans and specifications for the main outfall sewer have been continued for the Board by Messrs. Candy, Scott, and Furphy.

### PARLIAMENTARY PUBLIC WORKS COMMITTEE.

The Parliamentary Public Works Committee, during the year, inquired into two matters with which the Commission was concerned.

#### BARWON RIVER INQUIRY.

The Committee on 5th January, 1954, was asked—

- (a) To inquire into and report as to the present position in regard to the condition of the Barwon River and its tributaries, with special reference to the effect of the "breakwaters" across the lower Barwon River and the drainage of Lough Calvert and other inland basins into the Barwon River, and to report as to what action is necessary to provide for the carrying out and effective maintenance of comprehensive river improvement and drainage works within the catchments of these streams.
- (b) Also to report as to the estimated cost of any action recommended.
- (c) Any other matters which may appear to the Committee to be relevant to the inquiry.

The investigation is proceeding and the Commission and its officers have submitted evidence to the Committee which has made inspections during the course of its inquiries.

#### MORNINGTON PENINSULA WATER SUPPLY.

The Committee was also requested on 30th April, 1954, to inquire into the question of transfer of portion of the Mornington Peninsula Waterworks District from the Commission to the control of the Melbourne and Metropolitan Board of Works.

The terms of reference are :—

- (a) Whether, having regard to the water supply resources available to the Melbourne and Metropolitan Board of Works and the State Rivers and Water Supply Commission, and to the rapidly increasing demands upon the Mornington Peninsula System of the State Rivers and Water Supply Commission, it would be practicable and desirable to supply the whole or part of the urban area to the south and east of the metropolis and more particularly between the Mordialloc Creek and Frankston with water from the Metropolitan water supply system under the control of the Melbourne and Metropolitan Board of Works?

- (b) What part, if any, of the Mornington Peninsula Waterworks District now under the control of the State Rivers and Water Supply Commission for water supply and main drainage purposes could with advantage be excised from that District and included in the Metropolitan area, under the control of the Melbourne and Metropolitan Board of Works, for water supply, main drainage, and sewerage purposes?
- (c) Any other matters which appear to the Committee to be relevant to the inquiry.

On 19th April, 1955, the Committee made the following recommendations:—

1. That, as soon as possible, that portion of the Mornington Peninsula Water Supply District at present under the control of the State Rivers and Water Supply Commission, which includes the Springvale-Dandenong and the Chelsea-Frankston urban areas, be excised from such District and included in the metropolitan area under the control of the Melbourne and Metropolitan Board of Works; and
2. That the precise areas to be transferred and the dates of such transfers be determined by mutual agreement between the Commission and the Board.

The Commission and the Board are now conferring with regard to the matter with a view to making specific recommendations to the Government.

## IRRIGATION PRODUCTION 1953-54.

### GENERAL.

The area irrigated in 1954-55 was 864,000 acres, 40,000 acres more than the previous record in 1953-54 and over eight times as great as the area of 105,000 acres irrigated in 1905-06.

Though there have been a number of minor trends over the period 1905-1955, there have been only two really significant developments.

First and foremost comes the development of sown pastures. The area sown was negligible 50 years ago. However, by 1944-45, there were 285,000 acres sown down, and at present sown pastures comprise 576,000 acres or 67 per cent. of the total area irrigated. Concurrently with this has come two minor trends, namely, the decrease in the proportion under lucerne, the total area of which is not very different now from what it was in 1905-06, and the declining relative importance of native pastures. In 1905-06, native pastures comprised 50 per cent. of the area irrigated, but though they occupy a much greater area now, they only comprise 10 per cent. of the total.

The second major development has been that the area of vineyards, orchards, and market gardens has increased by 500 per cent. over the period. Since these areas yield one-third of the value of production from irrigation, this trend has contributed in a large measure towards the success of irrigation in Victoria.

Standard Herd Tests have been carried out by the Victorian Department of Agriculture for a period of 40 years, and in recent years dairy herds in irrigation areas have always played a prominent part. This clearly emphasizes the suitability of irrigated pastures for dairying and the undoubted value of irrigation to Victoria's economy.

The first irrigation herd to win a championship was that of the late Honorable Trevor Harvey of Boisdale in 1923, and this success was followed up by the herds of Mr. P. J. Maloney of Tongala in 1928, 1929, 1934, and again in 1945. Mr. N. Enders of Stanhope was successful in 1931, Mrs. M. V. Stephens of Tongala in 1933, Mr. H. Jackson, of Lockington in 1944 and 1952, Mr. J. Stedman of Appin in 1948 and 1949, and Mr. J. A. Till in 1953. Mr. Jackson also shared first place with Mr. W. Dreschler of Swan Hill in 1954. Over the past ten years herds from the irrigation districts have won five championships. In the 1955 season, four of the first six places were won by herds from the irrigation districts. The reserve championship was won by the herd owned by Mr. J. A. Till of Tongala.

## PRODUCTION.

The estimated gross value of production in Irrigation Districts in 1953-54—the last complete year for which information is available—was £39,725,000 and in areas irrigated by private diverters £4,675,000, a total of £44,400,000 made up as follows:—

## A. IRRIGATION DISTRICTS.

	<i>Livestock</i>				£	£
Milk and Milk Products .. .. .	..	..	..	..	10,275,000	
Beef and Veal Meats .. .. .	..	..	..	..	3,625,000	
Wool, Lamb, and Mutton .. .. .	..	..	..	..	6,200,000	
Pigmeats .. .. .	..	..	..	..	1,950,000	
Poultry and Eggs .. .. .	..	..	..	..	1,700,000	
					<hr/>	23,750,000

*Horticulture.*

Dried Vine Fruits .. .. .	..	..	..	..	5,450,000	
Table and Wine Grapes .. .. .	..	..	..	..	225,000	
Canning Fruits .. .. .	..	..	..	..	3,100,000	
Fresh and Jam Fruits .. .. .	..	..	..	..	950,000	
Citrus Fruits .. .. .	..	..	..	..	925,000	
					<hr/>	10,650,000
Vegetables .. .. .	..	..	..	..	..	2,800,000
Other Primary Products .. .. .	..	..	..	..	..	2,525,000

39,725,000

B. PRIVATE DIVERTERS .. .. .	..	..	..	..	..	4,675,000
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Total .. .. .	..	..	..	..	..	44,400,000
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It is of interest to know that although the irrigated areas of Victoria represent about one-seventieth of the State, they produce one-seventh of Victoria's primary production.

About 20 per cent. of the value of production by private diverters came from vegetable growing, 10 per cent. each from vine fruits and other fruits, and practically all the remaining 60 per cent. from livestock products.

In the irrigation districts, the total value was £2,700,000 above the figures for 1952-53. The major increases were in milk and milk products (£1,300,000) due to an increase in dairy cattle numbers; beef and veal meats (£1,200,000) owing to higher slaughter ratios; wool, lamb, and mutton (£400,000) mainly because of higher prices; and canned and fresh fruits (£1,650,000) largely owing to an increase in canned fruit output from 47,000 tons to 75,000 tons. The major decrease was in returns from dried fruits (£1,150,000) because of a smaller crop and lower prices, and vegetables (£1,000,000) due to a reduction in the area irrigated from 13,076 to 9,818 acres.

The major changes in livestock numbers were increases in pig and lamb numbers of 33 per cent. and 30 per cent. respectively. However, all livestock numbers increased to some degree, and the "sheep equivalent" per irrigated acre of pasture and forage crops increased by 6 per cent.

Production in the Wimmera-Mallee Domestic and Stock System in 1953-54 was £34,325,000 compared with £40,500,000 in 1952-53. The decrease was mainly in returns from wheat (down £5,500,000) owing to a fall in the price of wheat, and from wool (down £1,000,000) because of a lower wool clip.

In the Koo-wee-rup-Cardinia Drainage Districts production in 1953-54 was £3,000,000 which was almost the same as the 1952-53 figure.

## IRRIGATION PRODUCTION AND DEVELOPMENT—SEASON 1954-55.

## SEASONAL CONDITIONS.

Fairly dry conditions prevailed in spring, resulting in heavy water use in the irrigation districts. Despite heavy rains in February, the water use for the rest of the season was up to the average and the final figures for water deliveries again set an all time record.

The Valencia orange crop was somewhat lighter, but the Navel crop was satisfactory. The February rains caused losses from brown rot in peaches, and some losses of young fruit trees in the Goulburn Valley. The dried vine fruit season was difficult; early humid conditions caused losses from fungus diseases, while the later rains caused heavy losses at harvest, and resulted in lower quality fruit. Apricots and pears were above average in quantity and quality.

Stock numbers throughout the State were well above average resulting from the favourable season.

## DISTRICT APPEAL BOARDS.

During the year appeals from landowners in the Kerang, Third Lake, Maffra-Sale, Central Gippsland, and Murray Valley Irrigation Districts, against the description of land and water right apportionment in the District Registers of Lands were received, and were considered by Appeal Boards on which the Commission, the Department of Agriculture and the district irrigators each have a representative.

## SOLDIER SETTLEMENT.

Preparation of areas for occupation by soldier settlers is nearing completion in the Murray Valley Irrigation District while good progress has been made in the Central Gippsland Irrigation District. In the Horsham area, land preparation for irrigation was commenced, but heavy autumn rains interfered with pasture sowing.

## AGRICULTURAL RESEARCH AND EXTENSION.

Agricultural problems which are specifically related to irrigation were dealt with by the Commission's Irrigation Branch.

In the Nyah-Woorinen and Tyntynder areas, investigations into problems of irrigated agriculture were continued by Joint Committees, comprising representatives of this Commission, the Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, and local irrigators. In this connexion, the Swan Hill irrigators have made a forward move in purchasing a farm at Tyntynder, to be used for experimental purposes, and the Commission is co-operating in this work.

Experiments on the reclamation of salty land were continued in conjunction with the Department of Agriculture. Although shortage of staff has handicapped experimental work at Bundalaguah, the improvement in cover has been maintained on both plots. At Corop, leaching experiments have made steady progress in reclaiming salt-affected land.

Irrigation facilities were extended to the Department of Agriculture for experimental plots in a number of districts. In the Murray Valley Irrigation District, six plots have now been established out of a projected twelve, which aim at covering the major district soil types. That Department continued experiments with trace elements on some twenty sites, spread over the irrigation districts to cover a wide range of soil conditions. Two experiments were also conducted on the use of rock phosphate. The Commission granted additional water to all these plots.

## SOIL SURVEY AND LAND CLASSIFICATION.

In conjunction with the Department of Agriculture, field work on the soil surveys of Tragowel Plains, Calivil, and Dingee Irrigation Districts was completed, and preliminary reports and working plans were prepared for the whole of this area. Field work on the soil survey of the South Shepparton Irrigation District was completed, while work is still in progress in North Shepparton.

Smaller areas of some 4,000 acres and 1,700 acres respectively were surveyed for soldier settlement at Horsham and Murtoa. The final eight blocks in the subdivision for Robinvale Irrigation District were also soil surveyed.

Land classification is still proceeding in all areas likely to be affected by new storages in the Goulburn and Loddon Systems.

#### COMMITTEE OF INQUIRY, MID-MURRAY DRIED FRUITS AREA.

The Interstate Committee set up by the Commonwealth Government and the Governments of Victoria and New South Wales last year concluded its investigations, and presented its report to the Governments concerned in June. The Commission was represented on this Committee by its Chief Irrigation Officer, Mr. A. L. Tisdall.

#### WEED CONTROL.

In recent years the problem of maintaining weed and silt-free channels has received a great deal of attention and as a result a number of new chemical and mechanical methods have been developed.

One of the most important chemical developments during the year has been the discovery of a method for controlling the submersed weeds which block supply channels in the Torrumbarry system. The chemical used is a mixture of 2, 4-D hormone spray and finely-ground sulphur; in this mixture the sulphur acts as a carrier which sticks the 2, 4-D weedkiller to the submersed weeds enabling the weedkiller to act effectively. This technique has been successfully tested on a practical scale at Fish Point in the Swan Hill Centre and arrangements have been made for its widespread application in the Torrumbarry System.

Recent experiments on the control of cane grass have also given encouraging results, and although these results have not yet been confirmed in practice, there seems little doubt that economical chemical control of this weed is now possible.

Methods for the treatment of cumbungi are now well established in the Commission's districts and chemical control has become the standard method for handling this weed. The Branch has kept a close watch on the spraying being carried out in the Districts and as a result the conditions required for the effective control of cumbungi can be accurately defined.

In addition to the weeds mentioned above, chemical control methods are now known for a number of other weeds including jointed rush, common water milfoil, red azolla, buttonweed, willows, and algal slime.

In order to apply these chemicals in the most efficient way, ten irrigation districts have been equipped with power spray units combined with modified Furphy water carts. These spray units have been specially designed and fabricated for channel spraying; they are tractor attachments and are capable of spraying 4 miles of channel per day.

Water couch grass is the only major weed for which a control method is not known. This is a particularly serious and widespread weed which is the cause of most blockages in drainage systems, but until an effective and safe chemical is developed, water couch must be handled by mechanical methods.

The Commission's Mechanical Branch has tested many new mechanical methods of clearing channels, and the most successful implements have now been incorporated in maintenance equipment. These include both large and small machines such as weed launches, the New Zealand weed bucket attachment for a dragline excavator, the Pyramid Hill weed rake and the Cranvel hoe. Each of these implements has a particular use, and in their own spheres they have all helped to improve the over-all maintenance position.

It should be stressed that although chemicals are certain to earn an increasing place in maintenance programmes they will never entirely replace mechanical methods of control. The ultimate objective of chemical control is to find a method for destroying all the vigorously growing weeds, thereby reducing the frequency of mechanical operations and increasing their effectiveness.

The work being carried out on weed control is becoming more widely known, and this is evidenced by the large number of inquiries which have been received by the Commission from primary producers, official organizations, and commercial companies.

#### GROUND WATER SURVEY.

Ground water records have been continued in the Murray Valley, Tongala, Werribee, Central Gippsland, and Maffra-Sale Irrigation District. These records show that much has still to be learnt about the factors governing the movement of ground water in Victorian Irrigation Districts before the results can be interpreted with any confidence. More data will be sought on the geomorphology and hydrology of the irrigated areas.

Modern techniques are now being adopted for exploration of the deeper aquifers.



During the 1954-55 season, piezometers were installed in various places to show hydrostatic pressures at different levels below ground surface. In this way useful information on seepage from unlined channels through shallow sub-surface sand drifts in the Murray Valley Irrigation District was obtained.

A test length of channel lining composed of a thin bituminous membrane approximately an eighth of an inch thick which was buried 12 to 18 inches below the surface was successful in reducing seepage and lowering the local water table.

#### WATER UTILIZATION.

Surveys of irrigation water requirement of various crops were continued. Following work on permanent pastures in the Rochester District last year, investigations on a variety of crops were commenced in the Rodney and Shepparton Irrigation Districts, and are still in progress. These surveys were designed to obtain information on the water requirement of the main irrigated crops under varying conditions of soil and climate.

In Red Cliffs-Merbein Irrigation District, special attention was given to irrigation and drainage problems. In Red Cliffs investigations were made of the runoff through tile drains in relation to the amount of water applied, both on individual blocks and also on a district-wide basis, while in both districts many problems of irrigation and drainage design on individual holdings were dealt with. The compilation of a complete record of internal tile drainage installations in the districts was commenced.

#### EXTENSION ACTIVITIES.

Extension work aimed at increasing the efficiency of water use on farms was continued. In October the Commission co-operated with the Department of Agriculture and the Commonwealth Scientific and Industrial Research Organization in conducting a School on Irrigated Pastures and Fodder Crops, which was primarily designed for departmental officers engaged on administration, research, and extension in irrigation districts. The school extended over nine days, and included lectures, demonstrations, and a tour of inspection of many irrigation districts in Victoria. It was attended by over 80 delegates drawn mainly from State and Federal authorities, but also from New Zealand and Tanganyika. All States were represented.

During the year, the Mobile Extension Unit, organized by the Department of Agriculture, visited most of the irrigation districts in the State, and talks were given by Commission officers in each district.

The need for irrigation efficiency was also stressed through the use of published articles, addresses to irrigators' organizations, and exhibits prepared for country agricultural shows.

#### ADVISORY BOARDS CONFERENCE.

Members of gravitational district Advisory Boards met the State Rivers and Water Supply Commission in conference at Marysville on the 23rd and 24th June, 1955, to discuss water conservation and utilization, channel construction, channel maintenance, water allocation, domestic and stock supplies, drainage, private subdivisions, and other matters with which Advisory Boards are concerned.

The conference was officially opened by the Minister of Water Supply, the Honorable W. J. Mibus, M.L.A. In addition to the Commissioners and senior officers of the Commission, delegates were present from Boort, Calivil, Cohuna, Deakin, Dingee, Fish Point, Katandra, Kerang, Koondrook, Maffra-Sale, Murray Valley, Mystic Park, Rodney, Rochester, Shepparton, South Shepparton, North Shepparton, Swan Hill, Tongala-Stanhope, Tragowel Plains, Third Lake, Werribee, and Woorinen Advisory Boards.

An agenda paper containing 50 items covering many aspects of water conservation and utilization was discussed and many resolutions were passed at the conference.

#### FARM WATER SUPPLIES.

Since the establishment in 1944 of the Farm Water Supplies Branch of the Commission, which has only one inspector, more than 500 inspections have been made on individual properties.

Many public meetings have been attended to give general advice on development of farm water supplies on individual holdings, and 1,400 inquiries have been dealt with by correspondence in addition to 2,000 personal interviews.

Since the advisory service to landholders on water supply, irrigation, and drainage was commenced in 1951 following an amendment of the Water Act which authorized the Commission to carry out such work on individual holdings, the Branch has dealt with an average of 244 cases every year.

In addition to general advice on the development of farm water supplies on individual holdings and on irrigation and drainage, the Commission has also arranged for the analysis of water supplies to determine their suitability either for domestic or for irrigation purposes, and suggestions have been made with regard to the clarification and treatment of various types of water.

The Commission's publications on Farm Water Supplies, Farm Irrigation and Drainage, and Construction of Weirs on Streams by Landholders, have been in very keen demand not only by landholders within Victoria but also by farmers in other parts of the Commonwealth.

#### DISTRICT EXTENSIONS, EXCISIONS, AND ALTERATIONS.

The Robinvale Irrigation District was extended to include an area of 2,070 acres commanded by an extension of the Commission's pipe-line system. Of this area 780 acres were transferred from the Tyntynder North Waterworks District.

An area of 240 acres was excised from the Murray Valley Irrigation District and added to the Numurkah Urban District of the Shire of Numurkah Waterworks Trust, and an area of 46 acres of rural lands within the Numurkah Urban District was transferred to the Murray Valley Irrigation District.

Some 130 acres of isolated river frontage lands in the Deakin Irrigation District were excised from that District and added to the adjoining Tongala-Stanhope Irrigation District.

An area of 510 acres was excised from the Tyrrell Waterworks District and added to the Tyrrell West Waterworks District in order to facilitate the administration of the area.

The Long Lake, Tyntynder North, and Wychitella Waterworks Districts were extended to include areas of 2,200 acres, 2,850 acres, and 650 acres respectively benefited by the Commission's works. The area added to the Wychitella Waterworks District included an area of 310 acres transferred from the West Loddon Waterworks District.

Areas of some 1,500,000 acres and 1,200 acres not supplied by the Commission's works, were excised from the Walpeup West and Millewa Waterworks Districts respectively.

The Hindmarsh Waterworks District was extended to include an area of 640 acres supplied by the Commission's works. This area was excised from the Waterworks District of the Lowan Shire Waterworks Trust.

#### URBAN DISTRICTS.

The boundaries of the Wycheproof Urban District were extended to include an area of 30 acres served by an extension of the reticulation system of that District.

Small areas in the vicinity of townships, which have been subdivided into building lots, have been excised from Rochester, Rodney, and Werribee Irrigation Districts and added to Lockington Urban District, Kyabram Trust (Urban) District, and Werribee Shire Council (Water Supply) District respectively.

An area of 7½ acres, being the property of the Education Department, was excised from Tragowel Plains Irrigation District and added to the Pyramid Hill Urban District.

#### ADMINISTRATION.

##### RETIREMENTS.

The Commission wishes to express its appreciation of the loyal and valuable services rendered by the following officers who retired during the year on attaining the statutory retiring age or on account of ill health:—

Mr. W. Lambert, Chief Finance Officer; Mr. H. F. Byham, District Engineer; Mr. J. M. Mathew, Superintendent of Testing and Research; Mr. A. D. G. Brown, Chief Clerk; Messrs. G. E. Iredale, L. G. Taylor, H. H. Stanlake, and W. Carleton, Clerks; Mr. D. B. Anderson, Assistant Engineer; Miss M. B. Williams, Draughtswoman; Messrs. P. F. Nash and B. R. Hutton, Assistants; Mr. J. G. Sealey, Senior Ranger; Mr. P. Wade, Reservoir Keeper; Mr. F. K. Smith, Senior Water Bailiff; Messrs. C. Clayton, J. O. Douglas, A. L. Palling, and C. A. Tickner, Water Bailiffs; and Mr. W. J. B. Edwards, Departmental Chauffeur.



## RESIGNATIONS.

During the year 92 officers and employees resigned from the Commission's service, of whom 16 were engineers and surveyors, 11 were draughtsmen or draughtswomen, 23 were clerks, 24 were typists, 7 were bailiffs, and 11 other officers and employees.

## DEATHS.

The Commission records with regret the death during the year of the following officers :—

K. F. Cowden and R. K. McDonald, Draughtsmen ; H. W. Brierley, Senior Inspector ; R. J. Harding, Inspector ; and C. A. Rapsey, Reservoir Keeper.

## STAFF.

When the Commission was constituted in 1906, the Minister of the day authorized the Commission to use the services of 71 officers of the Water Supply Department in order to enable it to commence operations. Most of these officers were subsequently permanently transferred to the staff of the Commission. The Commission's responsibilities have been greatly increased by development and by legislation since then and some indication of the expansion of the Commission's activities may be gauged from the fact that as shown in the statement hereunder, the Commission now has on its staff 1,353 officers.

## STAFF AND EMPLOYMENT FIGURES AS AT 30TH JUNE, 1953, 1954, AND 1955.

	As at 30th June, 1953.			As at 30th June, 1954.			As at 30th June, 1955.		
	Per- manent.	Tem- porary.	Total.	Per- manent.	Tem- porary.	Total.	Per- manent.	Tem- porary.	Total.
<i>Engineering—</i>									
Staff, possessing professional qualifica- tions, engaged on engineering, draught- ing, research, and surveying ..	303	..	..	298	..	..	294	..	..
Draughting (Technical and General) ..	3	..	..	2	..	..	3	..	..
Total .. ..	306	83	389	300	84	384	297	81	378
Inspectors, Water Bailiffs, Rangers, &c., engaged on District Operating and Maintenance .. ..	350	102	452	357	98	455	361	99	460
Excavator Supervisors, Chainmen, Time- keepers, &c., engaged on Construction and Plant Maintenance .. ..	9	23	32	9	32	41	15	29	44
<i>Administration and Accounting—</i>									
Clerks and Accountants .. ..	168	..	..	170	..	..	175	..	..
Assistants (Technical and General) ..	79	..	..	79	..	..	78	..	..
Total .. ..	247	94	341	249	76	325	253	86	339
Typists, Messengers, &c. .. ..	38	43	81	34	49	83	37	49	86
<i>Other Categories—</i>									
Laboratory Assistants, Tradesmen, Motor Drivers, &c. .. ..	25	15	40	24	17	41	27	19	46
Totals .. ..	975	360	1,335	973	356	1,329	990	363	1,353
<i>Casual Labour—</i>									
Construction (Day Labour and Contract)	..	..	2,247			3,109			3,559
District Maintenance .. ..	..	..	706			883			895
Totals .. ..	..	..	4,288			5,321			5,807

## STAFF TURNOVER.

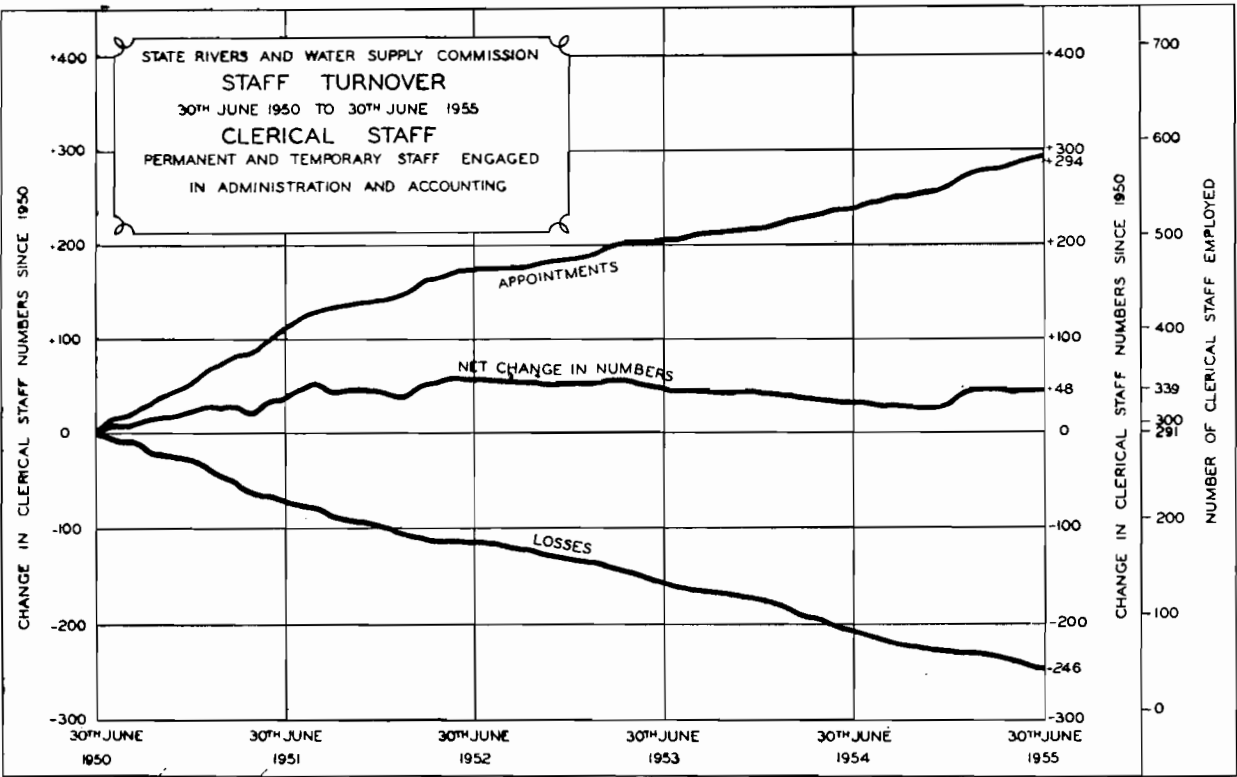
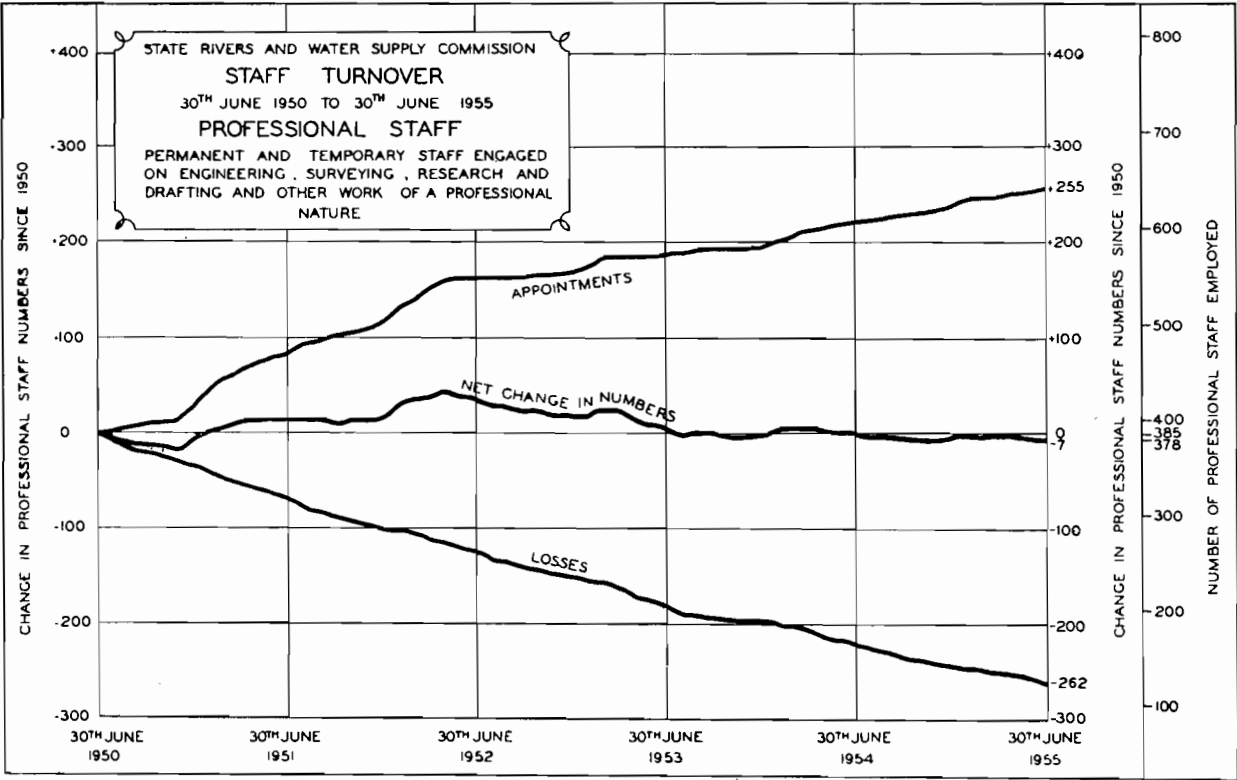
The following graphs indicate the position in regard to losses of professional and clerical staff by retirement, resignation, and death over the past five years since June, 1950.

It will be noted that, although only 385 officers were employed on professional work and 291 on clerical and accounting work at 30th June, 1950, losses in the following five years amounted to 262 professional men and 246 clerical men.

Speaking generally, the only persons available for new appointments to fill the vacancies have been men with little or no experience prior to their appointment, and, as much of the work of the Commission is of highly specialized character, the over-all effectiveness of its organization has been substantially reduced over the period.

It has been estimated that it costs industry from £30 to £250 every time a workman leaves, and there is consequently a sound monetary reason for endeavouring to reduce the number of departures.

The cost to the community when a planning and construction organization loses skilled and experienced professional and administrative officers is probably at least several times the higher figure quoted above, so that, altogether apart from failure to receive benefits from projects postponed or delayed because of loss of staff, the cost to the community of the staff losses incurred by the Commission has probably been not less than £500,000 over the past five years.



## OVERSEAS MISSION 1955.

On the recommendation of the Commission, the Government approved of an overseas investigation being made by the Commission's Chief Constructional Engineer, Mr. C. L. Sanders.

Mr. Sanders was required to investigate prestressing in reinforced concrete including its practical application, the construction methods used on small and medium sized dams and weirs with particular reference to structures on pervious foundations, the operating mechanisms of reservoir outlet control works, and channel lining construction methods including precast linings.

Mr. Sanders left Australia on the 11th April, 1955, and visited Great Britain, Europe, and later the United States of America.

Mr. Sanders was joined in London by Mr. K. A. Murley, one of the Commission's Assistant Engineers, who had been gaining overseas engineering experience while on leave in Great Britain after representing the Commission at an International Irrigation and Drainage Congress in North Africa. Mr. Murley remained with Mr. Sanders until the end of his investigations.

Mr. Sanders attended the Fifth Congress on Large Dams in France and an Executive Council Meeting of the International Commission on Large Dams, as representative of the Australian National Committee. He also attended an Executive Council Meeting of the International Commission on Irrigation and Drainage in Switzerland as representative of the Australian National Committee.

Messrs. Sanders and Murley expect to return to Melbourne in August.

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## PART II.—WATER SUPPLY AND DRAINAGE.

### WATER DISTRIBUTION.

#### PROGRESS IN REGULATING FLOW OF RIVERS DURING THE PAST 50 YEARS.

The principal irrigation storages at the time of the Commission's inception were the Laanecoorie Reservoir on the Loddon River, the Wartook Reservoir on the Mackenzie River, and Goulburn Weir, which though primarily a diversion weir, also provided some storage capacity.

There was no storage or weir at all on the River Murray, nor was there a major storage on the Goulburn River.

Weirs for diversion of stream flow were also situated on the Loddon at Bridgewater, Serpentine, and Kinypaniel. In addition there was a weir at the confluence of the Loddon and Pyramid Creeks, which, with regulators on the Sheepwash and Washpen Creeks, diverted water to the lakes in the Torrumbarry System west of the Loddon River. Water was also diverted from the Lerderderg at Bacchus Marsh and from the Campaspe.

On the River Murray, water was diverted by gravitation to the Gunbower Creek only at times of relatively high river, and thence conveyed to Kow Swamp Reservoir or direct to irrigated lands. Water was pumped for Mildura by the First Mildura Irrigation Trust and by Irrigation Trusts at Swan Hill, Cohuna, Benjeroop, Murrabit, Koondrook, and Myall.

The Commission extended diversion from the River Murray by erection of pumping plants at Swan Hill, Koondrook, Cohuna, and Nyah. This resulted in an expansion of irrigation, but development was limited through the lack of storages; in December, 1914, the river ceased to flow at Swan Hill.

Many years later the construction of Hume Reservoir and the River Murray weirs and locks made possible a very considerable increase in the annual diversions.

At the time of the inception of the Commission, irrigation in the Goulburn System was confined to water diverted from the natural flow at the Goulburn Weir and consequently development of irrigation was limited by the flow available in the driest months.

Although water deliveries were not fully measured in the early years of the Commission, the available information indicates that deliveries on the land in the Goulburn System amounted to 62,000 acre feet in 1906, the deliveries fluctuating considerably from year to year, according to seasonal conditions and the available flow.

In dry years such as 1907-08, 1913-14, and 1914-15, much greater areas of cereals and native grasses were watered and the total volume delivered was as high as 180,000 acre feet, but in the intervening years, the quantity of water used was only about half of this volume.

The water available by gravitation from Waranga Reservoir was exhausted early in the drought year of 1914, and it was decided to pump the water below gravitational level. Subsequently, the enlargement of the Waranga Reservoir was undertaken and completed in 1924. Water was first stored in Eildon Reservoir in 1922 during the construction of the dam.

In the 1920's, the annual deliveries of water steadily increased, and during the dry year of 1929-30, deliveries were at the very high figure of 361,000 acre feet.

For many years, the requirements were less than in 1929-30, but in 1937-38 and in the series of dry years commencing with 1940-41, the demand was such as to tax the available storage capacity to the limit.

The demands for water requirements in recent years have shown a greater trend to uniformity, and considerable quantities of irrigation water have been taken on to the land even in years of normal rainfall.

In 1954-55 deliveries of water in the Goulburn System amounted to 394,173 acre feet, which is more than six times as great as at the commencement of the Commission's conservation programme.

The volume of water deliveries to irrigation districts from the River Murray in the year 1906-07 was 70,000 acre feet, which figure soon doubled with the additional pumping plants at Swan Hill, Koondrook, Cohuna, and Nyah.

The construction of Hume Reservoir, Torrumbarry Weir, and Yarrawonga Weir progressively increased the diversion of water by the State, and in 1954-55 the deliveries of water to Victorian districts and to private diverters supplied from the River Murray amounted to 483,741 acre feet or nearly seven times the volume delivered at the inception of the Commission.

In southern Victoria, there were no State works for storage for irrigation purposes at the inception of the Commission, but since then storage works have been constructed on the Werribee and Macalister Rivers. From these systems a volume of 50,315 acre feet was delivered to irrigators in 1954-55.

#### PRIVATE DIVERSIONS.

In 1906 diversion of water for private purposes was authorized by licences issued by the Governor in Council, and there were only nine such licences.

Up to that time, full effect had not been given to the provisions of the *Water Act* 1886, vesting all natural waters in the Crown. The Commission observed that many unauthorized diversions were occurring, and that there was need of some form of annual authority, as well as long term licences.

An amendment of the 1905 Water Act was made in 1909, which empowered the Commission to issue annual permits to divert water from channels and natural sources of water supply.

Following this amendment, many annual permits were issued, and the Commission was able to assume effective control of private diversions, thereby preventing many of the conflicts which had occurred over the limited supplies in streams during dry periods.

The diversion of water by persons who assume full responsibility for pumping or other means of diversion has now attained major proportions in Victoria, and by 30th June, 1955, there were 4,284 licences and permits in existence.

These authorized the irrigation of 88,217 acres as well as the diversion of substantial volumes for industrial purposes in addition to domestic and stock requirements.

#### WATER DELIVERIES, 1954-55.

The total area of land supplied with water for irrigation purposes during the year, exclusive of the area supplied by the Melbourne and Metropolitan Board of Works, was 864,345 acres—an all time record.

The total quantities of the water used for irrigation in Victoria during the 1954-55 irrigation season was 1,070,433 acre feet, which exceeded the previous record of 1,011,556 acre feet established in the 1953-54 season.

Dry conditions were experienced in the winter of 1954 in northern irrigation areas and arrangements were made to commence irrigation in August, but rains occurred and obviated the need for irrigation at that time.

A heavy demand for irrigation occurred in late spring and early summer months, but rains of exceptional intensity in February caused a cessation of irrigation in most areas for a time. Following these rains, dry weather prevailed until May, and irrigation was continued beyond the end of the irrigation season on 30th April.

### DELIVERY TO LANDS IN IRRIGATION DISTRICTS.

The total quantity of water delivered for irrigation in all of the Commission's districts was 824,510 acre feet, including 65,384 acre feet by pumping in the Red Cliffs, Merbein, Robinvale, and Nyah Districts. In addition 40,701 acre feet were pumped by the First Mildura Trust for the irrigation areas under its control. The total volume delivered in all districts was therefore 865,211 acre feet as compared to 835,072 acre feet in the previous year.

Water deliveries on to the land in the Goulburn System totalled 387,264 acre feet, whilst 175,840 acre feet were delivered in the Torrumbarry System, and 121,918 acre feet in the Murray Valley Irrigation Districts.

The quantity of water delivered to lands outside the Commission's districts was 45,222 acre feet, bringing the total volume of water delivered to the land to 910,433 acre feet.

In addition private diverters pumped 160,000 acre feet on to lands under their direct control from various streams throughout the State. This brought the total quantity of water used for irrigation in Victoria to the already mentioned figure of 1,070,433 acre feet.

641,572 acre feet was released from the Waranga Reservoir of which 290,101 acre feet were delivered to the land, and 15,168 acre feet passed on at Loddon Weir to the Wimmera-Mallee Waterworks District. The quantity of water delivered to the land was 47·5 per cent. of that released from Waranga Reservoir.

249,988 acre feet of water were released from the Goulburn Weir and the Goulburn-Waranga Channel for the eastern portion of the Goulburn System of which 104,072 acre feet or 42·0 per cent. was delivered to irrigators.

Of the 891,560 acre feet released from the headworks of the Goulburn System, the volume delivered to the land was 394,173 acre feet which, with the 15,168 acre feet passed on to the Wimmera-Mallee represented a delivery efficiency of 45·8 per cent. from headworks to irrigators.

In addition to the record delivery of water throughout the State, record use of water was established in the following individual districts—Katandra, Calivil, Nyah, Robinvale, Campaspe, Central Gippsland. In addition the use of water by private diverters also constituted a record.

### PRIVATE WATER USERS.

#### DIVERSION OF WATER.

In accordance with Section 188 of the Water Act, the control of the use of water in rivers, creeks, streams, and watercourses, lakes, lagoons, and marshes was continued by the Commission.

On the 30th June, 1955, 718 licences issued for periods up to fifteen years were in existence authorizing the holders to irrigate a total area of 40,403 acres and to take water for domestic, stock, and industrial purposes. There were also 3,566 annual and special permits for the irrigation of a further 47,814 acres.

The total area authorized to be irrigated under licences and permits for the year was 88,217 acres, being an increase of 10,093 acres over the previous year's total.

The following table shows the number of licences and permits in existence, and the areas which may be irrigated under these authorities.

TABLE SHOWING THE NUMBER OF LICENCES AND PERMITS IN EXISTENCE AND THE AREAS WHICH MAY BE IRRIGATED  
UNDER THESE AUTHORITIES.

	Domestic and Stock.	Industrial.	Irrigation.											Total.	
			Vines.		Citrus.	Orchards.	Pastures.		Sorghum and Annual Crops.	Lucerne.	Cereals.	Market Garden.	Miscellaneous.		
			Dried Fruit.	Table and Spirit.			Native.	Permanent Sown.							Annual Sown.
<i>Licences.</i>															
Number in Force .. ..	1	4						713							718
Area authorised to be irrigated (acres)	..	..	1,410	1,706	4,270	773	2,884	10,092	10,590	992	901	1,860	793		40,403
<i>Permits.</i>															
Number in force .. ..	1,363	134						2,069							3,566
Area authorised to be irrigated (acres)	..	..	274	259	620	396	6,730	10,176	15,473	1,121	2,837	2,540	3,388		47,814
Total area authorised to be irrigated (acres) .. ..	..	..	1,684	1,965	4,890	1,169	9,574	20,268	26,063	2,113	3,738	4,400	4,181		88,217

## GOULBURN DIVISION.

The Goulburn Division includes the Rodney, Tongala-Stanhope, Deakin, Shepparton, South Shepparton, North Shepparton, Katandra, and Murray Valley Irrigation and Water Supply Districts, the Lock Garry and Kanyapella Flood Protection Districts, the Stanhope, Tallygaroopna, and Corop Urban Districts, and embraces an area of nearly 1,000,000 acres.

The Murray Valley District is supplied from the River Murray via Yarrawonga Weir; the Shepparton, South Shepparton, North Shepparton, and Katandra Districts from waters diverted from the Goulburn River by the Goulburn Weir to the East Goulburn Main Channel; the Rodney, Tongala-Stanhope, and Deakin Districts from waters diverted to the west side of the Goulburn River into the Goulburn-Waranga Channel, Waranga Reservoir and Waranga Western Channel.

One of the first works undertaken following the passing of Victorian Water Conservation Act in 1881 was construction of Pine Lodge Weir at the offtake of Pine Lodge Creek by the Shepparton Shire Waterworks Trust. This was followed up by construction in 1885 of Casey's Weir, jointly by the Yarrawonga and Shepparton Irrigation Trusts, at the offtake of Broken Creek, and several other weirs on Broken River and Broken Creek for the purpose of diverting water through a channel system for domestic and stock supplies to landowners in Shepparton, Tungamah, and Numurkah Shires' Waterworks Trusts. The supply of water from the Broken River source was not sufficient to permit any great development under irrigation in the Shires concerned. From 1910 onwards the greater part of Shepparton Shire Waterworks Trust was absorbed in Shepparton, South Shepparton, North Shepparton, and Katandra Irrigation and Water Supply Districts. A substantial part of the Shire of Numurkah Waterworks Trust was later embraced in the Murray Valley Irrigation and Water Supply District.

In 1882 the Echuca and Waranga Waterworks Trust was constituted. Its District comprised an area of approximately 584,000 acres between the Campaspe and Goulburn Rivers and embraced what is now Deakin, Tongala-Stanhope, and Rodney Irrigation Districts. Water was supplied through a channel system for domestic and stock purposes, plus a limited amount for irrigation, by a temporary pumping plant on the Goulburn River at Murchison.

The "Irrigation Act" was passed by the Victorian Parliament in 1886, and construction of the Goulburn Weir was commenced as a National Work on the Goulburn River near Nagambie the following year. With a view to expansion of areas under irrigation as a result of this work, the Rodney Irrigation Trust was constituted after excision from the Echuca and Waranga Waterworks Trust in 1889.

The Rodney Irrigation Trust's District comprised an area of 278,000 acres, approximately that of the Rodney Irrigation District to-day. It was served by nearly 300 miles of channel, which had extended to 643 miles by 1953-54. The area of land irrigated in 1894 was 3,760 acres as against 99,096 acres in 1953-54.

The value of irrigation became so apparent that work commenced on the construction of Waranga Reservoir Storage in 1902. This storage which was completed in 1909 was designed to hold 197,000 acre feet, and was further enlarged to hold 333,400 acre feet in 1921.

With the passing of the *Water Act* 1905, the Rodney Irrigation Trust's District was placed under the control of the State Rivers and Water Supply Commission. In 1908 the Echuca and Waranga Waterworks Trust was abolished and became the Deakin Irrigation and Water Supply District.

The East Goulburn Main Channel having been constructed to a point two miles north of the Broken River, a supply channel therefrom was completed to enable the Shepparton Irrigation and Water Supply District to be constituted in 1910.

An intensive campaign for land settlement under irrigation commenced in 1911. With the purchase of estates for subdivision, portions were excised from Deakin Irrigation District and formed into Koyuga Irrigation District. This District was in 1912 amalgamated with Tongala Irrigation District which was constituted in that year.

Through progress of land settlement and extension of cultivation in all districts of the Goulburn System, it became apparent that additional water storage was necessary to safeguard the growing needs of irrigators. Work commenced on Sugarloaf Reservoir (Eildon) on the Goulburn River near Alexandra in 1914, but because of war the work was discontinued during 1914-18, and was not completed till 1927. This storage was designed to impound 306,000 acre feet.



Development increased to such an extent with the purchase of additional areas that Stanhope Irrigation District was constituted in 1918 following excision from Deakin. An area in Echuca North was also excised from Deakin in 1922 and formed into Echuca North Irrigation District. Tongala, Stanhope, and Echuca North Districts were in 1939 amalgamated into Tongala-Stanhope Irrigation District.

The East Goulburn Main Channel was extended to the Broken Creek and as work on this Channel and subsidiary channels progressed, South Shepparton Irrigation District was constituted in 1924, North Shepparton in 1928, and Katandra in 1928.

With the advent of pastures under irrigated conditions about 1925 and improved cultural methods in subsequent years, development continued to extend in irrigation districts to a stage where in 1938 it was realized additional storage was required to safeguard existing pastures and orchards in years of drought. It was decided in 1940 to investigate the possibilities of increasing the capacity of Eildon Reservoir (Sugarloaf) and it was later decided to provide for the storage of  $2\frac{3}{4}$  million acre feet. In January, 1951, the Utah Construction Company of United States of America commenced the construction of Big Eildon Dam and the work was completed at the end of June, 1955.

Following an Interstate Conference of Engineers in 1913, the Governments of the Commonwealth of Australia and the States of New South Wales, Victoria, and South Australia, reached full agreement on a scheme for conservation, control, and use of waters of the River Murray. This agreement was ratified by the *River Murray Waters Act* 1915. Construction of a storage reservoir (Hume) on the Upper Murray commenced in 1919 and was completed in 1934, when work on Yarrawonga Diversion Weir and Main Offtake Channel was commenced.

#### DIVISIONAL REPORT FOR YEAR 1954-55.

Owing to the satisfactory state of storages, full deliveries of water were maintained to irrigators in all districts throughout the whole season 1954-55.

Rainfall recorded in all centres was considerably above average. The highest recording was that at Tatura where  $37\frac{1}{4}$  inches were measured, which also represents the highest recording over a period of 60 years. Minor flooding occurred following heavy rainfall in early December and again in mid-February extensive flooding was experienced in Shepparton, Rodney, and Tongala-Stanhope areas. Despite this abnormal summer rainfall all centres delivered water to irrigators in excess of the average for a season.

The construction of the channel system in the Murray Valley Irrigation District was practically completed during the year. This district now has 575 miles of irrigation and outfall channels. An area of 3,791 acres were contour surveyed and farm layout plans were prepared for 83 irrigators.

Areas of various crops irrigated showed a slight increase in all districts, excepting Katandra and Shepparton. The principal increase was 18,000 acres in Murray Valley District. Most of this was due to the extension of the district. Subdivisions, approved during the year, totalled 50, made up of Shepparton 15, Rodney 10, Tongala 18, and Murray Valley 7, involving a total increase in holdings of 61.

The main irrigation channel supplying Echuca Village settlement was reconstructed over a length of 4 miles during the year. In addition to improving the water supply to this area, water will now be carried below natural surface level through the "Biscay" area to enable free passage of flood water over the channel to the Goulburn River.

Weed growth in drainage channels has again received considerable attention. Improved equipment in districts enabled much to be done to combat weeds. A Cranvel Back Hoe has been operated throughout the year in Shepparton District with excellent results. The weed cutting launch has been used extensively on submerged weed at Tongala and in Nine Mile Creek at Shepparton, with a consequent increase in channel capacity. In districts where drainage channels exist, full use has been made of power spray units for the treatment of cumbungi with chemicals.

Reconstruction work on the Coram Main Drain in Tongala District was continued. Earthworks were completed and enlargement of culverts advanced to such a state that flooding was eliminated in the area served following the excessive rainfall of December and February.

The four portable pumps provided by the Commission for the use of settlers in Murray Valley District, in times of flooding, were put to good use following the abnormal rainfall in February.

An Audible Water Level Indicator has been installed on Yarrawonga Main Channel at the measuring weir at 8M38C. The indicator is connected to the local Telephone Exchange and the caller is able at any time to calculate the measured discharge in the channel from a series of signals transmitted by the instrument. The indicator functioned extremely well over the last irrigation season.

The soil survey of South Shepparton Irrigation District was completed by officers of the Agricultural Department and that for North Shepparton is approximately half completed.

### LODDON DIVISION.

The Loddon Division extends in its southern limits from and inclusive of the Rochester Irrigation District westerly to the Avoca River. The River Murray from Echuca to Tyntynder, just downstream from Swan Hill, defines the northern boundary.

The Division, through the district centres of Rochester, Pyramid, Boort, Cohuna, Kerang, and Swan Hill, controls 13 irrigation and water supply districts, 6 waterworks districts, and 10 urban districts. The total area of these districts is about 1,600,000 acres.

Water supply for the districts located in the southern portion of the Division is obtained from the Goulburn and Loddon water supply systems. The Torrumbarry supply system, offtaking from the River Murray upstream of Torrumbarry Weir serves the northern parts.

With the exception of the Tresco Irrigation District and the Gredgwin section of the Normanville Waterworks District, which are supplied by pumping, all districts draw their water supplies direct from the main carrier systems by gravitation.

Water supply to lands within the Loddon Division originated with the early Trusts and extends back to 1881 when, following a succession of severe droughts, the Water Conservation Act was passed to enable Trust districts to be formed to provide water, for domestic and stock purposes only, using natural watercourses as supply channels.

Under this Act the Swan Hill Waterworks Trust and also the Loddon United Waterworks Trust were constituted in 1882. This latter Trust was constituted to construct and administer a weir at Bridgewater and other weirs at Serpentine, Kinypanial, and Leaghur, and a number of channels and improvements to water courses to distribute water for domestic and stock purposes to serve an area of approximately 1,200 square miles.

Provision for the constitution of trusts for the purpose of irrigation was first made in the Water Conservation Act of 1883.

The Leaghur and Meering Irrigation Trust, the first such trust in Victoria, was constituted under this Act in 1885.

The formation of Irrigation Trusts was greatly encouraged by an amending Act in 1885 which provided for Government Loan Monies to be advanced for their works. This was followed by the comprehensive Irrigation Act which came into force in December, 1886.

Under the provisions of these Acts, passed from 1883 onwards, the following Trusts were constituted to provide a water supply to lands now within the Loddon Division—Leaghur and Meering (1885), Tragowel Plains (1886), Cohuna (1886), Koondrook (1886), Benjeroop and Murrabit (1886), Twelve Mile (1886), Swan Hill (1887), Boort East (1888), Boort North (1888), Wandella (1888), Marquis Hill (1888), Kerang East (1889), Campaspe (1889), Myall (1890), Dry Lake (1890), Macorna North (1893), Gunbower West (1899), and South Kerang (1899).

It soon became apparent that the natural flow of the streams was not adequate to meet the growing needs of these Trusts and, as the construction of the necessary storage and diversion works was beyond the capacity of the individual trusts, the State completed certain works as National Headworks. Those now serving the Loddon Division include the Goulburn River works, the Kerang North West Lakes works, the Kow Swamp works, the Loddon River works, and the Long Lake Pumping works.

The increasing demand for water faced the Trusts with difficulties which were beyond their ability to overcome individually and, under the Water Act of 1905, the State Rivers and Water Supply Commission was constituted to control all works of water supply throughout the State of Victoria, exclusive of the Melbourne metropolitan area.

All works previously used by the Irrigation Trusts were vested in the Commission and the Trust areas were consolidated and constituted as districts. Since that date the Commission has constructed many works to improve water supply to the various districts.

Such works include the Waranga Western channel offtaking at the major outlet on the western side of Waranga Basin. This channel, running in a general westerly direction for 134 miles and crossing the Campaspe and Loddon Rivers, serves as a main carrier for supply to irrigation districts located to the north along its course and by its later extension west, across the Avoca River, for a further 94 miles, has made available supplementary domestic and stock supplies to the Wimmera-Mallee System.

The first section of this channel was brought into use at the commencement of the 1911-12 irrigation season for supply to the Nanneella and Bamawm settlements in the Rochester District and early in February, 1912, for supply to the Tragowel Plains District. A further extension to the Loddon River was completed during the 1924-25 season and the extension further west across the Avoca was completed in 1928.

In the Torrumbarry System the Cohuna Weir, across the Gunbower Creek at Cohuna, was completed in 1908, and Berry's Regulator, across the National Channel about three miles downstream from the River Murray offtake, in 1913. Supply to Swan Hill District was considerably improved by the construction of the Little Murray Weir in 1915 and Benjeroop Weir in 1923. The completion of Torrumbarry Weir in 1924 made it possible to give a gravitated supply throughout the irrigation season to all parts of the system.

#### DIVISIONAL REPORT FOR YEAR 1954-55.

##### *Rochester Centre.*

The Rochester District centre controls the Rochester Irrigation and Water Supply District, the Campaspe Waterworks District, the Lockington Urban District, and is responsible for the regulation and maintenance of the Waranga Western channel to the 56 Mile regulator.

The Rochester Irrigation District was constituted in 1912. In that year the area irrigated within the district was 7,769 acres. Water rights were apportioned to lands in the district for the 1912-13 irrigation season.

The maximum delivery of water to lands in the district was the delivery of 87,952 acre feet during the 1937-38 season. This compares with the delivery of 85,191 acre feet during the present season. The total area of lands watered during 1937-38 was 57,052 acres, and the depth of water used per acre irrigated averaged 1.54 feet. Last season some 73,214 acres were irrigated, and the depth of water used per acre irrigated was 1.17 feet. It is considered that this reduction in the depth of water used is accounted for by the extensive development of annual pastures at the expense of lucerne and also by improved efficiency in the application of water to the land.

The past irrigation season was one of fluctuating demand. There were good rains during July, August, and September, when 490 points were recorded. October rainfall was below average, with 98 points, and by the end of that month deliveries totalled 20,000 acre feet. November and December were wet months with 644 points of rain and only 10,000 acre feet of water were delivered.

Abnormally heavy rain fell about the middle of February following which there was no demand for water for over two weeks. March and April were dry months and for a period of seven weeks an average delivery rate of 3,600 acre feet per week was maintained.

The rainfall recorded at Rochester for the year ended 30th June, 1955, was 25.13 inches which is half as much again as the district average of 16.65 inches per annum over the past 68 years.

The Campaspe Irrigation and Water Supply District consists of what was originally the southern portion of the Campaspe Waterworks Trust District—constituted in 1889.

As a result of a good flow in the Campaspe River practically throughout this season, the record volume of 1,434 acre feet was delivered for irrigation and some 155 tanks were filled for domestic and stock purposes.

### *Pyramid Centre.*

The districts controlled from the Pyramid Centre are the Tragowel Plains, the Calivil, and the Dingee Irrigation and Water Supply Districts; the Loddon and the East Loddon Waterworks Districts and the Pyramid Hill, Mitiamo, Macorna, and Dingee Urban Districts. This centre is also responsible for the maintenance of the Waranga Western channel from the 56 Mile regulator to the Loddon River.

The Tragowel Plains Irrigation District includes the lands originally covered by the Tragowel Plains and the Twelve Mile Trusts. The district was constituted in 1906 when the area was 20,366 acres. Water rights were apportioned to district lands for the 1912-13 season. The water delivery during this present season, when a total of 52,012 acre feet was delivered to the land, represents the maximum delivery to date.

The Calivil Irrigation District was constituted in 1928 with an area of 47,748 acres. Water rights were apportioned for the 1938-39 season. The volume of water delivered during this present year was 13,201 acre feet which was greater than in any previous year.

The Dingee Irrigation District was constituted in 1913. The area then was 4,893 acres. Water rights were apportioned for the 1913-14 season.

In the Pyramid Centre the rainfall for the year was 1,876 points which is substantially greater than the average, over the last 25 years, of 1,346 points. Heavy rain in the Dingee area in February, amounting to over 7 inches in four days caused extensive flooding which was aggravated by floodwaters from the Bullock and Myers Creeks. The drainage works in this area were heavily taxed but proved of great benefit in draining the area when the main flood had passed and no serious damage resulted to the works or the lands served.

The total water deliveries and the area irrigated in the centre during the present year are all time records. The average rate of delivery during the autumn peak period to all districts was at the rate of the total water right in 105 days. This compares with 120 days for the same period in the previous year. In the Tragowel Plains district 51.5 per cent. of the water supplied at district offtakes was delivered to users compared to the average of 42 per cent. over the previous five years.

Excellent results were obtained on the control of cumbungi and jointed rush in district drains and channels.

### *Boort Centre.*

The Boort Centre controls the Boort Irrigation and Water Supply District and the West Loddon and the Normanville Waterworks Districts.

These districts include the lands previously covered by the Boort East, the Boort North, the Leaghur-Meering and portions of the Marquis Hill and the Wandella Trust areas.

The Boort District was constituted in 1911 and at that time the area irrigated within the district was 6,801 acres. Water rights were apportioned to district lands for the 1938-39 irrigation season.

Irrigation commenced in mid-August 1954. The demand for water remained consistent throughout the season and resulted in the record total volume of 28,000 acre feet being delivered to the land up to the 15th May, 1955. Because of the limited capacity of the Waranga Western channel, rationing was imposed in the early spring and again during the autumn.

The installation of 28 vertical lift steel gates in place of drop bars at the Loddon Weir has greatly improved control facilities at this structure and it is now possible to pass the numerous Loddon River floods without disrupting supply to the districts.

Five hundred and seventy-seven dams in the Normanville Waterworks District were filled by the end of December.

In the West Loddon Waterworks District, 224 dams were filled for landholders stock and domestic purposes.

In the Normanville district a "mile-a-day" ditcher was used for channel cleaning with excellent results; some 33 miles being treated in eleven days.

### *Cohuna District.*

The Cohuna District includes the lands previously covered by the Cohuna Irrigation Trust which obtained its supply by gravitation through an inlet from the River Murray at the mouth of Deep Creek. This supply was supplemented by a pump unit of 50 c.f.s. capacity when the river fell below the sill level of the inlet.

When the Commission assumed control from the Trust the area was partitioned into three districts. These were the Cohuna District constituted in 1906, the Gannawarra District (1911), and the Leitchville District (1925).

The pump unit was replaced by the Commission with one of 100 c.f.s. capacity during 1908 and, as the existing gravitation supply was not reliable, a further unit of 200 c.f.s. capacity was installed in 1910. Water rights were apportioned to the Cohuna District for the 1911-12 season, to the Gannawarra district for 1912-13, to the Leitchville District for the 1926-27 season. The Cohuna District was extended to include the major portion of the Gannawarra District in 1935, and again in 1941 to include the Leitchville District.

Water for the 1954-55 season was turned into the system on the 16th August, 1954, but deliveries were light until mid-September, when the demand firmed and continued so until mid-November. Deliveries during December were moderate but firmed again during January and early February and also during March until the season closed on 30th April. The total volume delivered to users was 77,233 acre feet. The recorded rainfall for the year was 2,188 points.

The increased allocation of funds during the past two years has resulted in a considerable improvement in district works and it was possible during the present season to meet a peak demand of over 3,000 acre feet per week without overtaxing the system. Although, following heavy rains towards the end of the season, several days' delay occurred before it was possible to remove surplus water from low lying areas into the drainage system, a substantial improvement is evident throughout the district.

During October and November some 18 miles of drains were treated with hormone spray with excellent results. *Paspalum Distichum* threatens to become a greater problem than cumbungi in drainage channels. Some sections of the drains which were heavily infested with distichum were cleared using a half-yard dragline equipped with the New Zealand weed bucket. Where there was a minimum of track-making, this method was quite fast and effective. The best result was obtained where it was possible to use the machine on both sides of the drain so that each batter could be scraped during the upward haul of the bucket. It was not possible to remove the distichum roots from the batter on the side opposite to the machine.

#### *Kerang Centre.*

The districts controlled from the Kerang Centre are the Kerang, Koondrook, Mystic Park, and Third Lake Irrigation Districts, the North West Lakes Waterworks District and the Koondrook and Murrabit Urban Districts.

These districts include the lands previously covered by the Kerang East, the Koondrook, the Myall, and portions of the Macorna North, and the Marquis Hill Trusts.

The Kerang District was constituted in 1910 with an area of 19,763 acres. Water rights were apportioned for the 1938-39 season. The Koondrook District was constituted in 1911 with an area of 19,602 acres. Water rights were apportioned for the 1911-12 season.

The Mystic Park District was constituted in 1922 with an area of 6,430 acres and water rights were apportioned for the 1924-25 season. The Third Lake District was constituted in 1925 with an area of 713 acres. Water rights were apportioned for the 1926-27 season.

The rainfall for twelve months ending 30th June, 1955, was 1,576 points, which is some three inches above the average rainfall.

The total volume of water supplied to landholders in the centre was 77,580 acre feet and the area watered was 103,269 acres.

The old timber flume carrying the Macorna channel across the Pyramid Creek has been replaced with a prefabricated reinforced concrete flume and the replacement of the Bannagher No. 3 flume with a similar structure is well advanced. The completion of these two structures will considerably improve supply facilities in the Kerang District.

#### *Swan Hill Centre.*

The Swan Hill Centre controls the Swan Hill, the Tresco, and the Fish Point Irrigation Districts, and the Lake Boga Urban District.

The Swan Hill District includes the lands, originally covered by the Swan Hill Trust, which were supplied partly by gravitation through two offtakes from the River Murray and partly by pumping when the river level was low.

The Swan Hill District was constituted in 1906 with an area of 7,101 acres. Water rights were apportioned for the 1910-11 season.

Since that date the area under irrigation has increased by the addition of the Woorinen Soldier and Closer Settlement area and a further area to the south of the town extending to Lake Boga. The present area of the district is 37,173 acres.

The Tresco District was constituted in 1922 with an area of 1,558 acres. It was extended to include the Tresco West area in 1950. Water rights were apportioned for the 1954-55 season. Water supply for this district is obtained by pumping from Lake Boga.

The Fish Point District was constituted in 1926 with an area of 6,050 acres. Water rights were apportioned for the 1927-28 season.

Climatic conditions which were most favourable to dairying and grazing proved disastrous during the drying period of dried fruits. This latter industry has been further embarrassed by an uncertain market together with a stationery market value for fruit during a period of rising production costs. Land sales and subdivisions in the district have eased considerably but market values have continued to increase, the peak reaching £235 per acre for pasture land.

The commencement of the 1954-55 irrigation season was advanced to mid-August to meet the demand for an earlier watering but on account of unsettled weather the demand did not firm until late December when it became abnormally heavy and remained firm until the end of the season. A total of 44,446 acre feet of water was delivered to water users in the centre.

The remodelling of channels in the Woorinen area, using the "Gunitite" process, was continued and a further 160 chains were treated during the year.

Observations during the past twelve months indicate that the reconditioning of the Woorinen supply channel system has reduced the channel water loss to such an extent that evaporation from the drainage basins has been in excess of the runoff from the drains.

Excellent results have been obtained with hormone sprays on aquatic weeds in both drains and supply channels. This is particularly noticeable in the Fish Point District where all channels are relatively clean.

#### GIPPSLAND AND SOUTHERN DIVISION.

The Gippsland and Southern Division embraces an area of 262,600 acres consisting of the Maffra-Sale, Central Gippsland, Bacchus Marsh, and Werribee Irrigation Districts, the Heyfield Urban District, the Werribee Waterworks District, the Koo-wee-rup and Cardinia Flood Protection Districts, and the Carrum Drainage District.

##### *Maffra-Sale Irrigation District.*

The Maffra-Sale Irrigation District was constituted in 1926.

Investigations of possible storage sites on Gippsland rivers were commenced as early as 1914, and about that time a scheme was mooted for the irrigation of the Boisdale Estate, near Maffra, to aid the sugar beet industry.

In response to strong local requests, the question of irrigating Boisdale Flats and other near areas was thoroughly investigated in 1928 and it was concluded that irrigation there would be successful.

A satisfactory storage site was selected on the Macalister River and work on the construction of a mass concrete dam at Glenmaggie was commenced in 1919.

The construction of main channels to Maffra and Boisdale was commenced the following year, and by 1926 the first stage of the storage was completed with a capacity of 106,000 acre feet.

Numerous requests for an extension of the district were received by the Commission and extensions of the channel system proceeded as rapidly as possible.

By 1928 satisfactory results were being obtained by settlers from irrigation and the following year water rights were allotted for the first time.

During the 1929-30 irrigation season, the area under irrigated culture had increased to 14,150 acres, and further requests were received by the Commission for extensions of the scheme as the benefits from irrigation had been proved.



At the present time the Maffra-Sale district embraces an area of 72,900 acres with total allotted water rights of nearly 26,000 acre feet.

Prior to the Commission's activities in this area, the towns of Maffra, Heyfield, and Stratford had no reticulated water supply and in dry times water had to be carted from the rivers and sold to householders. Maffra's two milk factories, which now employ 500 people, were then non-existent and numerous large holdings which previously supported only one family were, following the advent of irrigation, subdivided and now support eight families living on the land.

*Central Gippsland Irrigation District.*

The Central Gippsland Irrigation District which is adjacent to the Maffra-Sale District and embraces an area of 58,500 acres was constituted in 1948.

This district, which in the main lies to the south of the Thomson River between Heyfield and Sale, includes the Nambrook-Denison Soldier Settlement area of some 22,500 acres which will contain 200 individual holdings when fully developed.

Channel construction was commenced in 1948 and irrigation water, which is conveyed by channel from the Glenmaggie Reservoir, was first supplied in October, 1952.

During the first irrigation season of 1952-53, a total area of 2,826 acres was watered and this area has been increased each subsequent year as channel reticulation works have progressed and as land has been developed for Soldier Settlement.

By 1954-55, the total area watered had increased to 6,605 acres and allotted water rights totalled 9,128 acre feet.

*Bacchus Marsh Irrigation District.*

Irrigation at Bacchus Marsh prior to the passing of the Water Act of 1905 was the responsibility of a local irrigation and water supply trust which had been constituted in 1889.

The maximum area supplied by the Trust was 910 acres and, as no storage existed then, supplies were restricted to natural river flows. Naturally this state of affairs did not lend itself to any great development in the area.

Following the assumption of control by the Commission in 1906, steps were taken to locate a suitable storage site so that assured supplies would be available for suitable irrigation lands at Bacchus Marsh.

Pykes Creek Reservoir with a capacity of 14,850 acre feet was constructed and filled to capacity in 1911.

In 1916, a tunnel one mile long connecting the Werribee River with the Pykes Creek Reservoir to supplement supplies to the storage was completed, and in 1930 the capacity of the storage was increased to 21,000 acre feet.

A new concrete diversion weir was constructed across the Werribee River to replace the old Trust structure and old channels were replaced and extended.

By the 1911-12 irrigation season, the irrigable area had been increased to 3,300 acres and water rights apportioned to 2,000 acres of that area. At the present time the district embraces an area of 6,700 acres with a total water right allocation of 3,302 acre feet.

Land values in the district increased from £30 per acre in 1911 to £600 per acre in 1954. This increase was influenced to some extent by the change in recent years from dairying to market gardening.

*Werribee Irrigation District.*

In the Werribee District, irrigation can be said to have started following the constitution of the Commission.

An Irrigation Trust was formed at Werribee in 1888, but never irrigated more than 160 acres.

In 1906 the Government purchased some 23,000 acres of the Werribee Park Estate at £13 per acre for closer settlement purposes.

Following investigations the Commission advised the Government that about half the purchased area was suitable for irrigation and that the balance should be constituted a waterworks district and supplied with water for domestic and stock purposes.

By 1910 a concrete diversion weir had been constructed across the Werribee River to the north of the township, a main channel therefrom had been completed and domestic and stock supply channels were under construction.

Pykes Creek Reservoir had been completed by 1911 and by 1916 the Melton Reservoir on the Werribee River between Bacchus Marsh and Werribee had been completed with a capacity of 17,000 acre feet. The capacity of Melton Reservoir was increased in 1936 to 19,000 acre feet by the installation of gates on the spillway.

The Werribee Irrigation District embracing an area of 8,000 acres was officially constituted in 1917, and the following year the balance of the purchased Werribee Park Estate was constituted a Waterworks District.

Additional land for soldier settlement was purchased in 1920 and 1921, and at the present time the irrigation district is a thriving settlement of 9,700 acres, of which 8,146 acres are irrigable and allotted water rights.

Originally the area was settled for dairying and lucerne growing, but in recent years there has been a marked change to market gardening, fruit growing, and egg production, and at the present time about half the area is devoted to these latter industries.

In quite recent times over £600 per acre has been paid for land for market gardening.

#### *Flood Protection and Drainage Districts.*

The Koo-wee-rup or "Great Swamp" drainage scheme, which has resulted in the Lower Koo-wee-rup Flood Protection District being one of the most highly productive areas in the State to-day, is the largest and most important swamp reclamation work carried out in Victoria.

The first works of the scheme were commenced in 1885 under the direction of the "Swamp Board" and later were continued by the Public Works Department in connexion with a village settlement scheme for absorbing unemployed from Melbourne.

In 1912, following floods which demonstrated the inadequacy of the early works, the Government directed the State Rivers and Water Supply Commission to prepare plans and estimates for improving the scheme.

In 1917, the Lower Koo-wee-rup Flood Protection District comprising 56,500 acres was constituted by the Commission, and since then most of the drains in the district have been substantially enlarged or improved.

Following the phenomenal flood of December, 1934, a thorough investigation was made and a scheme of works designated the "Yallock Outfall Scheme" was adopted by the Commission as the most satisfactory method of affording additional protection to the swamp lands from the flood of the Bunyip River. These works were commenced in 1939. Owing to the delays resulting from war and post-war shortages of manpower, materials, and other causes, these works, although now well advanced, have not yet been completed.

The Cardinia Flood Protection District comprising 26,660 acres which adjoins the western boundary of the Lower Koo-wee-rup Flood Protection District was also constituted in 1917 following a request by landholders whose own efforts at drainage had proved ineffective.

Construction of additional drains and the substantial enlargement of existing drains was carried out by the Commission after taking over the area. These works proved reasonably effective until the phenomenal flood of 1934. Following this flood a much more comprehensive scheme of works was prepared and finally completed in 1940, and these works have proved to be very effective.

The Carrum Drainage District is another example of early swamp reclamation in Victoria.

The first works of reclaiming the Carrum Swamp, which was a low-lying ti-tree covered area into which the Dandenong and Eumemmerring Creeks discharged and ponded before ultimately draining to the bay at Mordialloc and Frankston, were based on a plan prepared by the Lands Department and were carried out by the Dandenong Shire Council in 1868.

In 1871 the swamp lands were made available for selection under conditions which required applicants to reside on and carry out drainage improvements to land selected.

In 1879 the Patterson Cut, connecting the swamp with Port Phillip Bay and named after the then Minister of Public Works, was cut through the coastal sand ridge at Carrum.

In 1889 the Carrum Irrigation and Water Supply Trust was constituted. Following this, the Trust constructed a scheme of drainage and irrigation channels. During a succession of dry years following their construction these works proved fairly effective. With the recurrence of wet years, however, they proved ineffective and became badly silted.



In 1905, the management of the district was transferred to the Commission.

Since that time the Commission has carried out additional large drainage works which have proved effective, except against the phenomenal flood of December, 1934.

The Carrum Trust was abolished on the 1st July, 1945, and on the same day the Carrum Drainage District comprising some 16,000 acres was constituted under the control of the Commission.

#### DIVISIONAL REPORT FOR YEAR 1954-55.

At the commencement of the 1954-55 irrigation season the Glenmaggie, Pykes Creek, and Melton Reservoirs, which supply the irrigation and waterworks districts of the Division, were all full.

Following heavy rains in the catchment areas, all storages filled again early in November and remained full until the end of the following month. At the end of the season considerable quantities of stored water remained and at the end of the year under review, the favourable position existed of Glenmaggie and Melton Reservoirs being full and Pykes Creek Reservoir being within 3,000 acre feet of full capacity.

In the Maffra-Sale District rainfall for the year was 2,895 points compared with the average of 2,363 points. Heavy falls were experienced in November, February, and the first week of May but between these breaks in the weather high deliveries of water were made and total deliveries in the district reached 30,531 acre feet, the third highest on record.

In the Central Gippsland District additional areas in the Nambrook-Denison Soldier Settlement Area were developed and a total delivery of 7,857 acre feet of water was made during the year.

An additional service basin was constructed for the Heyfield Urban District and the scheme of supply by pumping from the Main Southern Channel, in lieu of from the Thomson River, was practically completed.

In the Bacchus Marsh District, water deliveries for the year represented 128 per cent. of the total water right and a high delivery efficiency of 85 per cent. was obtained.

In the Werribee District, the season's water deliveries amounted to only 85 per cent. of the total district water right. The demand was influenced by intermittent rains during the irrigation season, including heavy falls of three inches on the 13th January, and over six inches in  $3\frac{1}{2}$  hours three days later.

Considerable benefit to the district in the form of prevention of seepage losses, quicker deliveries, lowering of the ground water table and reduction in channel maintenance costs has resulted from gunite channel lining.

In the Koo-wee-rup District, mechanical excavators completed the regrading and reconditioning of McDonald's Outfall and made considerable progress with earthwork operations of the Yallock Outfall works above the old Bayles-Strezlecki Railway.

In the Cardinia District, mechanical excavators reconditioned  $2\frac{1}{2}$  miles of the large Deep Creek Outfall and some  $4\frac{1}{2}$  miles of important subsidiary drains.

Operating under arrangement with the Commission, privately owned suction plants removed a further 26,000 tons of coarse clean sand from the Koo-wee-rup Main Canal and 5,000 tons from the Cardinia Drain. The total amount of sand removed from the Main Canal since 1925 now amounts to 871,000 tons.

In the Carrum District, the reconditioning of the Mordialloc Main Drain by mechanical excavator was completed, and the pumping plants on the Swamp Drain at Mordialloc and Carrum continued to work satisfactorily during the year.

#### WIMMERA-MALLEE DIVISION.

Although the Water Act was passed in 1905, it was not until 1908 that local Trusts which were controlling the water supply for domestic and stock purposes to the Wimmera and lower Mallee were taken over by the Commission. The system of water distribution at that time was chiefly by means of creeks but shortly after the Commission took over the system, it was completely overhauled and main supply channels were constructed.

In the period from 1896 to 1902 the Wimmera and Mallee had passed through periods of low rainfall until in the disastrous drought of 1902 the Mallee was partially evacuated owing to lack of water for domestic and stock purposes, and the amount of stock lost at that time was calamitous.

In 1903 the Victorian Water Supply Department, which the State Rivers and Water Supply Commission succeeded, constructed Lake Lonsdale Reservoir but at the time the Commission took over the Wimmera and Mallee water supply in 1908 very little of the Mallee area had been developed, such development being impossible to any extent without a reliable supply of water for domestic and stock purposes. The area was remote from extensive and permanent river systems and no underground water was available. Exploratory levels showed that there was a fall of approximately 300 feet from the Wimmera River to the River Murray, and it was decided to extend the channel system in a northerly direction into the vast unwatered area of the Wimmera and Mallee.

As development proceeded, more storage capacity was required and storages were built at Fyan's Lake in 1915, the capacity of this reservoir being 17,100 acre feet, Taylor's Lake in 1918 with a capacity of 30,000 acre feet, and Pine Lake in 1921 with a capacity of 52,000 acre feet.

During the period 1908 to 1927 the channels were being extended further and further northward and this development has continued until at present a permanent domestic and stock water supply system is available to 10,000 farms in an area of something like 11,000 square miles served by 6,500 miles of channels constructed by the Commission. The system also supplies 47 towns.

The Wimmera and Mallee Domestic and Stock System is the largest of its kind in the world, and it has enabled two very prosperous provinces to be established in Victoria, provinces which between them produced last year primary production to the value of £34,325,000. An appreciation of the increased productivities of these areas is shown by the following statement:—

WHEAT—				1908.	<i>Present Day.</i>
Mallee	..	..	..	1,233,769 bushels	19,817,829 bushels
Wimmera	..	..	..	5,056,245 bushels	20,480,425 bushels
WOOL—					
Mallee	..	..	..	3,033,834 lb.	11,416,909 lb.
Wimmera	..	..	..	14,296,182 lb.	32,407,695 lb.

In order to safeguard these vast and fertile provinces for all time against water shortages for domestic and stock purposes, the Commission constructed the Rocklands Reservoir at the headwaters of the Glenelg River in 1953. This storage which has a capacity of 272,000 acre feet enables the floodwaters of the southern flowing Glenelg River to be diverted northward into the Wimmera and Mallee.

The assured water supply to this vast area has made possible the establishment of farms and homesteads with orchards, gardens, and other amenities, while in country towns many miles from reliable rivers, reticulated supplies make possible the provision of public baths, grassed ovals, tennis courts, public gardens, and the like.

#### DIVISIONAL REPORT FOR THE YEAR 1954-55.

Seasonal conditions for the year 1954-55 were very good and at the end of the watering season in November, 405,526 acre feet remained in storage. All domestic and stock water supply requirements were fully met for the year.

#### *Western Wimmera.*

The final survey of the Lubeck Connecting Channel was completed. This channel will supply part of the high area now dependent upon Lake Lonsdale.

Preparation of land in the Drung Soldier Settlement area was carried out by contract for the Soldier Settlement Commission under the supervision of the State Rivers and Water Supply Commission. 1,156 acres were ploughed, 1,235 acres graded, 600 acres checkbanked, and 300 acres sown. Construction of the channel system to serve this area was commenced.

#### *Walpeup West.*

Following a recommendation of the Walpeup West Advisory Board, all lands in the Murrayville Riding of the Shire of Walpeup were excised from the Walpeup West Waterworks District. It is proposed to sell 14 of the 17 bores and transfer control of the remaining 3 bores to the Shire. Seven bores have been sold to date.

#### *Tyrrell.*

610 feet of rising main at Eureka pumps were replaced with a 15-inch diameter pipe making the main uniform throughout. Pumps operated for 26 days compared with 40 days during the previous year.

*Wimmera United.*

The Wimmera United District was increased by approximately 4 square miles in the Parish of Wallaloo and 25 square miles in the Parishes of Gre-Gre, Darkbonee, and Swanwater.

*Wyचितella.*

The domestic and stock system was extended 5 square miles as a result of the construction of new channels through the Parishes of Narrewillock and Glenloth. A supply of water was given to the 10½ square miles of the new Teddywaddy area.

*Millewa.*

The Millewa District was made available for wheat and wool growing in 1923, and at that time consisted of 830 square miles of mallee lands which had been surveyed into holdings of from 750 acres to 800 acres.

An assured supply of water for domestic and stock supply purposes was obtained from the River Murray through a series of pumping stations and 680 miles of channels, the main stations being located at Lock 9 on the River Murray itself and Lake Cullulleraine.

It was found, however, that because of the very light and variable rainfall, the holdings were too small to be economically successful and in 1950, under the North-West Mallee Areas Act, the area was re-subdivided, the holdings being increased in size and reduced in number and, in addition, certain areas excised from the water supply system which is operated by the Commission.

In 1952 the Millewa, Yelta, Carwarp, and Carwarp Central Waterworks Districts were combined to become the Millewa Waterworks District, with a total area of 822 square miles and a channel system 480 miles in length. Water is supplied to the district from pumps on the Murray at Lock 9 and Lake Cullulleraine, and at Merbein and Red Cliffs.

The past year was one of good rainfall. Because of this, and the reduced area that has to be watered by the pumps at Cullulleraine and Lock 9, the period of watering of that part of the Millewa North-West District was reduced to a record period of 67 days, the shortest time in the history of the District.

## SAND DRIFT CONTROL.

Six hundred and thirty-eight acres of rye corn were planted on the channel banks and this together with better farming methods has largely affected the amount of drift sand entering channels. It is estimated that approximately 971,000 cubic yards of sand were removed this year as against 12,297,000 cubic yards in the bad year of 1945-46.

With the gradual change-over to mechanical farming, only 30 teams were employed during the year. Channel cleaning and maintenance operations were mainly carried out by tractors, hydraulic scoops, Briscoe, Chattin, and Parex Ditchers. These machines cleaned over 2,100 miles of channel for the year.

Although the amount of sand removed each year since 1949-50 has decreased, the general rise in operations cost has increased the annual amount of expenditure.

The following table shows the cost of removal of sand from the Wimmera-Mallee Domestic and Stock Channels from 1945-46. Figures for earlier years since 1928-29 are contained in previous reports :---

Year.	Financial Year.			Calendar Year.	
	Cost per Fortnight for Horse Teams.	Approximate Quantity of Sand Removed.	Total Cost.	Year.	Total Cost.
	£	cubic yards.	£		£
1945-46 .. .. .	42	12,297,000	322,827	1945	312,419
1946-47 .. .. .	43	6,954,000	187,017	1946	249,284
1947-48 .. .. .	46	2,440,000	70,179	1947	92,193
1948-49 .. .. .	64	1,540,000	61,629	1948	55,876
1949-50 .. .. .	68	1,187,000	52,437	1949	57,866
1950-51 .. .. .	84	1,159,000	60,852	1950	53,262
1951-52 .. .. .	96	1,348,000	80,922	1951	70,479
1952-53 .. .. .	106	1,297,000	69,827	1952	87,874
1953-54 .. .. .	107	1,025,000	63,447	1953	64,105
1954-55 .. .. .	108	971,000	65,566	1954	53,195

Red Cliffs-Merbein.

Development of the Merbein area as a mixed irrigated farming area supplied with water pumped from the River Murray commenced in 1910, but it was not long before vines were being planted and the larger holdings subdivided into smaller allotments.

Birdwoodton, on the east of Merbein, and Merbein West were established as a Soldier Settlement Area in 1919 for the production of dried fruit.

Red Cliffs was developed as a Soldier Settlement Area, and was almost entirely devoted to sultanas with a limited quantity of citrus and currants. The first allocation was made in 1921 and when completed some 700 returned soldiers were rehabilitated on the land project which was built by themselves.

Following drainage difficulties, sub-surface drainage outfall works were constructed by the Commission, commencing in 1934, at both Red Cliffs, and Merbein.

The first general irrigation for the season commenced on 30th August, 1954, at Red Cliffs, and on 18th September, 1954, at Merbein, while special waterings were given in both places.

From the point of view of dried fruits production the 1954-55 season has been one of the worst on record. Although yields were about average, humid conditions from January to April produced fruit of low quality, and both picking and packing costs were very high—probably 70 per cent. in excess of normal.

In order to bring about more accurate measurement of water usage on blocks, Dethridge Meter Wheels are being placed on holdings in both settlements.

Particulars of the six irrigations given in 1954-55 are :—

Red Cliffs.

Irrigation Number.	Period.			Acre Feet Pumped.	Equivalent Average Depth per Watering.
					inches.
1	30th August, 1954 to 25th September, 1954	..	..	7,729*	8·1
2	3rd November, 1954, to 26th November, 1954	..	..	6,651	7·1
3	14th December, 1954, to 4th January, 1955	..	..	6,088	6·5
4	11th January, 1955, to 4th February, 1955	..	..	7,283†	7·6
5 { A	22nd March, 1955, to 28th March, 1955, 1,055 }	..	..	5,537	8·6
6 { B	10th May, 1955, to 19th May, 1955 4,482 }	..	..	1,781	6·6
Total Season 1954-55				35,069	7·4

\* Includes 208 acres frost run through.      † Includes 1,092 acres harvest run through.      A.B. Split fifth irrigation.

Merbein.

Irrigation Number.	Period.			Acre Feet Pumped.	Equivalent Average Depth per Watering.
					inches.
1	18th September, 1954, to 7th October, 1954	..	..	5,289	7·5
2	2nd November, 1954, to 25th November, 1954	..	..	4,632	7·2
3	20th December, 1954, to 10th January, 1955	..	..	5,482	8·1
4	17th January, 1955, to 7th February, 1955	..	..	5,628*	8·1
5 { A	17th March, 1955, to 25th March, 1955, 1,322 }	..	..	5,922	8·1
6 { B	13th April, 1955, to 1st May, 1955. 4,600 }	..	..	329	4·9
	30th May, 1955, to 3rd June, 1955	..	..		
Total Season 1954-55				27,282	7·3

\* Includes 1,680 acres harvest run through.      A.B. Split fifth irrigation.

*Nyah.*

Nyah, which is also supplied with water pumped from the River Murray, was originally settled as the Sir John Taverner Village Settlement in 1910, with 50 acre blocks mostly under lucerne. In 1912 these holdings were being subdivided for planting of fruit trees such as peaches and apples. Marketing difficulties were encountered and by 1919 nearly all these plantings had been replaced by vines. The Vinifera section of Nyah was opened to Soldier Settlement in 1919, and Nyah North Extension in 1920. Plantings are mainly sultanas, with some gordos, currants, and citrus.

Six general irrigations and one special pumping for domestic and stock requirements were provided during the year.

The district experienced one of the most difficult seasons on record. Heavy rains throughout February and March not only caused serious damage to the fruit but also made drying conditions most unfavourable.

This year's (1955) crop will amount to approximately 2,000 tons compared with 3,022 tons in 1954, 3,371 tons in 1953, and 2,910 tons in 1952.

The 1955 crop of 2,000 tons represents the amount of dried fruit received at the packing houses, but does not include consignments of fresh fruit to markets or distilleries, which, however, were not heavy.

*Nyah.*

Irrigation Number.	Period.				Acre Feet Pumped.	Equivalent Average Depth per Watering.
						inches.
1	1st September, 1954, to 20th September, 1954	..	..	..	1,842	7·6
2*	27th October, 1954, to 8th November, 1954	..	..	..	1,617	6·8
	13th November, 1954, to 19th November, 1954	..	..	..	..	..
3*	1st December, 1954, to 2nd December, 1954	..	..	..	1,355	5·8
	7th December, 1954, to 20th December, 1954	..	..	..	..	..
4	29th December, 1954, to 17th January, 1955	..	..	..	1,920	7·8
5	25th January, 1955, to 12th February, 1955	..	..	..	1,780	7·3
6	15th April, 1955, to 2nd May, 1955	..	..	..	1,414	6·9
	Total Season 1954-55	..	..	..	9,928	7·0

\* Interrupted by rain.

Figures do not include special domestic and stock watering = 103 acre feet.

*Robinvale.*

Robinvale Soldier Settlement to which water is pumped from the River Murray was established in 1947, and of the 216 blocks now occupied by settlers in that district, 151 are producing dried fruit, the total tonnage produced for 1955 being 5,440 tons.

Details of crop averages are as follow :—

						cwt.
29	blocks,	6th	year	bearing,	average per acre	.. 39·8
24	..	5th	..	..	..	.. 38·1
29	..	4th	..	..	..	.. 39·3
17	..	3rd	..	..	..	.. 32·7
36	..	2nd	..	..	..	.. 35·1
16	..	1st	..	..	..	.. 25·6

Total plantings to date are as follows :—

						acres.
Sultanas and Gordos	..	..	..	..	..	2,715·0
Waltham Cross	..	..	..	..	..	148·0
Other Vines	..	..	..	..	..	13·0
Citrus	..	..	..	..	..	200·0
Mixed Trees	..	..	..	..	..	65·5
Total	..	..	..	..	..	3,141·5

The extension of the settlement continued during the year and a further 35 blocks were prepared for irrigation. The final stage of the irrigation district of 246 blocks will be completed during 1955-56.

A commencement was made with the sub-surface drainage on the section of the settlement east of the railway line.

Commencing in September, 1949, with a capital value of buildings and plant of £13,270 and treating a production of 171 tons, the Robinvale Producers Co-operative Co. Ltd., of which all settlers are shareholders, now operates with a capital value of £115,000 and employes up to 100 persons in the picking season.

Further extensions of buildings and plant are taking place to cope with recent allocation of blocks.

Six general irrigations and one special watering were supplied during the year, details of which are as follows :—

Irrigation Number.	Period.	Acre Feet Pumped.	Equivalent Average Depth per Watering.
			inches.
1	24th August, 1954, to 12th September, 1954 .. ..	1,905	7·2
2	19th October, 1954, to 5th November, 1954 .. ..	1,754	6·7
3	30th November, 1954, to 20th December, 1954 .. ..	1,312	5·0
4	30th December, 1954, to 19th January, 1955 .. ..	2,450	9·3
5	25th January, 1955, to 14th February, 1955 .. ..	2,262	8·6
6	13th April, 1955, to 24th April, 1955 .. ..	955	3·6
	Total Season 1954 55 .. ..	10,638	6·7

Figures do not include special Gordo and Citrus watering 15th to 17th March, 1955.

In the Tol Tol area east of Robinvale, to which water is pumped from the Murray by private diverters, 250 acres have been planted with olive trees and 195 acres to citrus. Although the olive trees are young, 112 tons of olives were harvested for the season, the oil being extracted by a local treatment plant.

Two private packing sheds packed 14,000 cases of oranges, lemons, grapefruit, and mandarins, while over 220 acres of peas and other vegetables were planted in the area and found a ready market in Sydney and Melbourne.

#### *Robinvale Township.*

Considerable expansion took place during the year. Twelve new businesses were established, two new banking chambers were built and one new bank opened for business.

The school which had 30 pupils in 1947 now has an attendance of over 600 and will probably exceed 1,000 pupils in the next two years.

Foundations are being laid for a new £62,000 twelve-bed hospital.

### MECHANICAL BRANCH.

#### *Cohuna, Koondrook, Swan Hill.*

Pumping for irrigation purposes in Northern Victoria was first utilized by the Commission in 1908 in the Cohuna District. Large centrifugal pumps of 50 cusecs output driven by triple expansion steam engines delivered into the irrigation channels some 15 feet above the normal level of the River Murray. Similar pumps were installed at Swan Hill and Koondrook in 1909 and 1910, but all were superseded by the use of gravitational supplies following construction of the Torrumbarry Weir. Some of these pumping units were transferred for use on the Millewa Domestic and Stock water supply system in 1926 and are still giving satisfactory service.

#### *Merbein, Nyah.*

The first high head pumping stations for irrigation purposes were constructed at Nyah and Merbein in 1909, these districts being still served by pumping. The original pumps were steam engine driven centrifugals of revolutionary design, invented by the famous Professor A. G. M. Michell for supply at levels up to 80 feet above normal river.

*Red Cliffs.*

The development of the Red Cliffs Irrigation District shortly after the first World War, required the construction of a large pumping station, using steam turbine driven pumps. The largest units were capable of 110 cusecs output to the main channels 85 feet above normal river level, with smaller relift pumps delivering into channels more than 100 feet above the river.

*Millewa.*

The first major pumping installation for domestic and stock water supply was in 1926 for the Millewa Waterworks District, which covers an area of more than half a million acres in the north-west Mallee. Water is pumped to channel systems at various levels, the highest being 246 feet above normal River Murray level. Large diesel engines were first used by the Commission in 1926, for pumps supplying the highest channels of the Millewa District.

*Robinvale.*

The Robinvale Irrigation District which has been developed for the Soldier Settlement Commission after the Second World War has required the construction of a main pumping station at the river with several relift pumps delivering into a pressure pipe distribution system, as distinct from the channel systems in other districts.

*Further Developments.*

The present trend is for replacement of steam engines by electric motors, as power supply becomes available, otherwise by diesel engines, and installation of more efficient centrifugal pumps of modern design. Important developments have been the conversion of the Merbein pumping station to electric motor drive with power generated at Red Cliffs pumping station, and following the recent construction of a new power station by the State Electricity Commission at Red Cliffs, conversion of the Red Cliffs pumping station to electric motor drive is also in progress.

## PUMPING STATIONS.

The Commission's main pumping stations are situated on or near the River Murray, and supply water for the irrigation districts of Red Cliffs-Merbein, Nyah, Robinvale, and Tresco, and the Waterworks Districts of Millewa, Yelta, and Tyntynder North. Total quantity of water pumped from the River Murray during the year by the Commission's pumps was 98,000 acre feet.

Several smaller pumping stations supply water for domestic and stock requirements to lands above gravitational levels in Waterworks Districts.

Drainage pumping plants for the relief of flooding in low-lying areas are operating in the irrigation districts of Red Cliffs-Merbein, Swan Hill, and Koondrook, and in the Carrum Drainage District.

Pumping plants are also operated by the Commission for water supply to 45 towns mainly in the Wimmera-Mallee Division.

*Red Cliffs Pumping Station.*

The conversion of the Red Cliffs main irrigation pumping station from steam to electric drive progressed during the year with the installation of new 40 and 60-cusec pumps; work is in progress on the installation of a new 80-cusec pump. Arrangements have been made for the transfer of steam boilers and electricity generating plant to the State Electricity Commission.

*Robinvale Pumping Station.*

For extensions to the Robinvale Irrigation District, a new diesel pump of 20-cusecs output has been installed at the main pumping station, and work is in progress on the construction of a new relift pumping station of 25-cusecs output.

*Urban Pumping Plants.*

New plant was installed during the year for water supply to the Urban Districts of Birchip, Cohuna, Hopetoun, Heyfield, Lysterfield, Manangatang, and Woomelang.



## MOTOR TRANSPORT.

The total number of motor vehicles operated by the Commission was 549, including 35 cars, 284 utility trucks, 28 motor-cycles, and 202 other types. Of this total, 134 vehicles were operated by construction contractors at Eildon and Cairn Curran works.

Commission owned vehicles (excluding contractors' vehicles), covered a total distance of 3,456,373 miles during the year, while vehicles owned by the staff of the Commission, and operated on a mileage basis, covered a further distance of 679,813 miles.

Low-loading transporters covered a total distance of 30,250 miles on the transport of heavy earthmoving plant.

Eighty-eight new vehicles were purchased during the year of which 58 were for replacements and 30 additions to the fleet.

## INVESTIGATIONS AND DESIGNS BRANCH.

The work of the Investigations and Designs Branch has been restricted by a shortage of Designing Engineers and Draughtsmen and much overtime has been worked in an endeavour to maintain the rate of plan production necessary for the Commission's construction programme. Investigation and forward planning of new works and projects was much retarded.

During the year, a new research station was formed incorporating the former Engineering Research Branch and the Hydraulic Research Laboratory at Werribee.

## CENTRAL GIPPSLAND PROJECT.

*Glenmaggie Dam.*

Detailed designs are being prepared for the works necessary for the installation of spillway gates on the Glenmaggie Dam to enable its capacity to be increased from 106,000 acre feet to 154,300 acre feet and for the reconstruction of existing outlets.

*Nambrok-Denison Soldier Settlement.*

The design of the irrigation works and the subdivision of the Nambrok-Denison soldier settlement area were completed. One hundred and twenty-nine miles of irrigation channels are necessary to supply water for irrigation to this settlement.

*Main Eastern Channel.*

Designs were in progress for the Main Eastern Channel for the supply of water to the south-eastern portion of the Maffra-Sale irrigation district, a large part of the area being formerly served by the existing Main Northern Channel. The channel, which will have a capacity of 250 cusecs, will be  $7\frac{1}{2}$  miles in length.

*Heyfield Extension Area.*

Preliminary designs for the  $12\frac{1}{2}$  miles of channels required to supply the Heyfield Extension Area situated east of Heyfield and north of the Thomson River have been completed.

## GOULBURN IRRIGATION SYSTEM.

*Eildon Project.*

Plan work for the Big Eildon Dam was completed during the year.

*Remodelling of the Goulburn Channel System.*

Soil surveys were completed by the Department of Agriculture in Boort, Deakin, South Shepparton, and parts of North Shepparton, and Tragowel Plains, and preliminary land classifications were completed in Boort and Deakin Districts.

The preparation of base plans (1 inch to 40 chains) showing works of water supply and land tenure has been continued, 24 plans having been completed and progress made on 11 others.

*Goulburn-Waranga Second Channel.*

Plans and specifications for the four major structures on the Goulburn-Waranga Second Channel and two associated structures on the Goulburn-Waranga First Channel were completed.



*East Goulburn Main Channel.*

Plans and specifications for the enlargement of the first  $31\frac{3}{4}$  miles of the East Goulburn Main Channel between the offtake at Goulburn Weir pool and the Broken River crossing were almost completed during the year. The capacity of the channel is to be increased from 430 cusecs to 1,000 cusecs.

*Waranga Western Main Channel.*

Investigations and designs for the enlargement of the first six miles of the Waranga Western Main Channel to a capacity of 2,500 cusecs were resumed.

*Rodney District Channels.*

Plans and specifications were commenced for the construction of a new main channel in the Rodney District to have a capacity of 450 cusecs.

## LODDON RIVER DEVELOPMENT.

*Cairn Curran Dam.*

Following the decision to recommence the construction of the dam, action was taken to complete structural drawings for the project.

*Reservoir on Tullaroop Creek.*

Field investigations including geological surveys, drilling, sampling, and testing of materials in connection with the Rodborough Reservoir have been continued to provide information for design purposes. The Lands Department assisted with this work by providing and operating a drilling machine.

## MORNINGTON PENINSULA WATERWORKS DISTRICT.

Investigations at the site of a new service reservoir for Mornington are in progress.

*Tarago River Diversion.*

Plans were completed for all work upstream from and including the Tarago tunnel, while plans for the raceline and siphon below the tunnel were prepared during the year in accordance with construction requirements. A one-sixteenth scale model of the proposed diversion weir on the Tarago River was constructed and tested to check the possibilities of scouring below the weir.

## OTWAY WATERWORKS DISTRICT.

The operation of the Otway Waterworks System is being studied to determine what additional works are necessary to increase its capacity in view of the increasing demand for water. Several alternative sites for new reservoirs are being investigated.

## CARRUM DRAINAGE DISTRICT.

Investigations and designs were commenced for the remodelling of the embankments of the main drain from Pillar's Bridge to the Patterson River outlet to the sea.

## BELLARINE PENINSULA WATERWORKS DISTRICT.

*West Barwon Dam.*

Investigations of several alternative sites for the proposed West Barwon Dam have been continued and estimates made of costs of various types of structures. As a result of these investigations a site immediately downstream from the junction of the Munday Creek and the West Barwon River has been selected for the construction of a dam.

*Wurdee Buluc Reservoir Enlargement.*

Documents were prepared for the calling of tenders for the enlargement of the Wurdee Buluc Reservoir as well as detailed drawings for the outlet structure and necessary road deviation.

*Wurdee Buloc Inlet Channel.*

Plans and specifications for earthworks and associated minor structures for the enlargement of the Wurdee Buloc Inlet Channel to an ultimate capacity of 100 cusecs were completed.

## MURRAY VALLEY IRRIGATION DISTRICT.

*Soldier Settlement Area.*

Design work for the expansion of the soldier settlement area by 41 blocks was completed. Drainage investigations were continued and a general basis for drainage design adopted for the first 10 miles of drain No. 6 which will have a capacity of 225 cusecs at its outlet. This drain will ultimately serve 40 per cent. of the soldier settlement area.

## HORSHAM SOLDIER SETTLEMENT.

The design of channel works and internal layouts of 25 irrigation farms was completed.

## ROBINVALE IRRIGATION DISTRICT.

The design of reticulation works for the extension of this district by 80 blocks was completed, together with block layouts for 37 holdings.

## TORRUMBARRY SYSTEM.

*Macorna Channel Flumes.*

Following the completion of the Pyramid Creek flume on the Macorna Channel with precast concrete units made at the Commission's Bendigo Depot, designs were prepared for a similar structure to replace the old timber flume known as Bannagher No. 3 flume. Designs are in progress for the reconstruction of Grinton's flume.

Progressive refinements to design have been made as a result of improved technique and control of concrete manufacture at the Bendigo Depot.

## KOO-WEE-RUP FLOOD PROTECTION DISTRICT.

Investigations were commenced of alternative proposals for the improvement of the Bunyip Main Drain between Cora Lynn and Vervale with a view to ensuring the escape of all flood flows in excess of 4,000 cusecs at or above Cora Lynn.

## LITTLE RIVER WEIR.

Designs were prepared for the raising of the Little River Weir by the provision of flash boards above the existing crest.

## LATROBE VALLEY SUB-REGION.

A comprehensive report was prepared to summarize analyses of the stream flows and meteorologic data available for the Latrobe Valley with a view to indicating available water resources.

Designs have been prepared and investigations carried out on behalf of the Latrobe Valley Water and Sewerage Board for water supply from the Tyers River to the Morwell area.

## GENERAL HYDROLOGY.

Hydrologic investigations including generalized estimates of flood flows based on rainfall data are being carried out. A statistical examination of storm rainfall at a large number of stations in the State has been made and investigations showing area, extent and depth of rainfall for Victorian streams is in progress as well as a statistical examination of flood flows.

## RIVER GAUGINGS.

The gauging of streams in Victoria was commenced in January, 1875, with regular measurements of discharges in the Coliban River at Malmsbury. Since that time the number of gauging stations has been progressively increased. At present there are twelve stations which have been in operation for more than 60 years and records of these stations are particularly valuable as they enable trends in stream flow to be determined.

On the 30th June, 1955, there were 97 daily read staff gauging stations and 55 recorder stations operated by the Commission. This includes seven staff stations and eight recorder stations established during 1954-55. During this period three staff stations were discontinued. The number of stream discharge measurements made during the year was 680 compared with 524 and 466 respectively for the last two years.

## HYDRAULIC RESEARCH.

Experiments at the Commission's Werribee Research Station have been continued and new hydraulic designs developed for checks and drops, buried pipe offtake regulators and pipe culverts. This work has involved numerous tests on models of channel structures of various scales from  $\frac{1}{4}$  to  $\frac{1}{16}$  full size. The tests were made to develop designs providing minimum head loss and erosion. The information obtained is being incorporated into new standard designs for such channel structures.

In addition to hydraulic tests on models, hydraulic tests are also in progress for the calibration of the standard large Dethridge meter. Two propellor type water meters and two pumps were tested, one of the latter being for the Soldier Settlement Commission.

A one-twelfth scale model of portion of the movable weir at Mildura was constructed for the purpose of studying methods of clearing sand accumulations which hinder the movement of weir trestles when they are withdrawn or replaced.

## INVESTIGATION DRILLING.

A motorized auger drill has been obtained for field explorations. This machine will sink holes up to 8 inches in diameter to a depth of 100 feet or more and enable soil surveys and foundation explorations to be carried out expeditiously.

## FILMS.

16mm. technical movie films of the hydraulic experiments on models of the Eildon Dam spillway and the Rocklands Dam stilling basin were made by the Commission's staff to record the hydraulic behaviour of these structures.

## ENGINEERING LABORATORY.

Since 1924, when the Commission first acquired a large compression machine for testing the breaking strength of concrete cylinders, more than 20,000 tests have been made to check the quality of concrete used not only by the Commission but also by other Constructing Authorities in many parts of the State.

The Branch which carried out these and other tests was for a number of years known as the Testing Branch which carried out or supervised all other tests required by the Commission on water supplies or on materials purchased by the Commission.

The first Commission Laboratory for Soil Mechanics was set up in 1940 at Hume Reservoir, and in 1942 the Testing Branch in Melbourne was expanded to become the Engineering Research Laboratory to include soil mechanics and other activities. Since that time soil testing necessary for the design of all major Commission structures has been done at the Melbourne Laboratory.

During the year just completed, the Laboratory was incorporated in a newly created Research Section of the Investigations and Design Branch.

Tests were carried out during the year on various types of cement for the Commission, Government Departments and municipal authorities.

Nine hundred and sixty samples of water were subject to routine chemical analysis and 112 samples were microscopically examined.

Advice on the suitability of water for various purposes or on methods of water treatment were given when required. 1,045 samples of soil were received for testing during the year, mainly from the proposed reservoir sites of the West Barwon River and Tullaroop Creek.

Samples of soil from deposits to be used in the enlargement of Hume and Wurdee Boluc Reservoirs were also tested, as well as materials from other water supply projects.

Tests were also carried out by the Engineering Laboratory on concrete pipes, steel pipes, and castings. Inspection of asbestos cement pipes has been reduced to a minimum because of the suppliers policy of testing each individual pipe according to their own rigid standards.

A summary of materials tested during the year is given in the following table :—

Item Tested.	Quantity in Lineal Feet.	
	For Commission Use.	For other Authorities.
Asbestos Cement Pipes .. .. .	296,678	95,000
Concrete Pipes .. .. .	126,077	18,016
Steel Pipes .. .. .	15,044	9,544
Total .. .. .	437,799	122,560

### SURVEY BRANCH.

When the Commission was first formed, survey groups were attached to the various projects under senior engineers. The largest of these groups, under the control of Supervising Surveyor G. Gibbs, L.S., carried out the surveys of all works under the direct control of Commissioner Dethridge. Mr. Gibbs resigned in 1921 and was succeeded by Mr. A. J. Robin, M.V.I.S.

From time to time survey parties were brought under the control of Supervising Surveyor A. J. Robin until 1939 when the organization became officially known then as the Survey Branch under Chief Surveyor Robin although these titles had been unofficially used for some time.

The Commission commenced about 1938 to train suitable youths under Articles of Indenture to qualify as Licensed Surveyors. This training scheme was stepped up in the immediate post-war years. To date, 22 youths have completed their training and 14 have obtained the qualification of Licensed Surveyor. Unfortunately, 5 of these Licensed Surveyors have left the Commission's employ to obtain higher salaries elsewhere. At the present time, 14 young men are under Articles in various stages of training.

With the great expansion of water supply investigations after the 1939-45 war, the Survey Branch was re-organized by dividing the State roughly into five zones, each under the control of a Superintending Surveyor and by the appointment of an Assistant Chief Surveyor.

To obtain trained Survey Assistants, to work under the direction of Superintending Surveyors, a Training School was established at Numurkah in 1945. Twelve selected chainmen were given three months intensive training in the use of survey instruments and field methods by the then Assistant Chief Surveyor, Mr. R. G. Mason, L.S., M.I.S. (Aust.). This proved so successful that a further 12 men were trained in a similar manner in the following year. A third school was held some two years later. Of the total number of 30 who qualified, 17 remain in the Commission's employ.

At 30th June, 1955, the Survey Branch consisted of 13 Licensed Surveyors, 20 Assistant Surveyors and Articled Pupils, 9 Survey Assistants, 42 Chainmen, 17 Draughtsmen, and 1 Assistant.

During the year, in addition to routine and investigation surveys in the Mornington Peninsula, Bellarine, Central Gippsland, Wimmera, Mallee, and Coliban Districts, surveys on a number of major projects were carried out.

In the Latrobe Valley, the line for an outfall sewer from Rosedale to the sea was located.

Surveys for the enlargement of Mt. Ewen Reservoir were completed in the Otway System, and a trial survey was made in the catchment area for pipelines to tap further streams.

In the East Goulburn Channel System, section plans for 33 miles of the East Goulburn Main and Kaarimba Channels have been prepared, whilst at Eildon, surveys have been completed for 37 areas acquired in connexion with the enlargement of the Eildon Reservoir.

Water reticulation and sewer lines have been set out on the Bolga site for the new township of Tallangatta and further land acquisition surveys have been completed.

## CONSTRUCTION.

## BIG EILDON PROJECT.

On 15th June, 1951, the Premier of Victoria turned the first sod at an official ceremony to mark the commencement of work on the enlargement of Eildon Reservoir from 306,000 acre feet to 2,750,000 acre feet.

This reservoir is situated at the junction of the Goulburn and Delatite Rivers in the Central Highlands of Victoria. The catchment area covers 1,500 square miles of high mountainous country, mostly forest, with an annual average rainfall of 49 inches. The annual flow of the Goulburn and its tributaries at Eildon has varied from 546,000 acre feet in a drought year to 3,302,000 acre feet in a flood, the average annual flow being 1,378,000 acre feet.

The manner in which the enlargement of Eildon Reservoir was to be achieved was by the construction, immediately downstream from the original bank, of a colossal earth and rockfill embankment 260 feet high, 1,200 feet wide at the base, and 3,000 feet long, and containing more than 13,000,000 cubic yards of material.

The Commission, because of the great amount of work it had on hand, recommended to the Government that the construction of the Eildon embankment should be carried out by contract, and tenders were invited throughout Australia and in Great Britain, Europe, and America for the work. The successful tenderer was the Utah Construction Company of America which undertook to complete the embankment in a period of four years and 36 weeks from the 1st January, 1951, the first six months being required for acquisition and assembly of plant.

In spite of a serious setback due to lack of sufficient loan money during the period of the contract which considerably retarded progress, the work was completed by the end of June, 1955, which was within the period specified in the contract.

The work that has been carried out has meant the excavation of 7,000,000 cubic yards of rock and earth for the foundations of the dam and the creation of a great artificial gorge 200 feet wide and up to 250 feet deep to provide a spillway channel for floods around the end of the dam.

The amount of material placed in the dam was 13,400,000 cubic yards of earth and rockfill carefully zoned and consolidated throughout. In addition, 240,000 cubic yards of concrete were used in the spillway and outlet works.

Rock excavations involved drilling 170 miles of holes, mostly 7 inches in diameter in moderately soft stone. Blasting was carried out by means of giant charges of from 10 to 25 tons of explosives at a time; the larger explosions bringing down as much as 145,000 tons of rock in a single blast. The quantity of explosives used exceeded 2,000 tons.

The spillway weir contains 117,000 cubic yards of concrete. It is 196 feet long. Three gates 65 feet 6 inches by 20 feet high are installed in the spillway which has a flood capacity of 119,000 cusecs. The flood capacity of the reservoir outlets will be augmented by 8,000 cusecs when the large turbines to be installed by the State Electricity Commission are placed in the new power house.

Water for power production and irrigation is released from the reservoir through an outlet tower 235 feet high, from the base of which a steel lined tunnel 23 feet in diameter and 1,256 feet long leads to the State Electricity Commission's power house.

About two miles downstream from the Eildon Dam, a concrete weir with three steel gates 65 feet 6 inches wide and 20 feet high has been built to provide a detention pondage of some 3,000 acre feet capacity. The purpose of this pondage is to enable the rapidly varying flows from the turbines—which will be operated in accordance with changing power demands—to be re-regulated to avoid rapid changes in water level along the Goulburn River downstream.

The most modern earth-moving plant available was brought to Australia from America by the contractors for the Big Eildon Project, an important item being the Euclid Loader, a giant machine powered with a 260 h.p. engine and drawn by two 175 h.p. tractors. This machine excavated earth and clay and loaded it into very large trucks at rates up to 30 tons in less than a minute. The maximum output obtained by the contractors in 24 hours, covering two shifts, was 37,000 cubic yards, and some weeks 200,000 cubic yards of material were excavated by the loader.

Other major items of plant used were twenty-seven 25-cubic yard bottom-dump and twenty 15-cubic yard end-dump trucks, a 5½-cubic yard excavator, four 3½-cubic yard excavators, together with power drills, shovels, graders, tractors, Sheepsfoot rollers, and many other items.

At the height of construction the number of men engaged on the project reached 1,730.

An important policy decision made in regard to the housing of construction workers was to provide for a number of men to be accommodated in a town which could become a permanent asset after the completion of the dam. Therefore, in addition to building large temporary hostels for single men, 300 houses complete with internal fittings were imported from Great Britain to house married staff and workers and to provide the nucleus of the permanent town. Good roads were built and water, electricity and sewerage services were provided. Modern workshops for the servicing of construction plant were erected to designs which would facilitate their conversion to factories later. Provision was also made for adequate recreation and sporting facilities and other amenities.

The capacity of the reservoir, as already stated, is 2,750,000 acre feet. Its area at full supply level will be 34,200 acres and the waters of the storage when full, will extend 23 miles up the Goulburn River and 23 miles up the Delatite River.

The enlarged Eildon Reservoir will make it possible to double the amount of water supplied to irrigators by the Goulburn System and work on the enlargement of channels serving the Goulburn Irrigation District has already been commenced.

The Commission's action in building a permanent town has been amply justified, most of the houses and the workshops and other buildings being sold to the Masonite Corporation and Australian Consolidated Industries for the establishment of new industries at Eildon.

The enlargement of the Eildon Reservoir has necessitated also the transfer of the small town of Bonnie Doon. This work was practically completed during the year and 29 houses and 2 stores have been transferred to a site adjoining a new route on the Maroondah Highway.

#### HUME RESERVOIR ENLARGEMENT.

##### *Tallangatta Township Removal.*

Work on the transfer of the township of Tallangatta to its new site at Bolga which commenced in July, 1952, has been continued.

The construction of roads has been completed except for minor resurfacing and the sealing of certain major streets. The construction of concrete footpaths in the shopping centre was commenced and substantial progress has been made during the year on the construction of concrete kerb and channelling. The water supply system to serve the new township came into operation during the year and is functioning satisfactorily. The construction of sewer reticulation mains by contract was commenced just prior to the end of the year.

Negotiations regarding the construction of shops, industrial premises, churches, and other public buildings have been finalized, with the exception of some isolated cases. Considerable progress has been made on the preparation of most replacement buildings, and in most instances plans have been completed or are nearing completion.

Fourteen shops have been completed during the year and are almost ready for occupation, and a new Department Store is nearing completion. Work has been started on a cafe and residence and on a garage.

Construction of the new Butter Factory commenced just prior to Christmas, 1954, and had advanced to a stage enabling transfer of the machinery to commence on 27th May, 1955. The factory is scheduled to commence production at the new site by early August, 1955. Construction of the factory office and manager's residence is proceeding.

New offices for the Shire of Towong were commenced and good progress had been made by the end of the year.

Contracts were let for the construction of an Anglican Church and Rectory and for a new Memorial Hall.



A tender was accepted for the construction of five brick houses and contracts for a further ten brick houses were let towards the end of June, 1955. Three residents have arranged private contracts for the construction of their replacement dwellings.

The transfer of the licence for the Victoria Hotel was approved by the Licensing Court and excavation of the foundations for the new building was commenced.

Plans for a new boarding-house have been completed and prefabricated housing units are on the site.

Eighty-six houses were on site in the new township at the end of the year, comprising 35 dwellings removed from the old town, 13 prefabricated housing units transferred from Eildon, 20 prefabricated houses of the "Winwood" type, and 12 houses similar to those from Eildon but built on site from precut panels, also 6 "Winwood" type dwellings erected by the Victorian Railways Department to house their employees.

Including Commission staff and employees, 51 families were residing in the new town at the close of the year.

Early difficulties were found in obtaining tradesmen and minor contractors to rehabilitate houses after removal to the new site but the rate of rehabilitation was improving rapidly by the end of the year.

The Victorian Housing Commission has agreed to take over a minimum of ten "Winwood" type houses to accommodate the tenants of houses whose owners have elected not to transfer them to the new town, and delivery of an additional ten "Winwood" houses to replace these will commence early in the new year.

The Country Roads Board has continued to make good progress on the construction of road deviations throughout the area.

A tender for the construction of a large embankment to take the road and railway across the Mitta Mitta River near Tallangatta was accepted and good progress has been made on the earthworks. Tenders have been called for the construction of the necessary road and rail bridges.

The Railways Construction Branch accepted a tender for the construction of rail deviation earthworks at Ebden, Two Bays Creek, and Tallangatta. The Ebden and Two Bays Creek earthworks are approaching completion and the Bolga deviation will be commenced early in the new year.

Plans for the new railway station, shunting yards, and stock trucking yards have been finalized, and construction of a road bridge over the railway on the western approach to the new township is proceeding.

#### MURRAY VALLEY IRRIGATION DISTRICT.

The Murray Valley Irrigation District has an area of 269,000 acres, of which 64,000 acres are devoted to Soldier Settlement and subdivided into 440 dairy blocks and 109 fruit blocks, and 31 blocks retained by the former owners of the land. In all 1,367 holdings in this district have been connected to the irrigation system.

Work was started in June, 1935, with the excavation by horse teams of the Yarrawonga Main Channel. It was interrupted by the war but by 1950 over 90 per cent. of the channels had been excavated by horse teams. By June, 1950, 66 per cent. of the area was supplied with water. During that year an average of 400 men were employed on the project, 100 of whom were on land preparation. In that year also the Commission took over the preparation of land for the Soldier Settlement Commission.

From 1951 mechanical equipment was used for the construction of channels in this district in place of horse teams. All farming work is now done by dozers and draglines and as a result it is almost impossible to obtain a ten-horse scoop team.

By April, 1955, all the work on the supply channels was completed. 591 miles of channels have been excavated involving the removal of 8,729,200 cubic yards of earth. In addition, 4,879 structures have been installed.

Since the Commission took over the responsibility for the preparation of blocks for the Soldier Settlement Commission in 1950, the following work has been performed—Clearing 3,656 acres, ploughing 28,813 acres, graded and check banked 27,000 acres, deliver channel formed 785 miles, scoop channel excavated 272,510 cubic yards, lucerne sown 12,037 acres, pastures sown 13,252 acres, orchards planted 1,328 acres.



All the blocks have been allocated in the area and there now remain only fourteen dairy blocks to be sown down to complete the whole of the Soldier Settlement in this area where more ex-servicemen have been placed on the land than in any other part of Australia.

In August, 1954, nine chains of bituminous membrane lining was laid on a section of spur 3-5 in an endeavour to stop seepage into a sand drift layer passing under the channel. Indications so far are that it has stopped the seepage, and the membrane when inspected after twelve months showed no signs of deterioration.

#### CAIRN CURRAN RESERVOIR.

A storage of 120,000 acre feet capacity is being created by the construction of an earthen dam across the Loddon River and a subsidiary embankment across a saddle in the surrounding high lands.

Construction ceased during 1952 because of a reduction in loan funds at that time. At that stage the subsidiary embankment had been completed but 500,000 cubic yards of material remained to be placed in the main embankment, and approximately 10,000 cubic yards of concrete was required to complete the spillway of the dam.

The offer of Utah Australia Ltd. to complete the dam under contract was accepted by the Commission on the 7th February, 1955, and on the 21st of February the placing of material had commenced on a two shift basis, using plant already on the works, supplemented by plant and labour which became available from the Big Eildon Project. Concreting operations commenced late in March on the intake tower and spillway.

For the period ended 30th June, 1955, 349,000 cubic yards of material had been placed in the embankment and 7,800 cubic yards of concrete had been poured since recommencement of the work, and installation of the permanent metal work had begun.

It is expected that the project will be completed during the coming year.

#### TARAGO RIVER DIVERSION.

Work was continued at an increased rate on this project which, when completed, will permit additional and urgently required water to be supplied to the Mornington Peninsula Waterworks District.

The site of the Tarago River Diversion Weir was cleared and the driving of timber piles was 25 per cent. completed at the end of the year.

The construction of the five-mile section of the Tarago Main Race upstream of the tunnel is now about 80 per cent. complete, 7,316 feet of reinforced concrete bench flume and 1,699 feet of concrete-lined channel being completed during the year, together with five siphons and other structures.

The contractors for the excavation of the remainder of the 10,499 feet tunnel from the downstream portal, Sainrapt and Brice (Aust.) Pty. Ltd., excavated a further 3,394 feet during the year and 1,541 feet remain to be excavated. Running ground was encountered in decomposed granodiorite which made it necessary to deviate the tunnel, increasing the length by 17 feet.

Concrete lining of part of the upstream section of the tunnel was continued and 865 feet were lined. An additional 146 feet of the floor was concreted.

Work is in progress on 3,150 feet of concrete pipe siphon and 4,040 feet of channel near Bunyip.

The 4,390 feet rising arm of the Bunyip Valley Siphon has been completed, and a temporary pumping station has been installed on the Bunyip River to supply additional water for the Mornington Peninsula next summer prior to the Tarago River water becoming available.

#### CENTRAL GIPPSLAND IRRIGATION PROJECT.

During the year channel construction in the Nambrok-Denison area continued. Water was supplied to a further 30 blocks of which 17 were allocated to ex-servicemen under the Soldier Settlement Scheme.

Cultivation, grading and sowing of land on behalf of the Soldier Settlement Commission has proceeded. Twenty-seven blocks were sown down during the year, making a total of 4,340 acres in 73 blocks completed since the inception of the scheme. The standard of pasture development has been generally very high, and excellent returns are being obtained from the blocks which have been established for two years or more.

Owing to financial limitations, work was confined principally to channel construction and land development.

At Glenmaggie Dam, the excavation of two short tunnels for new outlet pipes has been practically completed and some preliminary work in connexion with plant and equipment for the erection of spillway gates was put in hand.

Construction of drainage channels was commenced during the year and two miles of main drain were excavated. This work will improve drainage facilities in the southern portion of the Nambrok-Denison settlement.

#### LODDON WEIR.

On the 20th September, 1954, construction commenced on the installation of mechanically operated steel gates to replace manually operated drop-boards on the Loddon Weir which was constructed in 1928 to divert Loddon water into the Waranga Western Channel extension and to allow this channel to enter and leave the river immediately above the structure without the need for a siphon or flume type crossing.

The structure itself is of reinforced concrete construction with 28 equal openings each 10 feet high by 6 feet wide between piers. Manipulation of the wooden drop bars in flood time was slow, difficult and somewhat dangerous, and for this reason and to reduce leakage losses, it was decided to replace the drop bars with vertical-lift steel gates. The installation of the gates was completed by the end of March, 1955.

#### TORRUMBARRY IRRIGATION SYSTEM HEADWORKS.

##### *National Channel Headworks Regulator.*

Among important works being carried out to improve the efficiency of the Torrumbarry System is the construction of a new headworks regulator on the National Channel to replace the old timber headworks built in 1889. Practically all of the Torrumbarry Irrigation System is supplied from the River Murray via the National Channel, which has a capacity at full supply level of 1,600 cubic feet per second.

The old regulator had reached the end of its useful life and it was decided to replace it by a modern reinforced concrete structure designed as a combined road bridge and regulator with three gate openings 15 feet wide and 20 feet high.

Plant and equipment were assembled and preliminary work on the site was completed during April, 1954, the final month of the irrigation season. Immediately the irrigation season ended, the foundations were dewatered and construction was commenced and scheduled for completion to full supply level by the end of August, 1954.

Owing, however, to an early demand for water for irrigation and the low level of Kow Swamp, it became necessary to put the National Channel into service on July 30th, some three weeks earlier than intended. This meant that certain of the work below full supply level had to be left until the 1955 off-irrigation season.

All of the foundation work and some of the superstructure was completed in the twelve weeks between the end of the irrigation season in May, 1954, and the recommencement of irrigation in August, 1954, when the works were then closed down. The work was resumed in May, 1955, and the structure was approaching completion at the end of the year. It is expected that the large steel gates will be installed during the coming year.

##### *Pyramid Creek Flume.*

A precast reinforced concrete elevated flume 30 feet wide, 5 feet 3 inches deep and 223 feet long, with a capacity of 350 cusecs, and associated earth channel deviations were constructed to replace the old Pyramid Creek flume.

##### *Bannagher No. 3 Flume.*

Work was commenced during May, 1955, on the replacement of the Bannagher flume by precast reinforced concrete elevated flume 20 feet wide, 5 feet 3 inches deep, 180 feet long. The flume, which has a capacity of 132 cusecs, is expected to be finished in August, 1955.

## GOULBURN-WARANGA SECOND CHANNEL.

The duplication of the Goulburn-Waranga Channel, which conveys water from the Goulburn River at the Goulburn Weir to the Waranga Basin, has been the first and most important work to be undertaken to enable advantage to be taken of the additional waters made available by the enlargement of Eildon Reservoir.

The original Goulburn-Waranga Main Channel—to be known in future as the Goulburn-Waranga First Channel—was completed in 1891, with a designed capacity of 1,723 cusecs and length of  $23\frac{1}{2}$  miles. The question of increasing its capacity was investigated by the Parliamentary Public Works Committee in 1946. That Committee decided that a total channel capacity of 3,000 cusecs was necessary to enable full use to be made of the waters available from the Big Eildon to those parts of the Goulburn System on the west of the Goulburn River, and recommended that the best method of achieving this capacity was by the construction of a duplicate channel of 1,500 cusecs capacity.

Construction of the duplicate channel or Goulburn-Waranga Second Channel, as it will now be called, is being carried out under contract to the Commission by McDonald-Morrison Knudsen Co. of Sydney. The contract covers both earthworks and minor structures for a total length of 14 miles.

The earthworks involve the excavation of 5,032,000 cubic yards of earth, mainly soft decomposed grey mudstone containing a percentage of hard ironstone lumps with occasional reefs of sandstone, ironstone or limonite. The depth of the cut varies from 7 to 63 feet and the bed width from 20 to 48 feet. The water depth will be mainly 12 feet but up to 15 feet in places.

In addition to excavation of the channel, a large offtake regulator at the Goulburn Weir and seventeen other major structures have to be constructed. At the end of the period under review, 90 per cent. of the channel work had been carried out and all earthworks should be completed by the end of 1955. Good progress has also been made on the Offtake Regulator and other structures.

## PLANT.

During the year, the Commission used mechanical plant of a total value of £3,950,000 of which £2,450,000 represented plant and motor vehicles used and maintained on the Eildon construction project. On other projects plant was used to the value of £1,500,000 of which £260,000 represented motor vehicles. Much of the maintenance work on this plant was carried out at the Central Plant Workshops at Bendigo which were established in 1946.

The workshops, stores, and administrative buildings, cover an area of 44,550 square feet.

Low-loaders transport heavy equipment for overhaul and repair to the workshops from the Commission's water conservation projects throughout Victoria. In addition to carrying out work for the Commission itself, the workshops also overhaul for maintenance purposes much plant for other Government organizations.

In January, 1954, a section of the workshops was equipped for precasting concrete flumes and other structures, one of the first works of this type carried out there being the large flume at Pyramid referred to elsewhere in this report, the completed structure being 30 feet wide, 5 feet 3 inches deep, and 223 feet long and having a capacity of 350 cusecs.

During the year the workshops were actively engaged upon the repair of plant and vehicles for the Commission and other authorities and the manufacture of precast components for the Commission's works.

## TOWN WATER SUPPLIES.

## BELLARINE PENINSULA SYSTEM.

In 1927 a water supply scheme was commenced to enable water to be conveyed from the headwaters of the Barwon River in the Otway Ranges to the towns of Anglesea, Torquay, Barwon Heads, Ocean Grove, Point Lonsdale, Queenscliff, Drysdale, and Portarlington, and to supply water in bulk to meet a major part of the requirements of the City of Geelong. All these towns were supplied by 1934.

By the end of 1945 the number of services supplied in the Commission's Districts was 1,969, and Geelong's demand on the System had reached over 1,000 million gallons per annum. Ten years later, at the end of 1954-55, the number of services in the Bellarine towns had increased to 3,996, while the requirements of Geelong had reached 1,260 million gallons per annum and were very rapidly increasing.

Arrangements were completed during the year for the transfer to the Geelong Waterworks and Sewerage Trust on the 1st July, 1955, of the control and development of the headworks section of the Commission's Bellarine Peninsula System. Clauses in the agreement between the Commission and the Trust safeguard the interests of water consumers in the Bellarine towns from Drysdale to Anglesea including Birregurra for which towns the Commission will purchase water from the Trust in bulk.

Contracts were let during the year for the enlargement of the Wurdee Boluc Reservoir from 10,000 to 15,000 acre feet and for the enlargement of the inlet channel in the earthworks section from a capacity of 50 cusecs to 100 cusecs.

Work was commenced on the laying of an extension of  $4\frac{1}{2}$  miles of new main to provide a domestic and stock water supply to 45 rural properties in the Wallington District.

#### THE COLIBAN SYSTEM.

The Coliban System was started by the Victorian Water Supply Department in 1861 to bring water from the central highlands at Malmsbury to meet the urgent needs of Sandhurst—now Bendigo—and other gold mining towns.

The system of 406 miles of aqueducts and channels and 350 miles of pipelines supplies water to the City of Bendigo, Borough of Eaglehawk, the Towns of Castlemaine and Maldon, and eighteen other townships.

The total number of services from the System on 30th June, 1955, was 15,584.

In addition to town supplies, irrigation water is supplied annually to some 7,700 acres of land, subdivided approximately into 3,400 acres of orchards, 800 acres of tomatoes, and 3,500 acres of native pastures, lucerne and hay, and other crops.

The main storages of the Coliban System comprising the Upper Coliban, Lauriston, and Malmsbury Reservoirs with a total capacity of 56,100 acre feet were filled in December from a less-than-average level in the previous May to August period. Filling of the storages was protracted on account of the inadequacy of winter rains on the catchment. Due to the long dry autumn, water usage in towns exceeded that of the preceding three years but all water requirements for the year were met.

Owing to limitation of loan funds, improvements, and extensions of reticulation were carried out to a limited extent only, and then on a basis requiring not more than two chains of pipe for each erected house.

Due to interruptions in supply resulting from defects in the old wood main eleven miles in length supplying Maldon, the storage at that town reached such a low level in summer that a temporary imposition of restrictions in the use of water in the reticulated area was unavoidable in order to allow for replenishment of the local storages after repairs to the main had been completed.

#### MORNINGTON PENINSULA SYSTEM.

The Mornington Peninsula water supply system was commenced in 1916, the principal objective at that time being to give a supply of water to the Flinders Naval Base. The initial project involved the tapping of the Toomuc Creek and the conveyance of the water by channel to a reservoir at Beaconsfield.

From this reservoir it was to be conveyed by pipeline to the Naval Base and other parts of the Peninsula. This work and the construction of reservoirs at Frankston and Mornington was completed by 1921 when the greater parts of the Mornington, Frankston, Seaford, Carrum, Chelsea, and Edithvale areas were given a reticulated water supply.

In 1920, the Commission took over the works of the Dandenong Waterworks Trust and later constructed works to supply water to Dandenong from the Mornington Peninsula System.

In 1925-26 the water race from the Beaconsfield Reservoir was extended beyond the Toomuc Creek to tap the Bunyip River to provide an increased and more assured supply of better quality water.

In 1928-39 the construction of the Lysterfield Reservoir was carried out to supplement the Bunyip River supply, this additional supply being necessary to meet the ever growing demand upon the stream.

By 1941 the Mornington Peninsula water supply system had been extended to supply the bayside areas from Dromana to Portsea. By the end of 1945 there were 12,000 separate services from the system and in ten years this number has been more than doubled to 27,000.

The domestic and industrial development in the Mornington Peninsula system, however, has been probably greater than in any other part of Victoria outside of the metropolitan area, and in order to meet the ever growing demand it was decided to tap the Tarago River.

This work was commenced in January, 1950, but in May, 1952, it had to be discontinued owing to financial restrictions upon the amount of money available to the Commission from the Loan Council. However, work was resumed in April, 1954, and it is expected that the Tarago River will provide additional water supplies at the head of the Mornington Peninsula system at the end of 1956.

Earth channel enlargement and siphon duplication were continued on the Bunyip Main Race as part of the works required to increase its ultimate capacity to 42 cusecs.

The number of new services throughout this fast developing district for the twelve months under review was 1,949.

Following dry conditions in that district during late spring and summer, restrictions throughout the system were imposed on the use of water for domestic gardens. Initial restrictions which prohibited the watering of domestic gardens except by hand methods and limited the hours of watering for sports areas came into operation on the 13th October, 1954. Further restrictions had to be imposed on the 3rd December, 1954, by permitting domestic water of gardens by hand only between the hours of 5.30 p.m. and 8.00 p.m.

The second stage of restrictions were lifted on the 7th March, 1955, and restrictions completely removed on the 1st April, 1955. Restrictions will, however, be unavoidable every summer until funds can be obtained to increase the capacity of main pipelines throughout the system.

A new pipeline of 27-inch, 21-inch, and 18-inch diameter between the Frankston and Mornington Reservoirs was practically completed, and progress was made on enlarging the pipeline between the Bittern Bifurcation and the Frankston Reservoir to a 36-inch diameter main.

The 24-inch diameter main in Princes Highway was extended to enable supply to be given to the new Housing Commission's Estate at Doveton.

Work was also carried out on enlarging the channel between the Lysterfield Reservoir and the Hallam Basins to meet increased industrial demands for water in East Dandenong.

#### OTWAY SYSTEM.

The Otway water supply system to provide a reticulated water supply to the towns of Camperdown, Terang, Cobden, and Allansford, and also to supply water in bulk for the City of Warrnambool was commenced in 1935 and completed in 1938.

A catchment area of approximately three square miles of heavily timbered country in very high rainfall area was purchased by the Commission near Wyleangta in the heart of the Otway Ranges.

Water is diverted in this area from the Arkin's Creek and conveyed through a pipeline some 70 miles in length to storages at Camperdown, Mt. Ewin, and Tank Hill, the total capacity of these reservoirs being 285 million gallons.

The total number of services supplied by the Otway water supply system is 2,660, in addition to which 310 million gallons is supplied annually to the City of Warrnambool.

As in other water supply systems under the control of the Commission, there has been a very rapid increase in the demands for water from the Otway pipeline which is at present considerably overtaxed in a dry year.

Investigations are therefore now being made with a view to an enlargement of the headworks.

In recent years there has been a marked increase in the use of reticulated supplies of water by farmers adjacent to the main pipelines of this system and a number of extensions has been made to the rural communities of Carpendeit and Carlisle River.

Diversions from the headworks kept the district storages at full capacity until mid-December. From that time until the end of April the heavy demand lowered the storages to 23 per cent. of full capacity early in May when increasing flow from the catchment exceeded diminishing demand from water users and storages started to refill.

The quantity of water supplied in bulk to the Warrnambool Trust for the year ended 31st October, 1954, was 366,497,000 gallons.

#### WONTHAGGI DISTRICT.

During the year a contract was let for the cleaning and cement mortar lining in situ of the full length of  $8\frac{3}{4}$  miles of the 12-inch diameter cast iron main between Lance Creek Reservoir and the high level basin in Wonthaggi. This main was originally laid in 1911 but corrosion since then has reduced its capacity.

The work of lining to restore its carrying capacity was commenced on the 6th May, 1955, and by the end of June, 11,320 feet had been completed.

#### WIMMERA-MALLEE TOWNS.

Full supplies were delivered through the Wimmera-Mallee Domestic and Stock Water Supply System to the storages of 37 townships having pipe reticulation in the Wimmera-Mallee.

In addition bulk supplies of water were made available from the system to the City of Horsham and the nine towns of Charlton, Donald, Korong Vale, Murtoa, St. Arnaud, Stawell, Underbool, Warracknabeal, and Wedderburn, which are controlled by local Waterworks Trusts.

Extensions were made to supply new Housing Commission houses in the Dimboola, Natimuk, Nyah West, Ouyen, Birchip Urban Districts, and a new 12,000 gallon high-level tank was erected to serve the high area in Sea Lake.

The pumping plants of the Woomelang, Berriwillock, Nullawil, Birchip Urban Districts were changed from mechanical to electrical power, and Hopetoun urban changed from direct to alternating current.

#### NEW SERVICES AND INSTALLATION OF WATER METERS IN THE MAIN URBAN DIVISION.

The table summarizes the position in regard to new services and the installation of meters in the following districts :—

District.	Number of New Services 1954-55.	Total Number of Services at 30th June, 1955.	Meters Installed during Year 1954-55.	Total Number of Meters.	Percentage of Services Metered.
Coliban .. .. .	211	15,584	1,294	12,450	80
Mornington Peninsula .. .. .	1,949	27,573	232	18,080	66
Bellarine Peninsula .. .. .	183	3,996	2	2,917	73
Otway .. .. .	99	2,660	157	2,551	96
Wonthaggi .. .. .	7	1,643	..	90	5
Total .. .. .	2,449	51,456	1,685	36,088	..



## WATERWORKS TRUSTS AND LOCAL GOVERNING BODIES.

There are now 150 local authorities supplying water for domestic, industrial, and agricultural purposes to country towns and to some rural areas throughout the State. These authorities comprise 131 Waterworks Trusts, 17 local Governing bodies, 1 Water and Sewerage Board, and 1 Irrigation Trust, all of which operate under the general supervision of the Commission.

The Boolara Waterworks Trust was constituted during the year and new supplies have been installed at Herne's Oak and Tooborac. In addition town supplies were provided with the assistance of Government grants at Serpentine and Tallarook, both of which are administered by local Shire Councils.

In November, 1954, construction was authorized on eighteen new town supplies but delays in the supply of pipes and other materials have retarded progress on these works.

Additional works involving an expenditure of £720,000 were authorized during the year, the greater portion of which was expended by the 30th June, 1954.

In addition, £280,000 was advanced to the Latrobe Valley Waterworks and Sewerage Board for expenditure on the Tyers River water supply project. The purpose of this work is to provide water for the Morwell briquetting plant of the State Electricity Commission and for the new gasification plant, and to provide supplementary bulk supplies of water for the towns of Morwell and Traralgon.

During the year the Board completed the construction of a 42-inch pipeline to the Morwell Service Basin and commenced 42-inch and 27-inch distribution mains from that Basin to the briquette factory and gasification plant at Morwell.

The Geelong Waterworks and Sewerage Trust which operates solely by means of loans raised from other than Government sources borrowed £500,000 during the year. The Geelong Trust completed construction of the new Bostock Reservoir which will almost double the output obtained from the Trust's East Moorabool System in dry periods.

The Broadford Waterworks Trust proceeded with the enlargement of a further section of the main pipeline and continued the reconstruction of the town reticulation system.

The Mildura Urban Trust commenced the construction of a new reinforced concrete elevated storage of 600,000 gallons capacity, the largest of its kind in the State.

Improvements to storage and reticulation systems were carried out in many other country towns throughout the State.

## SEWERAGE AUTHORITIES.

There are at present 60 sewerage authorities controlling sewerage districts in country towns under the general supervision of the Commission.

Because of shortage of finance since 1942 only 30 of these authorities have been able to put their sewerage systems into operation.

In addition there is the Geelong Waterworks and Sewerage Trust which controls the sewerage of Geelong and suburbs and the Latrobe Valley Water and Sewerage Board now exercising sewerage functions within the Latrobe Valley. Both these authorities operate under special Acts.

During the year loans raised by country sewerage authorities from private sources amounted to £610,000, an increase of £248,000 on the previous year. Government funds were also advanced to these authorities to the extent of £70,000 making the total loans raised under the Sewerage Districts Acts £680,000. In addition £175,000 was borrowed by the Geelong Waterworks and Sewerage Trust, and Government loans amounting to £140,000 were advanced to the Latrobe Valley Water and Sewerage Board. The total expenditure on sewerage for the year was therefore £995,000.



Tenders were accepted for the construction of new sewerage systems in Maryborough and Stawell where the first stages of the works are being financed wholly by private borrowing. Installation of sewerage works was also commenced at the site of new Tallangatta township. The commencement of these three new projects represents the first substantial progress achieved for some years towards the carrying out of the large programme of approved sewerage works now estimated to cost £7,500,000. This programme has been severely curtailed in recent years because of shortage of loan funds.

The Latrobe Valley Water and Sewerage Board accepted tenders for the supply of pipe and for the construction of the section of the main outfall between Morwell and Rosedale. Investigatory work and detailed planning is proceeding for the construction of the remainder of this outfall which, when completed, will convey industrial wastes from the gasification plant and the Australian Paper Manufacturers works, as well as domestic sewerage from the Morwell area, to the sea.

## RIVERS AND STREAMS DIVISION.

### FLOODING.

Rainfall for the first four months of the year 1954-55 was generally not conducive to flooding; July and September were below average for most of the State, August somewhat above average in the central and north-west, and October also above average in most of the eastern half, with some heavy falls near the end of the month.

November, however, was a very wet month, with rainfall above average for most of the State. Rainfall in some localities was up to four times the normal, in two instances six times normal. Rainfall in Melbourne—811 points for the month—was the highest since 1855, and one fall of 286 points was a record for November. Flooding occurred in Gippsland, Yarram being the worst affected, and also in the Barwon River area and along the Yarra, Maribyrnong, and Werribee Rivers. Local flooding and traffic dislocation occurred in the metropolitan area on five occasions.

Further heavy rains in December caused some flooding in country areas, particularly in the Kyneton, Benalla, and North-eastern areas.

A dry period followed till the end of January. Thunderstorms in the middle of February caused some flooding in the northern part of the State, particularly in the Goulburn Valley, causing extensive damage to fruit crops, and the rainfall for the month was above average for most of the State. In March the rainfall was above average for the north-western, northern, and north-eastern parts of the State, but April was below average except in the south-west. Rains in May were general, totals being above average except in East Gippsland, part of the north-east and central area, and a few areas in West Gippsland and the Western District. June was above average for most of the State except Gippsland.

A noticeable feature of the year was the frequency of dry conditions in East Gippsland, for most of which the rainfall was below average for eight or nine months of the year.

### RIVER IMPROVEMENT.

For a long period during the earlier years in Victoria little attention was paid to the care of the streams of Victoria outside the metropolitan area. As a result, many rivers and streams deteriorated seriously; some became blocked with logs and willow growth, increasing the flooding of adjoining lands, while on others erosion of the banks went on at an ever-accelerating rate and thousands of acres of excellent river flats were swept away.

The Commission, however, has for many years past taken a keen interest in the question of the improvement and control of the rivers and streams in Victoria. The late Commissioner A. S. Kenyon made a long and systematic study of Victorian rivers, and furnished advice to various authorities for the carrying out of remedial works where erosion and flooding were causing difficulties on streams.

The creation of the Rivers and Streams Fund in 1930 was a big step forward in getting the streams in Victoria under control. Reference to this Fund is made elsewhere in this Report.

During the Depression, large sums were made available from Unemployment Relief Funds towards the cost of clearing and other improvements to rivers. Much valuable work was affected therewith, but in only one or two cases was it possible to make provision for systematic maintenance, and after a while it became obvious that unless such provision was made, work done on streams was largely wasted.

The *River Improvement Act* 1948 made provision for this maintenance possible by authorizing the formation of River Improvement Trusts with power to carry out river improvement works on the streams and to levy rates on the lands within their districts. These trusts act under the general supervision of the Commission. In addition to River improvement, some of them carry out works of drainage to improve the land along the stream.

The constitution of the Mitta Mitta River Improvement Trust during the year has brought the number of these trusts to twelve. Ten of them are river improvement trusts, and two are drainage trusts. These trusts have done very valuable work, though their activities have been largely limited by lack of sufficient loan funds. The Trusts have, however, been given power to borrow money privately, and this has enabled the amount of money devoted to River Improvement work to be considerably increased.

The application for a river improvement district and trust for the Macalister River has been under review. An application was lodged for a trust on the Merri Creek near Wallan, but owing to some local objections this was referred back to the applicant Shire Council. Other applications for trusts along the Powlett, Glenelg, and Mitchell Rivers and in the Strathdownie area have been under preparation.

The Lough Calvert Drainage Trust carried on during the year with its work of draining accumulated floodwater from portion of the "creeping lakes" area flooded in 1951 and 1952. By June, 1955, some 10,000 acres had been freed of water and were being brought back into production.

The Avon River Improvement Trust carried out works to check the very active erosion along that river, particularly where the Commission's channels and other public works were threatened.

The Latrobe Trust continued with its programme of river clearing and drainage, and commenced operations for the control of erosion on Eaglehawk Creek, silt and flooding from which has several times blocked the main Traralgon-Maffra road and railway.

The King, Kiewa, Ovens, Tambo, Mitta Mitta, Snowy, and Tarwin Trusts carried out river clearing, erosion and other improvement works.

#### RIVERS AND STREAMS FUND.

The Country Roads Board Fund Act No. 3944 of 1930 provided that fees received in respect to water frontages, which had formerly been paid to the Country Roads Board, should be paid into an account at the Treasury to be called the "Rivers and Streams Fund", and that the money standing to the credit of this Fund should be applied on the recommendation of the Commissioner of Public Works, after consultation with the Commission, for or towards the removal of obstructions from streams and the prevention of erosion of the banks thereof.

The *River Improvement Act* 1948 transferred from the Commissioner of Public Works to the Minister of Water Supply, the power to make grants from the Fund, and the Commission, in consequence took over the administration of the Fund as from January 1st, 1949.

Grants from the Fund are normally made on a contributory basis. They are made only to public bodies, usually municipal councils, and not to individuals, but landholders may ask a municipal council to apply for grants and carry out remedial works for the benefit of their properties, making any necessary arrangements with the councils for the finding of the local contribution.

Up to 30th June, 1955, some 1,404 grants had been made from the Fund, the total of these being over £310,000 ; taking into account the local contributions, this represents a large expenditure on stream improvement. Over a hundred municipal councils have received grants from the Fund, besides various Government departments and other public bodies.

Over the years this Fund has played a very valuable part in the improvement of the streams of Victoria. Although the resources of the Fund are restricted, so that grants from it have had to be of limited size and no very large works could be financed from it, the Fund has made possible a great deal of useful work in saving streams from deterioration and private and public property from damage. Moreover, it has provided valuable experience in determining the most effective and economical technique for the control of streams, and, by showing what is possible in the way of stream improvement, it has aroused widespread interest in stream control work and paved the way for larger and more systematic operations.

It became obvious in recent years that the demand on the Fund was greater than its resources could meet, and that its revenue would have to be increased. To this end, the *Water Act* 1954 made provision that the net receipts from fees for permits or licences to divert water from streams should also be paid into the Fund.

The total number of grants made from the Fund for the year 1954-55 was 72, representing a total of £19,546.

#### INTERSTATE RIVER MURRAY COMMITTEES.

The Interstate Committee on River Murray Levees investigated various proposals for the erection of levees on lands adjoining the River Murray.

The Interstate Departmental Committee for River Improvement Works on the Murray and Indi Rivers made inspections of various sites on these rivers where improvement works or removal of gravel from the river channel was proposed.

Mr. H. G. Strom, the Commission's Divisional Engineer for Rivers and Streams, is a member of both of these Committees.

#### SLUDGE ABATEMENT BOARD.

The Sludge Abatement Board continued its operations during the year. It was set up in 1905 in accordance with the provisions of the *Mines Act* 1904, to regulate dredging, sluicing, and other mining operations which might affect watercourses and reservoirs or lands used for agricultural, grazing, or residential purposes, or for the discharge of mining debris.

The control exercised by the Board, which made inspections of mining operations in various parts of the State, has greatly reduced damage formerly caused by alluvial mining and has made possible the recovery of large quantities of gold and minerals without serious damage to streams and marginal lands.

The Commission's representative on the Board is its Divisional Engineer for Rivers and Streams, Mr. H. G. Strom.

#### VALUATIONS BRANCH.

##### VALUATIONS FOR LAND COMPENSATION.

The purchase of lands for the enlargement of Eildon Reservoir was responsible for a great part of the Branch's work during the year. This task, which was commenced in 1950-51 has now progressed to the point where settlement has been reached in approximately 80 per cent. of the total number of cases. For the year under review, 47 claims totalling £824,859, were negotiated to the stage of agreement with the owners, with payments agreed on for a total of £624,200.

## TALLANGATTA TOWNSHIP TRANSFER.

The transfer of the Tallangatta Township to the new site at Bolga has also been a major task for the Valuations Branch in those aspects involving valuation.

In this instance, the emphasis has been not on payment of compensation, but on reaching agreement with owners on the terms of transfer to or reconstruction of their premises in the new town.

Progress in this connection is summarized below—

Type of Construction, &c.	Final Agreement Reached.	General Agreement Reached and Awaiting Formal Contract Agreement.	Negotiations Proceeding.
Business premises .. .. .	6	27	4
Brick house (for construction in new town to replace those in existing town) .. .. .	17	2	..
Public buildings, &c. (e.g., Shire Hall, Churches, Halls, Schools, Post Office) .. .. .	2	14	..

In addition contracts of sale have been completed in four cases for the purchase, by tenants to be transferred from the existing town, of houses erected in or transferred to the new town by the Commission.

Thirty-eight weatherboard houses in the existing town have been classified as not removable. Compensation is being assessed for these where alternative housing in the new town is not desired by the owners. Compensation has been assessed for the minor improvements associated with the 106 weatherboard houses which are classified as removable. Thirty-four of these are already in position in the new town.

## VALUATIONS FOR RATING PURPOSES.

Rating valuations which will be available for use in the rating year 1955-56 were carried out by Commission valuers in the following Districts—

*Irrigation and Water Supply Districts:* Rochester, North Shepparton, Maffra-Sale, Bacchus Marsh, and Tragowel Plains.

*Waterworks Districts:* Werribee, Western Wimmera, Wimmera United and Upper Wimmera United.

In all cases, these show considerable increases over the previous valuations, which were carried out during the period of land price control.

## RATING VALUATION APPEALS.

Nine protests out of a total of 307 assessments were received from ratepayers in the Werribee District affected by District Valuations which were used for the first time in 1954-55. Explanation satisfied all of these protests.

## SUPPLEMENTARY VALUATIONS.

Seven hundred and seventy-seven valuations were made during the year. 427 of these were in Irrigation and Water Supply Districts, 324 in Waterworks District, 24 in the Koo-wee-rup Flood Protection District, and 2 in the Carrum Drainage District.

## TRAINING OF VALUERS.

Two Cadet Valuers successfully completed the final examination of the Commonwealth Institute of Valuers during the year, while a third was successful in the first-year examination.

### HOUSING BRANCH.

During the year, 4 houses were purchased and 12 were constructed for the Commission, while 4 were transferred from Rocklands. At the end of the year 6 were under construction and contracts had been let for a further 6.

At the end of the year occupied residences totalled 513 of which 11 were on River Murray works.

### TECHNICAL LIBRARY.

There were 474 new accessions to the Commission's Technical Library for the year, and a total number of 7,290 books and other publications, excluding periodical literature, are now recorded. The number of periodicals received and circulated during the year was 292.

Administrative procedures are being reorganized to permit the development of increased services to Library users, who, in addition to the Commission and its staff, include other public and private organizations, as well as students and members of the public interested in water conservation and allied subjects.

### FIRST MILDURA IRRIGATION TRUST.

The 1954-55 Annual Report of the First Mildura Irrigation Trust shows that the Trust during the year supplied 43,824 acre feet of water for the irrigation of 62,183 acres, the average depth per acre for ordinary and special waterings being 8.5 inches.

The average area watered per day was 470 acres during ordinary irrigations and 205 acres during special irrigations.

The report shows that steady progress has been made on various contracts let by the Trust for the construction of the new Billabong pumping station which is expected to be in operation for the coming irrigation season.

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**PART III.—RATING AND FINANCE****VALUATIONS, RATES, IRRIGATION CHARGES AND FLOOD PROTECTION CHARGES.**

The statements which follow, set forth the districts supplied by the Commission with water for domestic and ordinary use, for watering cattle or other stock and for irrigation, together with the annual value of the lands and tenements, the number of assessments, and the general rates, compulsory irrigation charges, flood protection rates, and charges and drainage rates made in all districts.

In the districts where water for irrigation is obtained by gravitation from the various storage reservoirs throughout the State, with the exception of two districts in which the charges were increased, the compulsory irrigation charges were unchanged from those operating for the previous year. No alteration was made in the unit charge in the four districts which are supplied with water by pumping from either the River Murray or storages. In six Irrigation and Water Supply Districts the rates were increased compared with those of the previous year, while in one district (Tresco), in which water rights were allotted for the first time, the rate was decreased.

Rates were increased from those made for the previous year in five Waterworks Districts, while in one Waterworks District the rate was reduced.

In four Urban Districts, rates, and also the minimum rates for land on which there is a building, were increased, while in four Urban Districts rates were reduced. The minimum rate for land on which there is a building was decreased in one Urban District.

The rates and charges in the four Flood Protection Districts were unchanged from those of the previous year.

No alteration was made in the drainage rates in Irrigation Districts where drainage facilities have been provided, nor in the Carrum Drainage District.

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VALUATIONS, RATES, IRRIGATION CHARGES, AND FLOOD PROTECTION CHARGES.

Districts Supplied with Water for Domestic and Ordinary Use and for Watering Cattle or Other Stock.	Area of District in Acres.	Area Classified as Irrigable in Acres.	Water Rights Apportioned (Including Extra Rights) in Acre Feet.	Unimproved Capital Value.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955 on Net Annual Value except where indicated		Compulsory Irrigation Charge per Acre foot of Water Right, Season 1954-55.	Number of Assessments.	Estimated Number of Persons Dwelling in District.	
						General Rate.					Drainage Rate.
IRRIGATION AND WATER SUPPLY DISTRICTS.											
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VALUATIONS, RATES, IRRIGATION CHARGES, AND FLOOD PROTECTION CHARGES—continued.

Districts Supplied with Water for Domestic and Ordinary Use and for Watering Cattle or Other Stock.	Area of District in Acres.	Area Classified as Irrigable in Acres.	Water Rights Apportioned (including Extra Rights) in Acre Feet.	Unimproved Capital Value.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955 on Net Annual Value except where indicated.		Compulsory Irrigation Charge per Acre foot of Water Right, Season 1954-55.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
						General Rate.	Drainage Rate.			
IRRIGATION AND WATER SUPPLY DISTRICTS.										
				Valuation by Commission.	Valuation by Commission.	Divisions.				
						1st	2nd.	3rd.	1st.	
				£	£	s. d.	s. d.	s. d.	s. d.	s. d.
Supplied from Southern State Works.										
21. BACCHUS MARSH ..	6,744	3,300	3,302	253,866	17,344	1 0	0 6	..	..	284
22. CENTRAL GIPPSLAND ..	58,508	11,954	9,128	381,875	28,205	1 0	..	..	..	89
23. MAFFRA-SALE ..	72,916	27,174	25,766	1,084,107	91,894	1 0	0 6	0 3	1 0	652
24. WERRIBEE ..	9,698	8,149	8,150	2,316,679	146,783	1 0	0 6	..	0 4	290
Totals ..	147,866	50,577	46,346	4,036,527	284,226	..	..	..	..	1,315
Supplied direct from River Murray.										
25. NYAH ..	3,843	2,616	7,180	52,255	13,648	0 6	..	..	1 1½	252
26. RED CLIFFS-MERBEIN ..	22,822	18,932	57,877	1,005,750	225,012	0 6	..	..	1 1½	1,485
27. ROBINVALE ..	8,669	4,312	10,779	116,385	..	0 2	..	..	..	198
Totals ..	35,334	25,860	75,836	1,174,390	238,660	..	..	..	..	1,935
28. TRESKO ..	4,650	2,047	4,094	65,413	13,906	1 0	0 6	..	..	179
29. CAMPASPE ..	19,736	..	..	153,572	9,041	2 0	1 0	..	..	147
Totals (Irrigation) ..	2,069,040	1,103,783	616,169	19,048,654	1,652,291	..	..	..	..	15,976
Supplied on a Sale of Water Basis.										
29. CAMPASPE ..	19,736	..	..	153,572	9,041	2 0	1 0	..	..	145
Totals (Irrigation) ..	2,069,040	1,103,783	616,169	19,048,654	1,652,291	..	..	..	..	45,598

## VALUATIONS, RATES, AND FLOOD PROTECTION CHARGES.

Districts supplied with Water for Domestic and Ordinary use and for Watering Cattle or other Stock.	Unimproved Capital Value.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955.			Minimum Amount of Rate per 640 Acres on Lands in the First Division.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
WATERWORKS DISTRICTS.								
	Valuation by Commission.	Valuation by Commission.	Divisions.					
			1st.	2nd	3rd.			
<i>Supplied from Wimmera-Mallee System.</i>	£	£	s. d.	s. d.	s. d.	£ s. d.		
30. BIRCHIP .. .. .	701,097	44,594	3 4	1 8	0 10	20 0 0	495	860
31. HINDMARSH .. .. .	139,980	8,719	2 9	..	0 8½	20 0 0	52	255
32. KARKAROOC .. .. .	2,629,533	163,760	3 4	1 8	0 10	20 0 0	1,039	4,500
33. LONG LAKE .. .. .	640,678	76,847	3 4	1 8	0 10	20 0 0	830	2,200
34. OUYEN .. .. .	336,871	45,379	3 4	1 8	0 10	20 0 0	896	2,000
35. SEA LAKE .. .. .	379,126	69,068	3 4	1 8	0 10	20 0 0	726	1,800
36. TYNTYNDER .. .. .	307,540	40,053	3 4	1 8	0 10	20 0 0	832	2,100
37. TYRRELL .. .. .	261,025	42,840	3 4	1 8	0 10	20 0 0	883	2,200
38. TYRRELL WEST .. .. .	162,644	24,880	3 4	1 8	0 10	20 0 0	562	1,000
39. UPPER WESTERN WIMMERA .. .. .	1,523,592	90,013	2 6	..	0 7½	20 0 0	524	1,711
40. UPPER WIMMERA UNITED .. .. .	912,041	116,021	2 6	..	0 7½	20 0 0	861	2,400
41. WESTERN WIMMERA .. .. .	5,063,851	288,606	2 6	1 3	0 7½	..	2,168	8,574
42. WIMMERA UNITED .. .. .	7,256,306	354,738	1 6	0 9	0 4½	..	2,273	7,250
43. WYCHEPROOF .. .. .	1,293,052	87,192	3 4	1 8	0 10	20 0 0	1,080	2,490
44. WYCHITELLA .. .. .	952,534	61,765	3 0	1 6	0 9	20 0 0	482	516
Totals .. .. .	22,559,870	1,514,475	..	..	..	..	13,703	39,856
<i>Supplied direct from River Murray.</i>								
45. MILLEWA .. .. .	114,965	29,595	3 4	1 8	0 10	11 10 0	476	829
46. TYNTYNDER NORTH .. .. .	116,364	16,193	3 4	..	0 10	11 10 0	215	400
Totals .. .. .	231,329	45,788	..	..	..	..	691	1,229
<i>Supplied by Bores.</i>								
47. WALPEUP WEST .. .. .	387,326	22,896	1 0	0 6	..	6 13 4 1st Div., and 3 6 8 2nd Div.	1,142	600
<i>Supplied from Coliban System.</i>								
48. AXE CREEK .. .. .	16,225	1,772	3 0	..	..	..	68	250
49. HARCOURT .. .. .	61,106	8,958	1 6	..	..	..	195	600
Totals .. .. .	77,331	10,730	..	..	..	..	263	850
<i>Miscellaneous.</i>								
50. EAST LODDON .. .. .	307,114	19,707	2 0	1 0	0 6	..	265	134
51. KERANG NORTH-WEST LAKES .. .. .	89,532	8,854	1 6	..	..	..	204	178
52. LODDON .. .. .	505,662	29,761	2 0	1 0	0 6	..	310	203
53. NORMANVILLE .. .. .	833,819	48,906	3 4	1 8	0 10	20 0 0	377	409
54. WERRIBEE .. .. .	73,885	5,893	2 0	..	..	..	67	141
55. WEST LODDON .. .. .	695,247	40,098	2 6	1 3	0 7½	..	313	348
Totals .. .. .	2,505,259	153,219	..	..	..	..	1,536	1,413
Total (Waterworks) .. .. .	25,761,115	1,747,108	..	..	..	..	17,335	43,948

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

Districts Supplied with Water for Domestic and Ordinary Use from Pipe Reticulations.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955.	Minimum Amount of Rate for Lands on which there is a Building.	Minimum Amount of Rate for Lands on which there is no Building.	Water Charge per 1,000 Gallons.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
URBAN DISTRICTS AND DIVISIONS.							
	Municipal Valuation.				Rate Allowance.	Excess.	
<i>Supplied from Bellarine Peninsula System.</i>	£	s. d.	s. d.	s. d.	s. d.	s. d.	
56. ANGLESEA .. .. .	10,361	3 6	80 0	10 0	1 3	1 3	332
57. BARWON HEADS AND OCEAN GROVE .. .. .	45,246	2 2	50 0	10 0	1 3	1 3	1,145
58. BIRREGURRA .. .. .	6,002	3 0	60 0	10 0	1 3	1 3	159
59. DRYSDALE .. .. .	7,019	2 8	60 0	10 0	1 3	1 3	181
60. PORTARLINGTON .. .. .	11,811	3 0	60 0	10 0	1 3	1 3	359
61. QUEENSLIFF AND POINT LONSDALE .. .. .	45,064	2 9	60 0	10 0	1 3	1 3	992
62. TORQUAY .. .. .	33,513	2 6	50 0	10 0	1 3	1 3	667
Totals .. .. .	159,016	..	..	..	..	..	3,835
<i>Supplied from Mornington Peninsula System.</i>							
63. BERWICK .. .. .	20,270	2 6	50 0	10 0	1 3	1 3	340
64. BITTERN-CRIB POINT .. .. .	12,897	2 6	50 0	10 0	1 3	1 3	419
65. BUNYIP .. .. .	9,423	2 6	50 0	10 0	1 3	1 3	190
66. CHELSEA-FRANKSTON .. .. .	729,530	1 3	30 0	10 0	1 3	1 3	9,883
67. CRANBOURNE .. .. .	9,456	1 8	40 0	10 0	1 3	1 3	180
68. DANDENONG-SPRINGVALE .. .. .	640,623	1 0	30 0	10 0	1 3	1 3	8,535
69. DROMANA-PORTSEA .. .. .	432,462	1 2	50 0	10 0	1 3	1 3	4,641
70. GARFIELD .. .. .	6,394	1 8	40 0	10 0	1 3	1 3	107
71. HASTINGS .. .. .	11,366	2 2	50 0	10 0	1 3	1 3	254
72. LONGWARRY .. .. .	6,477	1 4	40 0	10 0	1 3	1 3	150
73. MORNINGTON .. .. .	218,458	1 2	30 0	10 0	1 3	1 3	1,896
74. PAKENHAM .. .. .	23,290	1 2	40 0	10 0	1 3	1 3	320
75. SOMERVILLE .. .. .	7,783	2 2	50 0	10 0	1 3	1 3	112
76. SOUTH FRANKSTON .. .. .	102,085	1 3	30 0	10 0	1 3	1 3	741
Totals .. .. .	2,230,514	..	..	..	..	..	27,768
<i>Supplied from Otway System.</i>							
77. ALLANSFORD .. .. .	3,497	2 8	60 0	10 0	1 3	1 3	113
78. CAMPERDOWN .. .. .	52,097	2 8	60 0	10 0	1 3	1 3	1,112
79. COBDEN .. .. .	22,842	2 8	60 0	10 0	1 3	1 3	428
80. TERANG .. .. .	38,167	2 8	60 0	10 0	1 3	1 3	879
Totals .. .. .	116,603	..	..	..	..	..	2,532
<i>Supplied from Wimmera-Mallee System.</i>							
81. ANTWERP .. .. .	230	3 6	80 0	10 0	1 4	1 4	23
82. BERRIWILLOCK .. .. .	2,472	3 6	80 0	10 0	1 3	1 3	92
83. BEULAH .. .. .	3,788	3 0	60 0	10 0	1 3	1 3	205
84. BIRCHIP .. .. .	9,389	3 6	80 0	10 0	1 3	1 3	361
85. BRIM .. .. .	1,633	3 6	80 0	10 0	1 3	1 3	99
86. CHILLINGOLLAH .. .. .	268	3 6	80 0	10 0	1 4	1 4	30
87. CHINKAPOOK .. .. .	567	3 6	80 0	10 0	1 4	1 4	49
88. CULGOA .. .. .	2,385	3 6	80 0	10 0	1 3	1 3	84
89. DIMBOOLA .. .. .	22,084	1 2	30 0	10 0	1 3	1 3	697
90. DOON .. .. .	274	3 6	70 0	10 0	1 3	1 3	6
91. HOPETOUN .. .. .	8,772	2 6	50 0	10 0	1 3	1 3	301
92. JEPARIT .. .. .	9,553	1 8	40 0	10 0	1 3	1 3	302
93. JUNG JUNG .. .. .	1,268	3 6	80 0	10 0	1 3	1 3	44
Carried forward .. .. .	62,683	..	..	..	..	..	2,293
							6,099

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

Districts Supplied with Water for Domestic and Ordinary Use from Pipe Reticulations.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955.	Minimum Amount of Rate for Lands on which there is a Building.	Minimum Amount of Rate for Lands on which there is no Building.	Water Charge per 1,000 Gallons.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
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## URBAN DISTRICTS AND DIVISIONS—continued.

	Municipal Valuation.				Rate Allowance.	Excess.		
	£	s. d.	s. d.	s. d.	s. d.	s. d.		
Brought forward .. .. .	62,683						2,293	6,099
94. LALBERT .. .. .	1,243	3 6	80 0	10 0	1 3	1 3	51	155
95. LASCELLES .. .. .	847	3 6	80 0	10 0	1 3	1 3	71	110
96. MANANGATANG .. .. .	3,224	3 6	80 0	10 0	1 4	1 4	128	450
97. MARNOO .. .. .	1,716	2 4	50 0	10 0	1 3	1 3	47	300
98. MINYIP .. .. .	11,684	3 0	60 0	10 0	1 3	1 3	305	800
99. NANDALY .. .. .	490	3 6	80 0	10 0	1 4	1 4	41	110
100. NATIMUK .. .. .	3,796	2 0	50 0	10 0	1 3	1 3	179	573
101. NULLAWIL .. .. .	988	3 6	80 0	10 0	1 4	1 4	52	100
102. OUYEN .. .. .	14,483	3 6	80 0	10 0	1 4	1 4	479	1,400
103. PATCHEWOLLOCK .. .. .	994	3 6	80 0	10 0	1 4	1 4	77	177
104. PIMPINIO .. .. .	394	0 4					30	68
105. QUAMBATOOK .. .. .	5,153	2 6	50 0	10 0	1 3	1 3	177	485
106. RAINBOW .. .. .	9,375	1 2	30 0	10 0	1 3	1 3	315	890
107. RUPANYUP .. .. .	9,690	3 0	60 0	10 0	1 3	1 3	233	900
108. SEA LAKE .. .. .	13,794	2 3	50 0	10 0	1 3	1 3	314	820
109. SPEED .. .. .	529	3 6	80 0	10 0	1 4	1 4	21	87
110. TEMPY .. .. .	283	3 6	80 0	10 0	1 4	1 4	32	111
111. ULTIMA .. .. .	2,318	3 6	120 0	10 0	1 3	1 3	145	260
112. WAITCHIE .. .. .	155	3 6	80 0	10 0	1 4	1 4	32	18
113. WALPEUP .. .. .	960	3 6	130 0	10 0	1 4	1 4	84	120
114. WATCHEM .. .. .	2,165	3 6	80 0	10 0	1 3	1 3	128	210
115. WOOME LANG .. .. .	2,395	3 6	80 0	10 0	1 3	1 3	167	330
116. WOORINEN .. .. .	1,890	3 6	80 0	10 0	1 3	1 3	75	270
117. WYCHEPROOF .. .. .	14,871	3 6	80 0	10 0	1 3	1 3	320	860
118. YAAPEET .. .. .	310	3 6	80 0	10 0	1 4	1 4	29	68
Totals .. .. .	166,430						5,825	15,771
<i>Supplied from Torumbarry System.</i>								
119. COHUNA .. .. .	26,756	1 8	40 0	10 0	1 3	1 3	556	1,487
120. KOONDROOK .. .. .	6,058	3 6	80 0	10 0	1 3	1 3	248	575
121. LEITCHVILLE .. .. .	5,507	3 6	80 0	10 0	1 3	1 3	120	291
122. MURRABIT .. .. .	782	3 6	80 0	10 0	1 4	1 4	35	79
Totals .. .. .	39,103						959	2,432
<i>Supplied direct from River Murray.</i>								
123. CARWARP .. .. .	96	3 6	80 0	10 0	1 4	1 4	19	51
124. LAKE BOGA .. .. .	3,467	3 6	80 0	10 0	1 3	1 3	190	450
125. MERBEIN .. .. .	21,710	2 6	50 0	10 0	1 3	1 3	510	1,635
126. MERINGUR .. .. .	304	3 6	100 0	10 0	1 8	1 8	30	60
127. NYAH .. .. .	1,864	3 6	80 0	10 0	1 3	1 3	76	210
128. NYAH WEST .. .. .	6,915	2 0	40 0	10 0	1 3	1 3	192	506
129. PIANGIL .. .. .	1,207	3 6	80 0	10 0	1 3	1 3	87	180
130. RED CLIFFS .. .. .	47,129	2 6	50 0	10 0	1 3	1 3	671	3,110
131. ROBINVALE .. .. .	6,272	3 6	80 0	10 0	1 4	1 4	205	660
132. WERRIMUL .. .. .	1,019	3 6	100 0	10 0	1 8	1 8	58	110
Totals .. .. .	89,983						2,038	6,946
<i>Miscellaneous.</i>								
133. COROP .. .. .	118	3 6	80 0	10 0	1 3	1 3	17	50
134. DINGEE .. .. .	712	3 6	80 0	10 0	1 3	1 3	25	40
135. HEYFIELD .. .. .	13,319	3 0	60 0	10 0	1 3	1 3	403	2,240
136. LOCKINGTON .. .. .	4,971	2 0	40 0	10 0	1 3	1 3	123	300
137. MACORNA .. .. .	713	3 6	135 0	10 0	1 4	1 4	38	47
138. MARONG .. .. .	1,226	3 6	80 0	10 0	1 3	1 3	50	200
139. MITIAMO .. .. .	1,583	3 6	130 0	10 0	1 3	1 3	55	135
140. NEWSTEAD .. .. .	4,888	3 6	80 0	10 0	1 3	1 3	173	400
Carried forward .. .. .	27,530						884	3,412

VALUATIONS, RATES, AND FLOOD PROTECTION CHARGES—*continued.*

Districts Supplied with Water for Domestic and Ordinary Use from Pipe Reticulations.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955.	Minimum Amount of Rate for Lands on which there is a Building.	Minimum Amount of Rate for Lands on which there is no Building.	Water Charge per 1,000 Gallons.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
URBAN DISTRICTS AND DIVISIONS— <i>continued.</i>							
	Municipal Valuation.				Rate Allowance.	Excess.	
<i>Miscellaneous—continued.</i>	£	s. d.	s. d.	s. d.	s. d.	s. d.	
Brought forward .. .. .	27,530						884 3,412
141. PYRAMID HILL .. .. .	8,111	2 0	40 0	10 0	1 3	1 3	206 605
142. STANHOPE .. .. .	3,934	2 0	50 0	10 0	1 3	1 3	110 450
143. TALLYGAROPNA .. .. .	1,560	3 6	100 0	10 0	1 3	1 3	40 118
144. WONTHAGGI .. .. .	65,804	1 6	30 0	10 0	1 3	1 3	1,897 5,100
Totals .. .. .	106,939	..	..	..	..	..	3,137 9,685

## COLIBAN SYSTEM.

	Municipal Valuation.				Rate Allowance.	Excess.		
	£	s. d.	s. d.	s. d.	s. d.	s. d.		
145. COLIBAN .. .. .	819,026	1 6	20 0	10 0	1 3	1 3	16,835	63,000
Includes Bendigo, Castlemaine, Eaglehawk, Maldon, Barker's Creek, Campbell's Creek, Chewton, Elphinstone, Epsom, Ascot, Fryerstown, Guildford, Harcourt, Huntly, Kangaroo Flat, Myer's Flat, Raywood, Sebastian, Spring Gully, Taradale, and Yapeen. See under Waterworks Districts for Axe Creek and Harcourt rural supplies and under Urban Districts for Marong.								
Totals (Urban) .. .. .	3,727,614	..	..	..	..	..	62,929	198,020

District.	Unimproved Capital Value.	Rate in the £1 made during Year ended 30th June, 1955.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
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## DRAINAGE DISTRICT.

			Divisions.					
			1st.	2nd.	3rd.	4th.		
	£		s. d.	s. d.	s. d.	s. d.		
146. CARRUM .. .. .	960,572		0 4	0 3	0 2	0 1	5,716	5,200
			(with a minimum amount of rate of 2/6 per tenement)					

District.	Annual Value of Lands and Tenements.	Rate in the £1 made during Year ended 30th June, 1955.	Number of Assessments.	Estimated Number of Persons Dwelling in District.
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## FLOOD PROTECTION DISTRICTS.

	Valuation by Commission. N.A.V.		Divisions.					
			1st.	2nd.	3rd.	4th.		
	£		s. d.	s. d.	s. d.	s. d.		
147. LOWER KOO-WEE-RUP .. .. .	72,071		6 0	4 6	3 0	1 6	1,123	3,100
	Area in Acres.		Charge per Acre made during Year ended 30th June, 1955.					
			s. d.	s. d.	s. d.	s. d.		
148. CARDINIA .. .. .	26,650		9 6	7 1½	4 9	2 4½	303	800
149. KANYAPELLA .. .. .	12,632		0 3	..	0 1½	..	46	67
150. LOCH GARRY .. .. .	41,687		0 2	..	..	..	114	193
Totals (Flood Protection) .. .. .	80,969	..	..	..	..	..	1,586	4,160

MISCELLANEOUS WATER CHARGES.

For Irrigation Supplies from the Commission's channels to lands outside constituted Irrigation and Water Supply Districts, the charge for water is 50 per cent. above the compulsory charge ruling in the nearest Irrigation and Water Supply District, excepting supplies to such lands as are within constituted Waterworks Districts and subject to the general Domestic and Stock rate, for which the charge is the equivalent of the irrigation charge ruling in the nearest Irrigation and Water Supply District.

For Irrigation Supplies to lands in the Western Wimmera and Wimmera United Waterworks Districts the charge for water is 15s. per acre foot with minimum annual payments for each and every holding. The minimum annual payment for any one holding in the Western Wimmera Waterworks District is either, £2 10s. per annum where the area irrigated is not greater than 3½ acres or, 15s. per acre per annum where the area irrigated exceeds 3½ acres. In the Wimmera United Waterworks District the minimum annual payment for any one holding is 15s. per acre per annum for the area irrigated.

For Domestic and Stock Supplies from the Commission's pipe lines to properties outside proclaimed Urban Districts the charges are in accordance with the Commission's By-law No. 4699 or by special agreement, and are as follow :—

Name of Waterworks District.	Amount of Charge per 1,000 Gallons for Water Supplied.	Minimum Charge per Annum.
	s. d.	s. d.
BELLARINE PENINSULA .. .. .	1 3	50 0
MORNINGTON PENINSULA .. .. .	1 3	50 0
OTWAY .. .. .	1 3	50 0

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## FINANCE

(L. A. King, A.A.S.A., Chief Accountant.)

## REVENUE.

The total revenue assessment for the year for rates and charges, sales of water, interest on arrears, &c., was £1,918,140. This represents an increase of £83,056 over the previous year. The actual sum collected during the year was £1,840,345 and represents 95·74 per cent. of the new money collectable.

An amount of £36,926 was written off the books of the Commission for the financial year 1954–55, as compared with £37,111 for the previous year. The total amount written off for the nineteen years ended 30th June, 1955, under the various headings as shown hereunder, was £784,080.

	£
<i>Farmers' Debts Adjustment Act</i> 1935 (No. 4326) .. .. .	87,102
Adjustment of arrears of rates and charges and irrecoverable amounts—Act No. 4513	172,439
Remission of Interest accrued on arrears to 30th June, 1940—Act No. 4740 ..	81,517
Reduction in rating classifications (Waterworks Districts) and of water right—Act No. 5017 .. .. .	8,651
Unoccupied or vacated Crown lands .. .. .	276,768
Reduction in rating classifications other than applicable to Act No. 5017 .. ..	13,652
Concessions granted to water-users .. .. .	68,540
<i>North-West Mallee Settlement Areas Act</i> 1948, No. 5321 .. .. .	19,585
Miscellaneous, including remission of interest accrued on Consolidated Arrears (Act No. 4740) subsequent to 30th June, 1940 .. .. .	55,826
	<hr/> 784,080 <hr/>

Subject to the provisions of the Water Act No. 4740, arrears of rates and charges totalling £437,635, as at 30th June, 1940, were consolidated, and are payable by instalments over periods up to twenty years from and inclusive of 1st January, 1941. The balance of instalments remaining as at 30th June, 1955, was £14,570. These consolidated arrears are not subject to interest conditionally upon the instalment being paid on the due date each year; however, interest accrued to 30th June, 1955, through default in payment of instalments, amounted to £1,195.

The arrears of rates and charges increased from £263,572 as at 1st July, 1954, to £304,978 as at 30th June, 1955—this figure includes the balance, £14,570 plus accrued interest, of arrears consolidated under Act No. 4740, mentioned in the preceding paragraph.

The respective amounts paid to Consolidated Revenue during the past three years were :—

Year.	Water Rates and Charges, Diversion and Grazing Fees, &c.	Recoup on Account of Payments from Revenue.	Interest on (a) Lands Sold, (b) Plant and Machinery Account.	Total.
	£	£	£	£
1952–53 ..	1,373,558	615,731	(a) 97 (b) 46,840	2,036,226
1953–54 ..	1,755,571	656,811	(a) 113 (b) 45,164	2,457,659
1954–55 ..	1,840,345	692,601	(a) 38 (b) 45,183	2,578,167



**EXPENDITURE.**

The expenditure for the year on maintenance, water distribution, and management, and the comparative figures for 1953-54 are set out hereunder :—

	1953-54.	1954-55.
	£	£
From Annual Vote Appropriation .. .. .	2,690,036	*2,744,758
From Annual Vote Appropriation (Exceptional) .. .. .	27,826	†36,863
	<hr/> 2,717,862	<hr/> 2,781,621

\* Includes £341,516 for recoup works, and also £321,778 for administration (including salaries, pay-roll tax, &c.) in respect of expenditure from other funds, charged to vote and recouped to Consolidated Revenue.

† Consists of £7,114 assistance to Sewerage Authorities where works are suspended; £24,996 subsidies to Sewerage Authorities in cases where the interest paid on Capital Liability is in excess of 3 per cent.; £586 subsidies to local Water Authorities to offset losses in reduction of rates; subsidies to local Water Authorities in cases where the interest paid on Capital Liability is in excess of 3 per cent., £5,008; and ex gratia payment to disabled officer towards medical and hospital expenses, £300.

Total expenditure on works carried out or supervised by the Commission for the year 1954-55 was as set out hereunder :—

	£	£
Vote Funds .. .. .	2,781,621	
Special Appropriation .. .. .	8,224	
	<hr/>	2,789,845
Ordinary Loan Funds—		
Commission Works .. .. .	8,159,911	
Contribution to River Murray Commission Works .. .. .	108,570	
Waterworks Trusts and Local Governing Bodies .. .. .	623,735	
River Improvement Trusts .. .. .	87,074	
Latrobe Valley Drainage and Water Supply .. .. .	289,468	
	<hr/>	9,268,758
Water Supply Works Depreciation Fund .. .. .		107,343
		<hr/>
Total Expenditure on construction, operation, maintenance, and administration of Commission's Works and Water Supply Works supervised by Commission, including subsidies to Sewerage Authorities, &c. .. .. .		12,165,946*

\* Excludes Expenditure from Plant and Machinery Depreciation Fund, £46,394, and Expenditure under Soldier Settlement Acts for work carried out on behalf of the Soldier Settlement Commission, £206,094.

Expenditure on Capital construction works was provided from :—

Water Supply Loans Application Act No. 5748 .. .. .	2,316,631
Water Supply Loans Application Act No. 5821 .. .. .	6,861,200
Treasurer's Advance .. .. .	90,927
	<hr/> 9,268,758
In addition, the Capital Loan Liability of the State for works of country Water Supply was increased as a result of loan conversion operations during the year, by an amount of .. .. .	57,470
	<hr/>
The total increase in Loan Liability for the year was therefore .. .. .	9,326,228
Deduct—Commission repayments to—	£
State Loans Repayment Fund .. .. .	163,016
Redemption Account .. .. .	6,230
Repayments by Waterworks Trusts and Local Governing Bodies .. .. .	33,912
	<hr/> 203,158
The net increase in Loan Liability for the year was .. .. .	<hr/> 9,123,070

The contribution by the Government of Victoria to the River Murray Commission for the maintenance of works under the River Murray Agreement was £46,000 (included in the expenditure from Annual Vote Appropriation as shown above). The actual expenditure by this Commission on the maintenance of these works was £20,487 and on construction of new works £535,229.

### CAPITAL LIABILITY.

The Capital Loan Liability of the State for works of Country Water Supply at 30th June, 1955, was £80,918,141 of which amount £71,671,757 is charged to the "Capital Expenditure borne by the State Account." Of the remainder £4,167,697 is charged to Waterworks Trusts and Local Governing Bodies, £41,030 to River Improvement Trusts, £559,569 is charged to Latrobe Valley drainage under the general supervision of the Commission, £1,497,342 is debited to the Plant and Machinery Account, and the balance, £2,980,746 represents the Capital Liability, after adjustment, debited to Districts and Divisions directly under the control of the Commission and to plant workshops. These figures are exclusive of an equity of £6,304,588 in the National Debt Sinking Fund.

In accordance with the provisions of the *Water Act* 1943, No. 4983, section 5, interest debited direct to water users on the cost of capital works incurred after the 30th June, 1943, is charged at the rate of 3 per cent. per annum. Interest on the Capital Liability for works of Country Water Supply, incurred prior to that date, is reckoned at the average rate of interest per centum (as determined by the Treasury) payable by the State of Victoria on securities in respect of Water Supply Loan Liabilities as at the thirtieth day of June in the preceding financial year. The average rate per centum of interest so charged for 1954-55 is £3 10s. 11d.

The amounts debited to Country Water Supply Works and the State Development Account on account of interest, exchange on overseas interest and Loan Conversion expenses were :—

	£	s.	d.
Interest .. .. .	2,787,076	19	5
Exchange on overseas interest .. .. .	112,768	1	2
Loan Conversion expenses .. .. .	4,353	10	8
	2,904,198	11	3

The amount paid by the Treasury in respect of exchange on overseas interest and loan conversion expenses has not been debited direct to water users.

The following statement shows the approximate interest payment for 1954-55 in relation to the Capital Liability.

Capital Debited to—	Capital Liability as at 30th June, 1955.	Interest Liability (excluding Exchange and Loan Conversion Expenses).	Interest Paid by Water Users (including Arrears).
	£	£	£
Districts and Divisions under the direct control of the Commission .. .. .	2,980,746	95,336	63,649
Waterworks Trusts, Local Governing Bodies and River Improvement Trusts, and Latrobe Valley drainage	4,768,296	124,360	123,387
Plant and Machinery Account .. .. .	1,497,342	45,183	45,183
Capital Expenditure borne by the State Development Account .. .. .	71,671,757	2,522,198	..
	80,918,141	2,787,077	232,219

### DEPRECIATION.

The amount at credit of the Water Supply Works Depreciation Account in the Commission's books at 1st July, 1954, was £645,620 9s. 6d. An amount of £120,475 was raised during the financial year 1954-55 for purposes of depreciation.

A further sum of £1,468 13s. 10d. was paid direct to the credit of the Fund, being amounts contributed by land holders and other bodies as capitalized maintenance of water supply works constructed for their respective benefits.

After crediting the Account with interest amounting to £13,423 3s. 5d. and deducting the expenditure (£107,342 10s. 4d.) from Depreciation for the year, the balance remaining in the Account as at 30th June, 1955, was £673,644 16s. 5d.

The Water Act No. 4513 provides that sums raised in respect of depreciation shall be paid into the Consolidated Revenue or, if the Treasurer so directs, shall to the extent that the Treasurer directs, be placed to the credit of the Water Supply Works Depreciation Fund. The Act provided further that all such moneys paid into the Consolidated Revenue shall be credited to the Water Supply Works Depreciation Account in the books of the Commission and credited with interest each year as if such sums had been placed to the credit of the Fund.

No transfer was made during the year from the Commission's revenue to the Water Supply Works Depreciation Fund in the Treasury. The difference between the credit to the Depreciation Fund and the amounts credited to the Depreciation Account in the Commission's books is £194,710 17s. 2d.—representing depreciation charged for 1954–55 (£120,475) and interest not yet credited (£74,235 17s. 2d.).

It is desirable, in order to avoid fluctuations in the Commission's revenue, and to provide for heavy future expenditure in respect of depreciation, that transfers be made annually to the Depreciation Fund.

Details of the Water Supply Works Depreciation Account are set out on pages 112, 113, 114 of this Report.

### PLANT AND MACHINERY ACCOUNT AND STORES SUSPENSE ACCOUNTS.

The capital liability for large-size moveable plant and machinery, held in the Plant and Machinery Account as at 30th June, 1955, was £1,497,341 11s. 11d. (This amount is exclusive of plant in use on major construction works.)

Items of plant and machinery controlled in the Plant and Machinery Account are hired to the respective works on which they are 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. The operating account is in credit to the extent of £485,083 9s. 4d.

The portion 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 £633,632 12s. 0d. as at 30th June, 1955.

The amount at debit of the Water Supply Stores Suspense Account as at 30th June, 1955, was £647,958 12s. 7d.—whereas the book value of stores and equipment controlled within the Account was £1,133,042 1s. 11d. The difference, £485,083 9s. 4d. represents the amount at credit of the operating account (also controlled within the Stores Suspense Account), in respect to major items of plant recorded in Plant and Machinery Account.

The net debit for plant and material held by the Commission as at 30th June, 1955, is £2,992,941 8s. 2d. and is controlled within funds provided from the following sources:—

		£	s.	d.	£	s.	d.
Water Supply Stores Suspense Account (Act No. 5253)	..	..	..	..	647,958	12	7
Water Supply Loans Application Acts—							
Rocklands Reservoir (Suspense Account)	..	..	31,466	3 10			
Gunbower Offtake Works (Suspense Account)	..	..	3,460	19 4			
Big Eildon Dam (Suspense Account)	..	..	116,242	14 10			
Bonnie Doon Project (Suspense Account)	..	..	11,357	0 7			
Cairn Curran Reservoir (Suspense Account)	..	..	70,451	14 4			
Central Gippsland Irrigation Project (Suspense Account)	..	..	260,576	5 6			
Robinvale Irrigation District (Suspense Account)	..	..	10,548	19 2			
Murray Valley Irrigation District (Suspense Account)	..	..	59,110	17 5			
Goulburn–Waranga Channel Duplication (Suspense Account)	..	..	32,154	14 9			
Tarago Tunnel Project (Suspense Account)	..	..	252,271	13 11			
					847,641	3	8
Plant and Machinery Account (Act No. 4761)	..	..	..	..	1,497,341	11	11
					2,992,941	8	2

## REVENUE EXPENDITURE CHARGEABLE TO THE STATE ACCOUNT.

The Commission, by direction of the Governor in Council, has throughout 1954-55 continued the operation of 4 Irrigation Districts, 17 Waterworks Districts, 46 Urban Districts, and 6 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 amount so transferred for 1954-55 was £256,824 making a total of £3,286,859 borne by the State since 1st July, 1938.

In 35 of these districts an aggregate cash surplus of revenue over expenditure of £24,794 was obtained. This amount was applied to Interest (£601) Redemption (£83), and Depreciation (£17,752), leaving a sum of £6,358 available to the credit of the respective districts.

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 in the following pages.

### FINANCIAL OPERATIONS, 1954-55.

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 Acts* 1937 (No. 4513) and 1944 (No. 5017) the Capital Liability of Country Water Supply Works has been 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 has been transferred to the "Capital Expenditure borne by the State Account."

### "PAYING" DISTRICTS.

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.

The aggregate financial transactions for the year 1954-55 however, in respect of the districts listed hereunder, resulted in an excess of expenditure over revenue to the extent of £132,997. This is due mainly to increased operating costs.

#### *Irrigation and Water Supply Districts (25).*

Bacchus Marsh	Dingee	Mystic Park	South Shepparton
Boort	Katandra	North Shepparton	Swan Hill
Calivil	Kerang	Robinvale	Third Lake
Campaspe	Koondrook	Rochester	Tongala-Stanhope
Central Gippsland	Maffra-Sale	Rodney	Tragowel Plains
Cohuna	Murray Valley	Shepparton	Werribee
Deakin			

#### *Waterworks Districts (13).*

Bellarine Peninsula	Mornington Peninsula	Otway	West Loddon
East Loddon	Newstead	Werribee	Wimmera United
Harcourt	Normanville	Western Wimmera	Wychitella
Loddon			

*Urban Divisions and Districts (38).*

Cohuna	Berriwillock	Dimboola	Pimpinio
Lockington	Berwick	Dromana-Portsea	Pyramid Hill
Macorna	Birregurra	Jeparit	Queenscliff and
Red Cliffs	Brim	Longwarry	Point Lonsdale
Robinvale	Camperdown	Marnoo	Rainbow
Tallygaroopna	Chelsea-Frankston	Merbein	Rupanyup
Allansford	Cobden	Minyip	Somerville
Antwerp	Cranbourne	Mornington	South Frankston
Barwon Heads and	Culgoa	Natimuk	Terang
Ocean Grove	Dandenong-Springvale	Pakenham	Watchem

*Drainage District (1).*

Carrum

## “NON-PAYING” DISTRICTS.

(To which supplies of water are continued by direction of the Governor in Council.)

Where the revenue from existing rates and charges is insufficient to meet operating costs, the works in such centres may be maintained and the supply of water continued by direction of Parliament or the Governor in Council, in which case the loss resulting from their 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”.

Districts which were maintained and operated by direction of the Governor in Council are listed hereunder :—

*Irrigation and Water Supply Districts (4).*

Fish Point	Nyah	*Red Cliffs-Merbein	Tresco
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*Waterworks Districts (17).*

Axe Creek	Long Lake	Tyntynder North	Upper Wimmera
Birchip	Millewa	Tyrrell	United
Hindmarsh	Ouyen	Tyrrell West	Walpeup West
Karkarooc	Sea Lake	*Upper Western	Wycheproof
Kerang North-west Lakes	Tyntynder	Wimmera	

*Urban Divisions and Districts (52).*

*Corop	Chinkapook	Marong	*Sea Lake
*Dingee	Coliban	Meringur	*Speed
*Heyfield	*Dooen	Mitiamo	*Tempy
*Leitchville	*Drysdale	*Nandaly	*Torquay
Murrabit	*Garfield	Newstead	Ultima
Stanhope	*Hastings	*Nullawil	Waitchie
*Anglesea	*Hopetoun	*Nyah	Walpeup
*Beulah	Jung Jung	*Nyah West	Werrimull
Birchip	*Koondrook	*Ouyen	Wonthaggi
*Bittern-Crib Point	Lake Boga	Patchewollock	*Woomelang
*Bunyip	*Lalbert	*Piangil	*Woorinen
*Carwarp	*Lascelles	*Portarlinton	*Wycheproof
Chillingollah	*Manangatang	Quambatook	*Yaapect

In districts marked “\*” the operations for 1954-55 resulted in an aggregate cash surplus of £24,794. Of this amount, a sum of £684 has been applied to redemption and interest.

The amount debited to “The Revenue Expenditure chargeable to the State Account” in respect of Districts maintained during 1954-55 by direction of the Governor in Council, in which the Revenue was insufficient to meet operating costs, was	£
256,824	

## NATIONAL SERVICES.

Included in the heading of “National Services” are such items as river gaugings and inspections; contributions to the River Murray Commission for the maintenance of River Murray works; supervision and administration in respect to waterworks trusts, sewerage authorities, river improvement trusts, and of works constructed from other funds, &c. In addition, the salaries (provided for under special appropriation) paid to the Commissioners of the State Rivers and Water Supply Commission, are debited to the annual cost of operating country water supply works.

The Total Cost of Services of a National Character administered by the Commission during 1954-55, and paid from the Commission's Vote Appropriation was .. .. .	£	918,613
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This amount may be offset by miscellaneous revenue collected in respect to diversion permits, rents, recoup payments, &c. .. .. .	£	817,214
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	£	101,399
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No direct contribution is made to the Commission's revenue to offset the "utility service" 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 in the Auditor-General's Report for 1954-55 that the net cost to the State for the year in connexion with country water supply which has been met from general revenue was £3,002,178. This figure includes the cost of the service referred to earlier. The equivalent figure stated annually is often incorrectly quoted as a "loss" in respect of country water supply, whereas the only amount which, on the existing basis of rates and charges, might be correctly regarded as a cash "loss" is the amount of £383,464, being the net deficiency (£250,467) on Districts in which the revenue was insufficient to meet expenses, the operations of which, as already intimated, were continued by direction of the Governor in Council plus a loss of £132,997 on other Commission Districts.

A summary of the total cost (£3,002,178) to the State for the year is set out hereunder—a more detailed analysis is set out on page 77 of this Report.

	£	£
Net loss on Commission Districts .. .. .	132,997	
Net loss on "Order in Council" Districts .. .. .	250,467	
		383,464
Cost of "National Services" .. .. .	918,613	
Less Miscellaneous Revenue Collected .. .. .	817,214	
		101,399
		484,863
Interest, Exchange, and Loan Conversion Expenses on Headworks and Capital borne by the State .. .. .	2,639,320	
Add Arrears of Interest owing by Waterworks Trusts 1954-55 .. .. .	973	
	2,640,293	
Less Interest on Land sold .. .. .	38	
		2,640,255
		3,125,118
Less amount paid to Revenue in respect of Depreciation (£120,475) and Redemption (£2,465) .. .. .		122,940
		3,002,178
Add amount transferred from Revenue to Depreciation Fund .. .. .		
		3,002,178

The net cost to the State (£3,002,178) was £49,977 less than the comparable figure for the previous year.

The fact that no transfer was made by the Treasurer from the Commission's revenue to the Water Supply Works Depreciation Fund during the year was the prime cause of this decrease. During 1953-54, however, an amount of £561,958 8s. 9d., representing charges raised for six years, was so transferred.

If the charge raised each year for depreciation was transferred in that same year by the Treasurer, the net cost to the State would have been £2,580,813 for 1953-54 and £3,122,653 for 1954-55, an increase during 1954-55 of £541,840.

The increase in the total Interest, Exchange, and Loan Conversion Expenses on Loan Liability (£2,904,199 as against £2,338,293 for 1953-54) as a result of the large programme of loan works being pursued by the Commission, is the major factor in this increased cost to the State of Country Water Supply.

Increased cost of operation of Commission's Districts (£58,014) was offset by increased collections for Rates (£36,389) and Irrigation Charges (£26,705), the increase in the net loss on District operation being due to increased charges against Districts for Interest (£20,235) and Depreciation (£29,859).

Provision exists for the transfer from the "Capital Expenditure borne by the State Account" to the direct liability of water users of such amounts of the Capital Liability as are commensurate with the development of the respective districts. Accordingly, additional Capital Liability totalling £585,367 in respect of some urban districts within the Mornington Peninsula System, and the Dimboola, Dooen, Marnoo, Minyip, Nyah West, Pyramid Hill, Rainbow, Rupanyup, Terang, and Wonthaggi Urban Districts was transferred as from 1st July, 1954, from the State-borne Capital to the direct debit of the districts. The consequent additional Interest charges met by these districts amounted to £17,561.

Major Water Supply Projects under construction will involve a large expenditure of capital funds, but as the cost of these works will be borne by the State, it is inevitable that, notwithstanding increasing developments the cost to the State will tend to increase. The amount (£3,002,178) borne by the community for the year 1954-55 is equivalent to £1 3s. 11d. per head of the population of the State, and represents the contribution of the individual citizen towards the indirect but enormous benefits derived from the State works of Country Water Supply.



## RESULTS OF OPERATIONS IN DISTRICTS UNDER CONTROL OF COMMISSION.

## Disbursements, 1954-55.

	Operating Expenses.		Interest on Capital Allotted.		Depreciation Paid by Districts.				Redemption Paid by Districts.		Total Disbursements.	
					On Works.		On Buildings.					
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Plant Workshops .. ..	27,422	4 2	574	16 2	1,412	0 0	..	..	53	4 0	29,462	4 4
Coliban Works .. ..	130,310	4 2	10,391	10 8	7,755	0 0	531	0 0	..	..	148,987	14 10
Irrigation Districts .. ..	1,006,777	0 11	..	..	65,470	0 0	6,576	0 0	..	..	1,078,823	0 11
Irrigation Urban Divisions .. ..	13,904	1 8	170	0 0	1,976	0 0	..	..	13	8 7	16,063	10 3
Waterworks Districts .. ..	492,384	16 0	13,779	9 1	12,782	0 0	2,110	0 0	232	3 6	521,288	8 7
Waterworks Urban Districts .. ..	188,103	18 0	70,119	19 11	21,080	0 0	679	0 0	2,165	18 7	282,448	16 6
Flood Protection Districts .. ..	41,541	2 4	..	..	..	..	83	0 0	..	..	41,624	2 4
Carrum Drainage District .. ..	11,446	6 6	..	..	..	..	21	0 0	..	..	11,467	6 6
	1,911,889	13 9	95,335	15 10	110,475	0 0	10,000	0 0	2,464	14 8	2,130,165	4 3
Expenditure not chargeable to Districts—River Murray Commission, Recoupable and other items .. ..	869,731	5 6	..	..	..	..	..	..	..	..	869,731	5 6
	2,781,620	19 3	95,335	15 10	110,475	0 0	10,000	0 0	2,464	14 8*	2,999,896	9 9

\* Exclusive of Redemption paid in respect of Plant and Machinery Account.

## Receipts, 1954-55.

	Water Rates and Charges, Diversion and Grazing Fees, &c.		Recoups on Account of Payments from Revenue.		Total Receipts.		Less—Transfer to Depreciation Fund.		Nett Collections Paid to Consolidated Revenue.		Excess (Dr.) Disbursements over Receipts (Cr.) Receipts over Disbursements.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Plant Workshops .. ..	1,110	7 2	31,805	3 7	32,915	10 9	..	..	32,915	10 9	(Cr.)	3,453 6 5
Coliban Works .. ..	101,381	8 8	..	..	101,381	8 8	..	..	101,381	8 8	(Dr.)	47,606 6 2
Irrigation Districts ..	965,252	6 6	514	8 7	965,766	15 1	..	..	965,766	15 1	(Dr.)	113,056 5 10
Irrigation Urban Divisions ..	18,200	12 2	..	..	18,200	12 2	..	..	18,200	12 2	(Cr.)	2,137 1 11
Waterworks Districts ..	317,546	18 11	1,217	9 4	318,764	8 3	..	..	318,764	8 3	(Dr.)	202,524 0 4
Waterworks Urban Districts ..	274,813	7 3	..	..	274,813	7 3	..	..	274,813	7 3	(Dr.)	7,635 9 3
Flood Protection Districts ..	25,712	10 0	..	..	25,712	10 0	..	..	25,712	10 0	(Dr.)	15,911 12 4
Carrum Drainage District ..	9,147	3 5	..	..	9,147	3 5	..	..	9,147	3 5	(Dr.)	2,320 3 1
	1,713,164	14 1	33,537	1 6	1,746,701	15 7	..	..	1,746,701	15 7	(Dr.)	383,463 8 8
Divisions and Miscellaneous ..	127,180	3 2*	..	..	127,180	3 2	..	..	127,180	3 2	(Cr.)	127,180 3 2
Recoups of amounts paid from Revenue not credited to Districts .. ..	..	..	659,064	2 8	659,064	2 8	..	..	659,064	2 8	(Dr.)	210,667 2 10
	1,840,344	17 3	692,601	4 2	2,532,946	1 5	..	..	2,532,946	1 5	(Dr.)	466,950 8 4

\* In addition, an amount of £3,775 6s. 3d. was collected and paid to Rivers and Streams Fund as net revenue pursuant to Section 8, *Water Act* 1954, No. 5838.

## SUMMARY OF OPERATIONS FOR YEAR 1954-55.

Receipts.		COMMISSION DISTRICTS.		Expenditure.		(Result.)	
	£	s. d.		£	s. d.	£	s. d.
Rates and Charges .. ..	..	..	Vote Funds .. ..	1,911,889	13 9	..	..
less Depreciation Transfer .. ..	..	..	Interest charged on Capital borne by Districts .. ..	95,335	15 10	Dr.	260,523 14 0
Deficiency .. ..	..	..		2,007,225	9 7		
	..	..		2,007,225	9 7		
OTHER WORKS AND SERVICES.							
Diversion, Grazing Rentals, &c.							
Permits and Licence Fees and Charges, Grazing Rentals, &c. .. ..	..	..	Surplus .. ..	127,180	3 2	Cr.	127,180 3 2
	..	..		127,180	3 2		
Construction, Administration and Works for Other Authorities, and Water Users.							
On-cost received .. ..	..	..	Administration .. ..	321,778	3 2	..	..
Recoups of Expenditure .. ..	..	..	Expenditure Recoupable .. ..	341,515	17 4	Dr.	4,479 17 10
Deficiency .. ..	..	..		663,294	0 6		
	..	..		663,294	0 6		
River Murray, Sewerage, and Miscellaneous National Services.							
Recoup of Expenditure .. ..	..	..	Commissioners' Salaries .. ..	8,223	17 5	..	..
Grants to Sewerage Authorities ..	..	..	River Murray, Sewerage, and Trusts .. ..	100,562	19 1	..	..
	..	..	Miscellaneous National Services ..	105,874	5 11	..	..
	..	..	Pensions and Gratuities .. ..	40,657	12 4	Dr.	224,099 9 0
Deficiency .. ..	..	..		255,318	14 9		
	..	..		255,318	14 9		
Net Cost to the State for Services of a National Character .. ..				..	..	Dr.	101,399 3 8
Capital Charges.							
Interest Paid by Trusts .. ..	..	..	Interest, Exchange, and Loan .. ..	2,904,198	11 3	..	..
from Plant Hire, &c. .. ..	..	..	Conversion Expenses .. ..	..	..	Dr.	2,640,255 7 3
charged to Commission Districts ..	..	..		2,904,198	11 3		
Deficiency .. ..	..	..		2,904,198	11 3		
	..	..		2,904,198	11 3		
Total Expenditure Borne by the State .. ..				..	..	..	3,002,178 4 11

## ANALYSIS OF EXPENDITURE BORNE BY THE STATE, 1954-55.

	£	s.	d.	£	s.	d.
<b>Services of a National Character—</b>						
River Murray Commission's Contributions by State of Victoria in accordance with the provisions of the River Murray Water Acts .. .. .	..	..	..	46,000	0	0
<b>Assistance to Sewerage Authorities—</b>						
Where suspension of Works is being continued .. .. .	5,973	0	0			
In cases where the Interest paid on Capital Liability is in excess of the rate 3 per cent. ..	24,996	5	9			
				30,969	5	9
<b>Subsidies to Waterworks Trusts and Local Governing Bodies—</b>						
To enable a reduction of 33½ per cent. to be made in Water Rates .. .. .	585	17	0			
Where Interest is in excess of 3 per cent. on Loans raised under Act No. 5637 .. .. .	5,007	16	4			
				5,593	13	4
<b>Payment to First Mildura Irrigation Trust consistent with reduction in Rates in Pumping Districts in Irrigation Areas controlled by the Commission .. .. .</b>						
	..	..	..	18,000	0	0
<b>Ex gratia payment to disabled officer as a contribution towards medical and hospital expenses .. .. .</b>						
	..	..	..	300	0	0
<b>Miscellaneous Services—</b>						
Administration Waterworks Trusts and Sewerage Authorities, &c. .. .. .	14,066	17	10			
Administration Farm Water Supply: (Act No. 5020) .. .. .	1,153	0	6			
Irrigation Branch .. .. .	11,469	12	4			
Travelling, Minister and Commissioners .. .. .	3,076	16	2			
Minister's staff, salaries and Pay-Roll Tax, Commissioner's Cost of Living Allowances and Pay-Roll Tax (from 1st July, 1954, to 29th November, 1954) .. .. .	3,173	6	4			
Free Water for Research, Free Places Melbourne University, Library, Publicity, &c. .. .. .	32,418	10	11			
Rivers and Reclamation Division, River Gaugings, Diversions, Land Leasing, Surveys and Reports, Underground Water and Mining Investigations, Hydraulic Research .. .. .	40,216	1	10			
				105,574	5	11
<b>Administration in respect to Expenditure from other Funds and Works carried out for other Authorities (including Salaries, Pay-Roll Tax, &amp;c.) .. .. .</b>						
	..	..	..	321,778	3	2
<b>Works carried out for Other Authorities and Water Users, and Salaries charged to construction Projects, Recoupable .. .. .</b>						
	..	..	..	341,515	17	4
<b>TOTAL (from Vote Funds) .. .. .</b>						
	..	..	..	869,731	5	6
<b>Commissioner's Salaries (Special appropriation), including Cost of Living Allowances and Pay-Roll Tax from 30th November, 1954 .. .. .</b>						
	..	..	..	8,223	17	5
<b>TOTAL Expenditure on Service of a National Character .. .. .</b>						
	..	..	..	877,955	2	11
<b>Amount debited by Treasury for Pensions and Gratuities .. .. .</b>						
	..	..	..	40,657	12	4
				918,612	15	3
<b>Less Revenue received from Grazing Licences, Diversion Permits, Rents, &amp;c., £127,180 3s. 2d.; On-cost of Expenditure from Other Funds, £299,603 10s. 8d.; Recoups, £359,210 12s. ..</b>						
	785,994	5	10			
<b>„ Special Recoup, Commissioner's Salaries .. .. .</b>						
	250	0	0			
<b>„ Grants by State. Assistance to Sewerage Authorities .. .. .</b>						
	30,969	5	9			
				817,213	11	7
<b>Net cost to the State for Services of a National Character .. .. .</b>						
	..	..	..	101,399	3	8
<b>Interest on Capital Expenditure on Headworks and other Capital Expenditure borne by the State ..</b>						
	2,522,198	5	6			
<b>Exchange on Overseas Interest Payments .. .. .</b>						
	112,768	1	2			
<b>Loan Conversion Expenses .. .. .</b>						
	4,353	10	8			
<b>Arrears of Interest owing by Waterworks Trusts and other Corporations 1954-55 .. .. .</b>						
	973	3	0			
				2,640,293	0	4
<b>Less Interest on Lands Sold .. .. .</b>						
	..	..	..	37	13	1
				2,640,255	7	3
<b>Commission Districts—</b>						
<b>Districts, the Capital Liability of which have been adjusted under Acts Nos. 4513 and 5017—</b>						
<b>Excess Expenditure over Revenue after allowing for Depreciation, £81,277, and Redemption, £2,381 7s. 7d. .. .. .</b>						
	..	..	..	50,526	5	6
<b>Current Interest—</b>						
<b>Paid .. .. .</b>						
	..	..	..	63,047	16	8
<b>Forward Unpaid .. .. .</b>						
	..	..	..	19,422	10	5
				82,470	7	1
				132,996	12	7
<b>Districts supplied by direction of Governor in Council, but which show excess Revenue over Operating Costs after allowing for Depreciation, £17,752 9s. 3d. and Redemption, £83 7s. 1d.—</b>						
<b>Surplus .. .. .</b>						
	..	..	..	6,958	6	0
<b>Less Current Interest Paid .. .. .</b>						
	..	..	..	600	13	5
				Cr. 6,357	12	7
				126,639	0	0
<b>Excess Expenditure in Districts supplied by direction of Governor in Council and showing excess Expenditure over Revenue inclusive of Interest, £12,264 15s. 4d., and Depreciation, £21,445 10s. 9d. .. .. .</b>						
	..	..	..	256,824	8	8
				383,463	8	8
<b>Add amounts transferred to Water Supply Works Depreciation Fund in Treasury on Account of moneys paid to Revenue and Interest credited to Depreciation Account .. .. .</b>						
	..	..	..	..		
				383,463	8	8
<b>Deduct amounts paid to Revenue in respect of Depreciation on Works and Buildings, £120,475 and Redemption £2,464 14s. 8d. .. .. .</b>						
	..	..	..	122,939	14	8
				260,523	14	0
<b>Net Expenditure borne by the State .. .. .</b>						
	..	..	..	3,002,178	4	11

# SUMMARY OF CAPITAL EXPENDITURE, LOAN LIABILITY, INTEREST and EXCHANGE.

## CAPITAL EXPENDITURE 1954-55.

	£	s.	d.	£	s.	d.
Expenditure during the year on Capital Works of Water Supply—						
Ordinary Loan Funds (Details, pages 116, 117, 118) .. .. .	..	..	..	9,177,831	8	6

## LOAN CAPITAL LIABILITY.

Net Loan Liability of State for Works of Country Water Supply at 30th June, 1955 .. .. .	£	s.	d.	75,233,682	6	2
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### Represented by—

#### Works at Debit of Authorities—

Commission Districts .. .. .	2,957,284	2	0
Water Supply Plant and Machinery Account .. .. .	1,497,341	11	11
Plant Workshops .. .. .	17,646	11	4
Waterworks Trusts and Local Governing Bodies .. .. .	4,167,697	2	9
River Improvement Trusts .. .. .	41,030	3	10
Latrobe Valley Drainage .. .. .	559,569	4	2
	9,240,568	16	0

#### Capital Expenditure Borne by the State—

Headworks not apportionable to Districts .. .. .	4,404,802	3	4
Capital Works and Charges not apportionable to Districts .. .. .	1,268,850	8	11
Headworks and Distributory Works .. .. .	62,130,563	0	1
Waterworks Trusts and Local Governing Bodies .. .. .	3,731,000	11	7
Free Grants to Local Authorities in early years .. .. .	142,356	4	11
	71,677,572	8	10

Net Loan Capital Liability of Commission's Districts, Divisions, and Works under Control of the Commission .. .. .	80,918,141	4	10
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Less Expenditure from Treasurer's Advance .. .. .	90,926	14	11
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Less Amount from National Debt Sinking Fund, being the difference between redemption recoup contributions paid by Districts, Waterworks Trusts, &c. (£711,055 9s. 4d.) and the amount (£6,304,587 13s. 1d.) contributed from Consolidated Revenue to the National Debt Sinking Fund (page 000) .. .. .	5,593,532	3	9
	75,233,682	6	2

Add Cash on Hand at Treasury .. .. .	..	..	..
Net Liability Country Water Supply Capital Account in Treasury .. .. .	75,233,682	6	2

## INTEREST AND EXCHANGE.

The Total Interest on the Loan Liability for 1954-55 is .. .. .	2,787,076	19	5
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### To which is to be added—

Exchange payable on Overseas Interest .. .. .	112,768	1	2
Loan Conversion Expenses .. .. .	4,353	10	8
	2,904,198	11	3

### Interest Debitable to—

#### Works at Debit of Authorities—

Commission Districts .. .. .	95,335	15	10
Trusts .. .. .	124,360	0	10
Water Supply Plant and Machinery Account .. .. .	45,182	17	3
	264,878	13	11

#### Capital Expenditure Borne by the State—

Capital Works and Charges .. .. .	154,996	13	6
State Works of Water Supply .. .. .	44,648	8	8
Headworks and Distributory Works not debited to Districts .. .. .	2,186,461	14	3
Waterworks Trusts and Local Governing Bodies .. .. .	131,082	4	3
Free Grants to Local Authorities in early years .. .. .	5,009	4	10
	2,522,198	5	6

Exchange £112,768 1s. 2d. and Loan Conversion Expenses, £4,353 10s. 8d. not apportioned .. .. .	117,121	11	10
	2,904,198	11	3

## RECEIPTS AND DISBURSEMENTS.

STATEMENT of Moneys Received and Disbursed during the Year Ended 30th June, 1955.

Works.	Receipts.			Disbursements from Annual Vote and (a) Special Appropriation (Exclusive of Interest Redemption and Depreciation Charges).
	Total.	Paid to Depreciation Fund.	Paid to Consolidated Revenue.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Commission's Districts—				
Plant Workshops .. .. .	32,915 10 9	..	32,915 10 9	27,422 4 2
Coliban Works .. .. .	101,381 8 8	..	101,381 8 8	130,310 4 2
Irrigation Districts .. .. .	965,766 15 1	..	965,766 15 1	1,006,777 0 11
Irrigation Urban Divisions .. .. .	18,200 12 2	..	18,200 12 2	13,904 1 8
Waterworks Districts .. .. .	318,764 8 3	..	318,764 8 3	492,384 16 0
Waterworks Urban Districts .. .. .	274,813 7 3	..	274,813 7 3	188,103 18 0
Flood Protection Districts .. .. .	25,712 10 0	..	25,712 10 0	41,541 2 4
Carrum Drainage District .. .. .	9,147 3 5	..	9,147 3 5	11,446 6 6
	1,746,701 15 7	..	1,746,701 15 7	1,911,889 13 9
Other works and services (not directly apportionable to Districts)—				
Diversions .. .. .	24,411 1 4	..	24,411 1 4	..
Miscellaneous, Grazing Rentals, &c. .. .. .	102,769 1 10	..	102,769 1 10	..
	127,180 3 2	..	127,180 3 2	..
River Murray Commission .. .. .	..	..	..	46,000 0 0
Assistance to Sewerage Authorities .. .. .	..	..	..	30,969 5 9
Assistance to Waterworks Trusts .. .. .	..	..	..	5,593 13 4
Subsidy to First Mildura Irrigation Trust .. .. .	..	..	..	18,000 0 0
Ex gratia payment to disabled officer .. .. .	..	..	..	300 0 0
Miscellaneous National Services .. .. .	..	..	..	105,574 5 11
Expenditure Recoupable.. .. .	359,210 12 0	..	359,210 12 0	341,515 17 4
Administration in respect of Expenditure from other funds (including Salaries, Pay-Roll Tax, &c.) .. .. .	299,603 10 8	..	299,603 10 8	321,778 3 2
	658,814 2 8	..	658,814 2 8	869,731 5 6
Total—Other Works and Services .. .. .	785,994 5 10	..	785,994 5 10	869,731 5 6
Total Vote .. .. .	2,532,696 1 5	..	2,532,696 1 5	2,781,620 19 3
Commissioners' Salaries (Special Appropriation) .. .. .	250 0 0	..	250 0 0	8,223 17 5
Grand Totals .. .. .	2,532,946 1 5	..	2,532,946 1 5	2,789,844 16 8
Total Disbursements from Vote, and special Appropriation .. .. .	..	..	..	2,789,844 16 8
Net Receipts paid to Consolidated Revenue .. .. .	..	..	2,532,946 1 5	..
Grants from Revenue—				
To Assist Sewerage Authorities .. .. .	..	..	30,969 5 9	2,563,915 7 2
Deficiency from Commission's Operations .. .. .	..	..	..	225,929 9 6
Amount not included in above Statement—				
Debits by Treasury for Pension and Gratuities .. .. .	..	..	40,657 12 4	..
Interest Paid :—By Waterworks Trusts and Local Governing Bodies, £123,386 17s. 10d.; Plant and Machinery Account, &c., £45,182 17s. 3d.; and on Land Sold, £37 13s. 1d.	..	..	Cr. 168,607 8 2	Cr. 127,949 15 10
Deficiency Chargeable to State exclusive of Interest, Exchange, and Loan Conversion Expenses .. .. .	..	..	..	97,979 13 8
Interest, Exchange, and Loan Conversion Expenses .. .. .	..	..	..	2,904,198 11 3
Total amount borne by the State .. .. .	..	..	..	3,002,178 4 11

PLANT WORKSHOPS.  
CASH ACCOUNT.

District.	Receipts.		Expenditure.							Accumulated—					
	Year Ended 30th June, 1955.		Year Ended 30th June, 1955.							Excess Expenditure over Receipts 1954-55.	Excess Receipts over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.	
	Receipts Year Ended 30th June, 1955.	Total to 30th June, 1955.	Operating Costs.	Interest.	Depreciation.	Redemption.	Total.	Total to 30th June, 1955.							
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1. Bendigo ..	29,459	0	0	157,815	4	7	24,915	8	9	520	2	10	970	0	0
2. Residences (14) ..	1,110	7	2	5,024	7	1	840	0	0	..	..	..	350	0	0
Total Central Plant	30,569	7	2	162,839	11	8	25,755	8	9	520	2	10	1,320	0	0
Workshops ..	2,346	3	7	2,982	5	2	1,666	15	5	54	13	4	92	0	0
3. Kerang Sub-depot ..															
Total	32,915	10	9	165,821	16	10	27,422	4	2	574	16	2	1,412	0	0

1. Bendigo  
2. Residences (14)  
Total Central Plant  
Workshops  
3. Kerang Sub-depot  
Total

COLIBAN SYSTEM.  
CASH ACCOUNT.

STATEMENTS of Moneys received and disbursed from 1st July, 1905, to 30th June, 1955; also of Interest charged at the rates of 3.546 per cent. on Capital Debits as at 30th June, 1943, and 3 per cent. on Capital Debits subsequent to 30th June, 1943, and of Depreciation and Redemption charged for Financial Year 1954-55.

District.	Receipts.		Expenditure.							Accumulated—				
	Total 1905 to 30th June, 1955.		Year Ended 30th June, 1955.							Excess Expenditure over Receipts 1954-55.	Excess Receipts over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.
	Receipts Year Ended 30th June, 1955.	Total	Operating Costs.	Interest.	Depreciation.	Redemption.	Total.							
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
1. Harcourt	3,971 12 1	77,335 3 3	4,683 1 1	..	50 0 0	..	4,733 1 1	77,324 6 0	761 9 0	..	10 17 3	..	..	
Totals	3,971 12 1	77,335 3 3	4,683 1 1	..	50 0 0	..	4,733 1 1	77,324 6 0	761 9 0	..	10 17 3	..	..	

The Districts set out hereunder 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 Orders in Council, dated 8th November, 1943, 18th December, 1944, and 26th February, 1946, under the provisions of Section 6, *Water Act 1937*, No. 4513.)

2. Axe Creek	938 17 2	16,493 0 3	1,355 13 11	..	5 0 0	..	1,360 13 11	18,529 3 5	421 16 9	..	..	972 10 0	1,063 13 2
3. Coliban	96,212 12 10	2,348,017 3 5	123,960 15 6	10,390 14 10	8,190 0	..	142,531 10 4	3,492,142 12 2	46,318 17 6	..	..	13,729 8 9	1,130,396 0 0
4. Marong	258 6 7	4,879 3 6	320 13 8	0 15 10	41 0 0	..	362 9 6	6,247 18 3	104 2 11	..	..	210 8 10	1,158 5 11
Totals	97,409 16 7	2,369,389 7 2	125,627 3 1	10,391 10 8	8,236 0 0	..	144,254 13 9	3,516,919 13 10	46,844 17 2	..	..	14,912 7 7	1,132,617 19 1
Grand Totals	101,381 8 8	2,446,724 10 5	130,310 4 2	10,391 10 8	8,286 0 0	..	148,987 14 10	3,594,243 19 10	47,606 6 2	..	10 17 3	14,912 7 7	1,132,617 19 1

The Districts set out hereunder 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 Orders in Council, dated 8th November, 1943, 18th December, 1944, and 26th February, 1946, under the provisions of Section 6, *Water Act* 1937, No. 4513.)

2. Axe Creek  
3. Coliban  
4. Marong  
Totals  
Grand Totals

988 17 2	16,493 0 3	1,355 13 11	5 0 0	..	..	..	1,360 13 11	18,529 3 5	421 16 9	..	..	972 10 0	1,083 13 2
96,212 12 10	2,348,017 3 5	123,950 15 6	8,190 0 0	10,390 14 10	..	..	142,531 10 4	3,492,142 12 2	46,318 17 6	..	..	13,729 8 9	1,130,396 0 0
258 6 7	4,879 3 6	320 13 8	0 15 10	0 15 10	..	..	362 9 6	6,247 18 3	104 2 11	..	..	210 8 10	1,138 5 11
97,409 16 7	2,369,389 7 2	125,627 3 1	8,236 0 0	10,391 10 8	..	..	144,254 13 9	3,516,919 13 10	46,844 17 2	..	..	14,912 7 7	1,132,617 19 1
101,381 8 8	2,446,724 10 5	130,310 4 2	8,286 0 0	10,391 10 8	..	..	148,987 14 10	3,594,243 19 10	47,606 6 2	10 17 3	..	14,912 7 7	1,132,617 19 1

# PLANT WORKSHOPS.

## PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.

	(A) Value of Work Completed or In Progress, (B) House Rents,		Expenditure.				Profit and Loss.						
	£	s. d.	Operating Costs.	Interest.	Depreciation.	Redemption.	Total.	Expenditure in Excess of Earnings.	Earnings in Excess of Expenditure.	Adjustments to Revenue for Yrs. Prior to 1954-55.	Loss as at 30th June, 1955.	Gain as at 30th June, 1955.	
1. Bendigo	..	..	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	
2. Residences (14)	..	..	24,915	8 9	520	2 10	44	1 10	26,449	13 5	..	31,054	0 7
	..	..	840	0 0	..	..	..	..	350	0 0	..	515	12 11
Total Central Plant Workshops	..	..	25,755	8 9	520	2 10	44	1 10	27,639	13 5	..	31,569	13 6
3. Kerang Sub-depot	..	..	1,666	15 5	54	13 4	4	11 1	1,817	19 10	..	473	6 0
Total	..	..	27,422	4 2	574	16 2	48	12 11	29,457	13 3	..	31,569	13 6

# COLIBAN SYSTEM.

## PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.

STATEMENT of Revenue Assessment (inclusive of Rates, Water Sales, Interest, and Miscellaneous) and Expenditure, Interest, Depreciation, and Redemption charged and Amounts Written Off.

District.	Expenditure.						Profit and Loss.							
	Revenue Assessment.	Operating Costs.	Interest.	Depreciation.	Redemption.	Amounts Written Off.	Total.	Excess Expenditure over Assessment.	Excess Assessment over Expenditure.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years prior to 1954-55. (A) Loss. (B) Gain.	Interest and Other Losses prior to 30th June, 1938, Borne by State (Act No. 5017).	Loss since 30th June, 1938.	Gain as at 30th June, 1955.
1. Harcourt	£ s. d. 3,974 18 0	£ s. d. 4,683 1 1	£ s. d. ..	£ s. d. 50 0 0	£ s. d. ..	£ s. d. ..	£ s. d. 4,733 1 1	£ s. d. 758 3 1	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. 12 0 9
Total	£ s. d. 3,974 18 0	£ s. d. 4,683 1 1	£ s. d. ..	£ s. d. 50 0 0	£ s. d. ..	£ s. d. ..	£ s. d. 4,733 1 1	£ s. d. 758 3 1	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. 12 0 9

The Districts set out hereunder are those whose works will not produce sufficient revenue to cover the expense of 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 Orders in Council, dated 8th November, 1945, 18th December, 1944, and 26th February, 1946, respectively, under the provisions of Section 6, *Water Act* 1937, No. 4513.)

2. Axe Creek .. .. .	933 3 5	1,355 13 11	5 0 0	8,190 0 0	733 0 0	0 15 9	1,360 13 11	427 10 6	..	43 1 1	(A) 14 18 3	828,373 18 10	1,994 13 5	..
3. Coliban .. .. .	101,906 19 4	123,950 15 6	10,390 14 10	8,190 0 0	733 0 0	0 15 9	143,265 6 1	41,358 6 9	..	..	..	310,573 4 11	..	..
4. Marong .. .. .	295 14 10	320 13 8	0 15 10	41 0 0	0 1 10	..	362 11 4	66 16 6	..	..	..	1,282 7 5	..	..
Totals .. .. .	103,135 17 7	125,627 3 1	10,391 10 8	8,236 0 0	733 1 10	0 15 9	144,988 11 4	41,852 13 9	..	43 1 1	(A) 14 18 3	828,373 18 10	313,850 5 9	..
Grand Totals .. .. .	107,110 15 7	130,310 4 2	10,391 10 8	8,236 0 0	733 1 10	0 15 9	149,721 12 5	42,610 16 10	..	43 1 1	(A) 14 18 3	828,373 18 10	313,850 5 9	12 0 9

## IRRIGATION AND WATER SUPPLY DISTRICTS.

## CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1955; also of Depreciation charged for Financial Year 1954-55. (State Works of Water Supply excluded.)

District.	Receipts.			Expenditure.						Excess Receipts over Expenditure 1954-55.	Excess Receipts over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Accumulated.		
	Receipts Year Ended 30th June, 1955.		Total 1906 to 30th June, 1955.	Year Ended 30th June, 1955.		Total.	Excess Receipts over Expenditure 1954-55.	Excess Receipts over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.				Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.	
	£	s. d.		£	s. d.										£
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.				
1. Baccins Marsh ..	11,263 4 9	247,481 18 10	9,152 18 11	351 0 0	9,503 18 11	234,983 9 6	..	1,759 5 10	..	16,331 2 5	21,170 8 3				
2. Boort ..	15,087 1 2	243,689 7 2	21,510 17 5	2,032 0 0	23,542 17 5	317,006 9 3	8,455 16 3	..	..	71,696 6 10	1,620 15 3				
3. Calvil ..	9,762 19 1	118,159 15 10	9,237 0 2	971 0 0	10,208 0 2	128,637 4 1	445 1 1	..	9,458 0 11	..	19,935 9 2				
4. Campaspe ..	1,630 9 4	39,235 7 0	1,077 10 7	304 0 0	1,381 10 7	46,539 17 11	..	248 18 9	..	3,609 4 1	3,695 6 10				
5. Central Gippsland ..	12,132 18 5	21,530 14 10	6,906 1 4	276 0 0	7,182 1 4	13,288 2 4	..	4,950 17 1	8,242 12 6	..	..				
6. Cohuna ..	56,691 8 5	980,607 17 10	57,621 12 2	4,871 0 0	62,492 12 2	1,010,137 6 2	5,801 3 9	..	..	14,384 7 6	15,145 0 10				
7. Deakin ..	10,851 17 11	251,910 11 4	12,932 15 0	1,060 0 0	13,992 15 0	266,875 11 3	3,140 17 1	..	..	12,709 15 2	2,255 4 9				
8. Dingee ..	6,576 3 2	92,979 14 9	6,637 9 4	461 0 0	7,098 9 4	97,959 13 7	522 6 2	..	..	213 7 5	4,766 11 5				
9. Katandra ..	11,998 3 0	169,316 5 2	10,398 16 11	416 0 0	10,814 16 11	134,286 7 1	..	1,183 6 1	2,887 18 2	..	27,858 0 1				
10. Kerang ..	28,590 1 7	410,377 2 5	26,667 19 2	4,069 0 0	30,736 19 2	437,401 17 3	2,146 17 7	..	..	23,258 8 8	3,766 6 2				
11. Koondrook ..	30,827 11 10	503,215 18 8	28,240 9 11	2,236 0 0	30,476 9 11	583,796 11 0	..	351 1 11	..	28,189 2 8	52,391 9 8				
12. Maffra-Sale ..	51,146 15 9	544,884 6 4	49,766 7 9	4,586 0 0	54,352 7 9	649,060 6 10	3,205 12 0	..	..	100,462 19 1	3,713 1 5				
13. Murray Valley ..	92,646 15 3	478,650 2 5	77,913 9 7	1,452 0 0	79,365 9 7	444,295 4 0	..	13,281 5 8	34,444 18 5	..	..				
14. Mystic Park ..	2,359 13 5	40,551 19 6	5,067 11 5	226 0 0	5,293 11 5	64,773 14 4	2,933 18 0	..	..	22,108 18 2	2,112 16 8				
15. North Shepparton ..	17,707 16 5	225,989 18 2	21,759 3 10	926 0 0	22,685 3 10	282,727 7 7	4,977 7 5	..	..	13,977 7 5	42,760 2 0				
16. Robinvale ..	20,906 0 0	101,482 15 3	43,039 0 1	6,030 0 0	49,069 0 1	225,354 4 9	28,163 0 1	..	..	123,871 9 6	..				
17. Rochester ..	71,253 7 0	1,683,942 6 2	67,020 19 5	4,732 0 0	71,752 19 5	1,140,517 8 7	499 12 5	..	..	20,312 5 11	35,162 16 6				
18. Rodney ..	81,635 3 8	1,463,219 19 1	87,055 17 11	8,362 0 0	95,417 17 11	1,635,853 7 1	13,782 14 3	..	..	86,473 12 5	86,159 15 7				
19. Shepparton ..	25,912 5 6	426,024 16 7	32,853 17 11	1,634 0 0	34,487 17 11	531,323 0 9	9,475 12 5	..	..	44,385 12 5	60,912 11 9				
20. South Shepparton ..	6,386 0 2	84,235 18 6	6,636 12 5	296 0 0	6,932 12 5	95,355 17 4	546 12 3	..	..	8,384 2 1	2,735 16 9				
21. Swan Hill ..	32,118 10 1	493,059 4 0	35,795 10 2	2,337 0 0	38,132 10 2	575,383 13 11	6,014 0 1	..	..	76,087 19 5	6,236 10 6				
22. Third Lake ..	2,576 10 1	35,691 13 7	2,838 4 0	152 0 0	2,990 4 0	44,783 8 3	413 13 11	..	..	6,652 12 6	2,439 2 2				
23. Tongala-Stanhope ..	55,731 8 2	819,033 2 1	83,725 0 8	2,171 0 0	85,896 0 8	983,834 6 7	30,164 12 6	..	..	91,178 6 4	73,622 18 2				
24. Tragowel Plains ..	41,797 9 5	694,799 16 7	37,533 7 10	4,446 0 0	41,979 7 10	791,261 17 7	181 18 5	..	..	53,621 14 4	42,840 6 8				
25. Werribee ..	22,631 8 2	311,370 8 4	26,149 5 10	535 0 0	26,684 5 10	362,702 13 1	4,052 17 8	..	..	35,856 14 6	15,475 10 3				
Totals	719,321 1 9	9,822,541 0 5	767,537 19 9	54,932 0 0	822,469 19 9	11,148,049 0 1	124,923 13 4	21,774 15 4	55,033 10 0	853,765 8 10	526,776 0 10				



## IRRIGATION AND WATER SUPPLY DISTRICTS—continued.

## CASH ACCOUNT—continued.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1955; also of Depreciation charged for Financial Year 1954-55 (State Works of Water Supply excluded)—continued.

District.	Receipts.			Expenditure.						Excess Receipts over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Accumulated.		
	Receipts Year Ended 30th June, 1955.	Total 1906 to 30th June, 1955.	Year Ended 30th June, 1955.			Total.	Excess Receipts over Expenditure 1954-55.	Excess Receipts over Expenditure 1954-55.	Deficiency Chargeable to District Account at 30th June, 1955.			Deficiency Chargeable to State Account at 30th June, 1955.		
			Operating Costs.	Depreciation.	Total.									
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.			
26. Fish Point .. ..	2,054 14 2	27,214 17 5	3,723 4 11	197 0 0	3,920 4 11	43,749 14 10	1,865 10 9	..	..	654 5 10	15,880 11 7			
27. Nyah .. ..	23,550 12 5	380,479 0 1	24,960 14 8	1,687 0 0	26,647 14 8	462,993 7 8	3,097 2 3	..	..	11,264 15 0	71,249 12 7			
28. Red Cliffs—Merbein .. ..	209,337 0 10	2,947,805 11 10	194,400 14 3	14,340 0 0	208,740 14 3	3,333,923 13 1	..	506 6 7	..	46,583 9 7	339,534 11 8			
29. Tresco .. ..	11,503 5 11	110,391 13 5	16,154 7 4	890 0 0	17,044 7 4	250,291 18 10	5,541 1 5	..	..	46 8 9	139,943 15 8			
Totals .. ..	246,445 13 4	3,465,801 2 9	239,239 1 2	17,114 0 0	256,353 1 2	4,090,958 14 5	10,503 14 5	506 6 7	..	58,518 19 2	566,608 12 6			
Grand Totals .. ..	965,769 15 1	13,288,342 3 2	1,006,777 0 11	72,046 0 0	1,078,823 0 11	15,239,067 14 6	135,427 7 9	22,371 1 11	55,063 10 0	912,314 8 0	1,093,354 13 4			

The Districts set out hereunder 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 Orders in Council, dated 30th July, 1938, and 15th November, 1942, under the provisions of Section 6, *Water Act* 1937, No. 4313.)

The Districts set out hereunder 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 Orders in Council, dated 30th July, 1938, and 16th November, 1942, under the provisions of Section 6, *Water Act 1937*, No. 4513.)

## IRRIGATION AND WATER SUPPLY DISTRICTS.

## PROFIT AND LOSS ACCOUNT FOR YEAR 1954-55.

## STATEMENT of Revenue Assessment (inclusive of Rate, Charge, Water Sales, Interest, Miscellaneous and Credits for Urban Water), and Expenditure and Depreciation Charged and Amounts Written Off.

District.	Revenue Assessment.			Expenditure.			Profit and Loss.																		
	(A) General Rate.		(A) Irrigation Charge.	Total Revenue Assessments.	(A) Operating Costs.	Amounts Written Off.	Total.	(Dr.) Excess over Assessment.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue prior to 1954-55.	Interest and Other Losses Prior to 30th June, 1938, Borne by State (Act No. 5017).	Loss since 30th June, 1938.	Gain as at 30th June, 1955.												
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.											
1. Bacchus Marsh	(A)	850	6 6	(A)	6,603	0 0	10,443	2 4	(A)	9,152	18 11	(Cr.)	933	17 5	0	8 0	..	..	21,170	8 3	15,533	14 7	..		
2. Boort	(A)	2,444	17 0	(A)	8,501	5 10	20,876	7 0	(B)	351	0 0	(Dr.)	2,678	18 9	0	13 1	..	..	1,620	15 3	64,348	17 2	..		
3. Callivill	(A)	898	6 0	(B)	9,930	5 0	10,903	16 1	(B)	2,032	0 0	(Cr.)	695	9 10	0	18 0	..	..	19,935	9 2	..	..	13,644	8 8	
4. Campaspe	(A)	823	11 3	(B)	5,126	15 1	2,058	11 1	(B)	971	0 0	(Cr.)	677	0 6	..	..	..	..	3,695	6 10	2,960	17 0	..		
5. Central Gippsland	(A)	2,006	2 0	(B)	1,234	19 10	20,130	6 6	(B)	304	0 0	(Cr.)	5,161	13 8	..	..	..	..	..	..	..	..	9,147	18 11	
6. Cohuna	(A)	3,786	8 2	(B)	6,871	14 6	57,428	2 10	(B)	6,906	1 4	(Dr.)	5,131	10 2	34	16 3	..	..	15,145	0 10	3,939	0 6	..		
7. Deakin	(B)	4,834	8 7	(A)	37,014	0 0	11,070	8 7	(A)	57,621	12 2	(Dr.)	2,922	6 5	81	7 3	(B)	0 14 4	2,255	4 9	11,133	12 2	..		
8. Dingee	(B)	3,471	12 1	(A)	11,793	6 1	6,382	14 11	(B)	4,871	0 0	(Dr.)	715	14 5	..	..	..	..	4,766	11 5	..	..	252	18 0	
9. Katandra	(A)	311	9 6	(B)	4,273	10 0	11,998	14 5	(B)	1,060	0 0	(Cr.)	1,285	8 5	..	..	(A)	101 10 11	27,858	0 1	..	..	3,398	11 5	
10. Kerang	(A)	765	5 0	(A)	3,335	5 0	28,866	12 3	(B)	461	0 0	(Cr.)	1,870	6 11	..	..	..	..	3,766	6 2	14,934	19 1	..		
11. Koondrook	(B)	1,195	15 6	(A)	5,495	5 0	32,691	4 8	(A)	10,297	6 0	(Cr.)	2,214	14 9	1	18 7	..	..	52,391	9 8	19,498	10 5	..		
12. Maffra-Sale	(A)	2,895	5 3	(A)	16,086	14 6	49,446	6 1	(B)	4,069	0 0	(Dr.)	5,008	7 1	200	10 6	(B)	23 5 1	3,713	1 5	98,719	0 2	..		
13. Murray Valley	(B)	1,647	17 6	(B)	18,466	10 0	105,965	2 2	(A)	2,236	0 0	(Cr.)	23,365	8 6	105	5 0	(B)	54 13 10	..	..	..	..	65,649	8 5	
14. Mystic Park	(A)	3,924	3 0	(A)	57,734	12 6	2,785	6 1	(B)	4,586	0 0	5,293	11 5	(Dr.)	2,508	5 4	0	1 0	..	..	2,112	16 8	20,892	8 1	..
15. North Shepparton	(A)	387	3 4	(B)	40,147	3 8	17,988	9 10	(B)	1,452	0 0	22,509	14 4	(Dr.)	4,521	4 6	..	..	42,760	2 0	12,571	19 3	..		
16. Robinvale	(A)	2,709	18 6	(A)	332	12 9	47,928	3 6	(B)	226	0 0	70,051	2 3	(Dr.)	22,122	18 9	..	..	..	..	113,366	19 0	..		
17. Rochester	(B)	897	4 0	(B)	9,809	5 0	72,624	13 0	(A)	21,576	8 4	(Cr.)	871	13 7	42	10 2	..	..	35,162	16 6	1,552	18 6	..		
18. Rodney	(A)	1,023	2 4	(A)	4,482	2 4	84,449	14 2	(B)	6,030	0 0	95,446	12 11	(Dr.)	10,996	18 9	8	1 3	(B)	219 0 11	86,159	15 7	64,649	2 8	..
19. Shepparton	(B)	5,146	8 0	(B)	43,099	10 0	25,167	12 2	(A)	4,732	0 0	34,237	18 3	(Dr.)	9,070	6 1	..	..	60,912	11 9	43,501	10 0	..		
20. South Shepparton	(A)	8,874	6 6	(A)	45,681	15 0	6,480	9 2	(B)	8,362	0 0	6,874	16 8	(Dr.)	394	7 6	..	..	2,735	16 9	8,024	6 3	..		
21. Swan Hill	(B)	2,513	6 6	(B)	27,380	6 2	31,599	0 7	(A)	32,562	3 9	38,210	18 7	(Dr.)	6,611	18 0	3	2 3	(A)	291 14 2	60,912	11 9	43,501	10 0	..
22. Third Lake	(A)	2,657	7 9	(A)	15,777	0 0	2,745	6 5	(B)	1,634	0 0	2,990	4 0	(Dr.)	244	17 7	..	..	6,236	10 6	70,095	18 4	..		
23. Tongala-Stanhope	(B)	4,848	11 6	(B)	1,884	12 11	56,285	10 11	(A)	6,575	12 8	..	..	(Dr.)	30,252	0 1	90	17 1	2,439	2 2	6,055	7 1	..		
	(A)	1,794	11 6	(A)	3,368	5 0			(B)	296	0 0	4 10 0	..	(Dr.)					..	..	73,622	18 2	82,166	16 6	..
	(A)	3,062	15 0	(A)	1,317	12 8			(A)	35,795	10 2			(Dr.)					..	..	..	..	..	..	..
	(B)	1,831	18 0	(B)	19,401	0 0			(B)	2,888	4 0			(Dr.)					..	..	..	..	..	..	..
	(A)	206	7 6	(A)	7,293	7 7			(A)	1,524	0 0			(Dr.)					..	..	..	..	..	..	..
	(A)	3,407	1 0	(A)	654	3 11			(B)	84,362	1 0			(Dr.)					..	..	..	..	..	..	..
	(B)	5,337	3 5	(B)	11,512	16 6			(B)	2,171	0 0			(Dr.)					..	..	..	..	..	..	..

IRRIGATION AND WATER SUPPLY DISTRICTS—continued.

PROFIT AND LOSS ACCOUNT FOR YEAR 1954-55—continued.

STATEMENT of Revenue Assessment (inclusive of Rate, Charge, Water Sales, Interest, Miscellaneous and Credits for Urban Water), and Expenditure and Depreciation Charged and Amounts Written Off—continued.

District.	Revenue Assessment.				Expenditure.			Profit and Loss.				
	(A) General Rate. (B) Drainage Rate.	(A) Irrigation Charge. (B) Sales and Miscellaneous.	Total Revenue Assessments.	(A) Operating Costs. (B) Depreciation.	Amounts Written Off.	Total.	(Dr.) Excess Expenditure over Assessment. (Cr.) Excess Assessment over Expenditure. 1954-55.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years Prior to 1954-55. (A) Loss. (B) Gain.	Interest and Other Losses Prior to 30th June, 1938, Borne by State (Act No. 5017).	Loss since 30th June, 1938.	Gain as at 30th June, 1955.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
24. Tragowel Plains	{ (A) 4,882 18 4 } { (B) 272 8 0 }	{ (A) 23,410 10 0 } { (B) 15,490 2 2 }	{ 44,055 18 6 } { 24,607 15 10 }	{ (A) 37,533 7 10 } { (B) 4,446 0 0 }	43 13 8	42,023 1 6	(Cr.) 2,032 17 0	0 2 0	..	42,840 6 8	42,633 14 11	..
25. Werribee	{ (A) 7,015 16 6 } { (B) 4,210 17 4 }	{ (A) 10,187 10 0 } { (B) 3,193 12 0 }	24,607 15 10	{ (A) 26,149 5 10 } { (B) 535 0 0 }	..	26,684 5 10	(Dr.) 2,076 10 0	..	(B) 19 5 0	15,475 10 3	31,841 19 4	..
Totals	{ (A) 74,646 0 6 } { (B) 38,943 3 2 }	{ (A) 449,200 2 6 } { (B) 222,190 2 11 }	784,979 9 1	{ (A) 767,537 19 9 } { (B) 54,932 0 0 }	32,397 16 0	854,867 15 9	{ (Dr.) 107,126 10 4 } { (Cr.) 37,238 3 8 }	570 10 5	{ (A) 637 0 4 } { (B) 1,019 19 5 }	526,776 0 10	728,421 11 0	92,093 5 5
<p>The Districts set out hereunder are those whose works will not produce sufficient revenue to cover 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 Orders in Council dated 30th June, 1938, and 16th November, 1942, under Section 6, <i>Water Act</i> 1937, No. 4513.)</p>												
26. Fish Point	{ (A) 316 1 8 } { (B) 483 13 1 }	{ (A) 1,383 7 6 } { (B) 21,506 5 0 }	2,188 2 3	{ (A) 3,723 4 11 } { (B) 197 0 0 }	..	3,920 4 11	(Dr.) 1,737 2 8	..	..	2,479 7 4	13,372 8 0	..
27. Nyah	{ (A) 340 19 0 } { (B) 727 13 1 }	{ (A) 21,506 5 0 } { (B) 2,040 8 8 }	24,615 5 9	{ (A) 24,960 14 8 } { (B) 1,687 0 0 }	..	26,647 14 8	(Dr.) 2,032 8 11	15 0 0	..	30,297 7 11	45,308 1 5	..
28. Red Cliffs-Merbein	{ (A) 5,618 4 6 } { (B) 14,395 3 6 }	{ (A) 173,416 10 0 } { (B) 14,523 4 11 }	207,953 2 11	{ (A) 194,400 14 3 } { (B) 14,340 0 0 }	28 12 0	208,769 6 3	(Dr.) 846 3 4	120 3 10	..	47,614 2 7	333,879 19 0	..
29. Tresco	{ (A) 667 16 6 } { (B) 896 8 3 }	{ (A) 12,282 0 0 } { (B) 896 8 3 }	13,846 4 9	{ (A) 10,154 7 4 } { (B) 890 0 0 }	..	17,044 7 4	(Dr.) 3,198 2 7	10 10 0	..	65,026 4 5	72,048 10 4	..
Totals	{ (A) 6,943 1 8 } { (B) 15,122 16 7 }	{ (A) 208,588 2 6 } { (B) 17,943 14 11 }	248,597 15 8	{ (A) 239,239 1 2 } { (B) 17,114 0 0 }	28 12 0	256,381 13 2	(Dr.) 7,783 17 6	145 13 10	..	145,417 2 3	464,608 18 9	..
GRAND TOTALS	{ (A) 81,589 2 2 } { (B) 54,065 19 9 }	{ (A) 657,788 5 0 } { (B) 240,133 17 10 }	1,093,577 4 9	{ (A) 1,006,777 0 11 } { (B) 72,046 0 0 }	32,426 8 0	1,111,249 8 11	{ (Dr.) 114,910 7 10 } { (Cr.) 37,238 3 8 }	716 4 3	{ (A) 637 0 4 } { (B) 1,019 19 5 }	672,193 3 1	1,193,030 9 9	92,093 5 5

## URBAN DIVISIONS.

## CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1955 : also of Interest charged at the rates of 3·456 per cent. on Capital Debits as at 30th June, 1943, and 3 per cent. on Capital Debits subsequent to 30th June, 1943, and of Redemption and Depreciation Charged for Financial Year 1954-55.

Division.	Receipts.			Expenditure.										Accumulated.																																				
	Receipts, Year Ended 30th June, 1955.			Year Ended 30th June, 1955.						Total 1956 to 30th June, 1955.	Excess Expenditure Over Receipts 1954-55.	Excess Receipts Over Expenditure 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.																																				
	£	s.	d.	Operating Costs.	Interest.	Depreciation.	Redemption.	Total.																																										
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.																																					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.																																			
1. Cehuna	2,584	10	11	45,669	19	6	2,041	1	7	110	17	4	2,431	6	7	45,237	15	10	..	..	..	..	..	..																										
2. Lockington	532	7	4	9,742	18	9	291	11	3	4	3	3	93	0	0	0	7	9	389	2	3	8,636	8	0	143	5	1	1,056	10	9	..	..	..	..																
3. Macorna	175	3	0	1,076	6	5	141	6	6	..	..	..	47	0	0	..	..	188	6	6	1,422	15	0	13	3	6	..	..	..	..	..	..	..																	
4. Red Cliffs	6,744	4	7	73,982	18	4	5,056	13	7	54	19	5	532	0	0	..	4	13	2	5,648	6	2	75,796	15	3	1,095	18	5	..	..	1,813	16	11	..	..	..														
5. Robinvale	1,479	11	11	5,503	19	5	815	14	9	..	..	..	179	0	0	..	..	994	14	9	4,374	6	7	..	..	484	17	2	1,129	12	10	..	..	..	..															
6. Tallygaroopna	326	11	0	1,422	3	0	173	9	7	..	..	..	55	0	0	..	..	228	9	7	1,046	17	4	..	..	98	1	5	375	5	8	..	..	..	..															
Totals ..	11,842	8	9	137,398	5	5	8,519	17	3	170	0	0	1,177	0	0	13	8	7	9,880	5	10	136,564	18	0	13	3	6	1,975	6	5	2,993	12	11	2,160	5	6	..	..												
The Divisions set out hereunder 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 Orders in Council, dated 30th July, 1938, and 18th December, 1944, under the provisions of Section 6, <i>Water Act</i> 1937, No. 4513.)																106	0	11	..	152	13	10	..	160	19	2	..	389	9	9	..	30	16	2	2,336	3	8	108	4	10	..	..	183	10	0	3,618	0	8	..	..
7. Corop	39	19	9	1,261	7	1	23	0	0	..	..	..	6	0	0	..	..	29	0	0	1,356	8	3	..	..	10	19	9	..	..	..	..	..	..	..	..	..	..												
8. Dingee	123	8	8	2,739	18	5	121	3	7	..	..	..	41	0	0	..	..	162	3	7	3,409	14	7	38	14	11	..	..	..	..	..	..	..	..	..	..	..	..												
9. Heyfield	4,629	6	10	24,672	9	3	3,391	15	6	..	..	..	501	0	0	..	..	3,892	15	6	22,879	13	1	..	..	736	11	4	1,953	15	4	..	..	..	..	..	..	..												
10. Leitchville	991	10	2	13,588	12	6	878	5	6	..	..	..	101	0	0	..	..	979	5	6	13,965	17	7	..	..	12	4	8	12	4	8	..	..	..	..	..	..	..												
11. Murrabit	148	10	9	1,991	18	7	519	7	9	..	..	..	67	0	0	..	..	586	7	9	4,358	18	5	437	17	0	..	..	..	..	..	..	..	..	..	..	..	..												
12. Stanhope	425	7	3	7,741	3	9	450	12	1	..	..	..	83	0	0	..	..	533	12	1	7,388	11	5	108	4	10	..	..	..	..	..	..	..	..	..	..	..	..												
Totals ..	6,358	3	5	51,995	9	7	5,384	4	5	..	..	..	799	0	0	..	..	6,183	4	5	53,359	3	4	584	16	9	759	15	9	2,437	16	11	2,437	16	11	183	10	0	3,618	0	8	..	..							
Grand Totals	18,200	12	2	189,393	15	0	13,904	1	8	170	0	0	1,976	0	0	13	8	7	16,063	10	3	189,924	1	4	598	0	3	2,735	2	2	5,431	9	10	2,343	15	6	3,618	0	8	..	..									

The Divisions set out hereunder 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 Orders in Council, dated 30th July, 1938, and 18th December, 1944, under the provisions of Section 6, *Water Act* 1937, No. 4313.)

URBAN DIVISIONS.

PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.

STATEMENT of Revenue Assessment (inclusive of Rate, Water Sales, Interest, and Miscellaneous), and Expenditure (inclusive of Debits for Urban Water), Interest, Depreciation, and Redemption charged, and Amounts Written Off.

Division.	Revenue Assessment.	Expenditure.						Profit and Loss.						
		Operating Costs.	Interest.	Depreciation.	Redemption.	Amounts Written Off.	Total.	Excess— (Dr.) Expenditure, (Cr.) Assessment for Year.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years Prior to 1954-55. (A) Loss. (B) Gain.	Interest and Other Losses Prior to 30th June, 1938, Borne by State. (Act No. 5017.)	Loss since 30th June, 1938.	Gain as at 30th June, 1955.	
1. Cohuna ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
2. Lockington ..	2,559 3 2	2,041 1 7	110 17 4	271 0 0	8 7 8	..	2,431 6 7	(Cr.) 127 16 7	0 12 8	..	..	..	610 2 2	..
3. Macorna ..	554 6 2	291 11 3	4 3 3	93 0 0	0 7 9	..	389 2 3	(Cr.) 165 3 11	0 12 6	(B) 1 0 0	..	..	1,124 0 11	..
4. Red Cliffs ..	189 15 8	141 6 6	..	47 0 0	..	..	188 6 6	(Cr.) 1 9 2	..	..	..	331 11 10	..	..
5. Robinvale ..	6,945 2 2	5,056 13 7	54 19 5	532 0 0	4 13 2	..	5,648 6 2	(Cr.) 1,296 16 0	6 18 9	(B) 0 5 0	..	1,215 19 7	..	..
6. Tallygaroopna ..	1,565 3 1	815 14 9	..	179 0 0	..	..	994 14 9	(Cr.) 570 8 4	..	(B) 13 0 0	..	..	1,334 17 9	..
Totals ..	317 13 3	173 9 7	..	55 0 0	..	..	228 9 7	(Cr.) 89 3 8	..	..	..	..	381 11 11	..
7. Corop ..	48 18 9	23 0 0	..	6 0 0	..	..	29 0 0	(Cr.) 19 18 9	..	..	..	62 8 1	..	27 3 7
8. Dingee ..	157 19 9	121 3 7	..	41 0 0	..	..	162 3 7	(Dr.) 4 3 10	..	..	..	93 10 6	536 11 4	..
9. Heyfield ..	4,232 1 7	3,391 15 6	..	501 0 0	..	..	3,892 15 6	(Cr.) 339 6 1	110 17 11	..	..	160 19 2	..	2,027 6 4
10. Letchville ..	992 13 3	878 5 6	..	101 0 0	..	..	979 5 6	(Cr.) 13 7 9	..	..	..	353 15 2	..	..
11. Murrabit ..	136 7 2	519 7 9	..	67 0 0	..	..	586 7 9	(Dr.) 450 0 7	39 18 0	..	..	92 1 10	2,214 5 7	..
12. Stanhope ..	459 1 1	450 12 1	..	83 0 0	..	..	533 12 1	(Dr.) 74 11 0	..	..	..	..	..	439 3 9
Totals ..	6,027 1 7	5,384 4 5	..	799 0 0	..	..	6,183 4 5	(Dr.) 528 15 5 (Cr.) 372 12 7	150 15 11	..	..	408 19 7	3,104 12 1	2,483 13 8
GRAND TOTALS ..	18,158 5 1	13,904 1 8	170 0 0	1,976 0 0	13 8 7	..	16,063 10 3	(Dr.) 528 15 5 (Cr.) 2,623 10 3	158 19 10	(B) 14 5 0	..	408 19 7	4,652 3 6	5,944 6 5

## WATERWORKS DISTRICTS.

## CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1955; also of Interest charged at the rate of 3.546 per cent. on Capital Debts, as at 30th June, 1943, and 3 per cent. on Capital Debts subsequent to 30th June, 1943, and of Redemption and Depreciation charged for Financial Year 1954-55. (State Works of Water Supply excluded.)

District.	Receipts.			Expenditure.						Accumulated.		
	Year ended 30th June, 1955.	Total 1906 to 30th June, 1955.		Year ended 30th June, 1955.						Surplus Credited to District Account at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.
	£ s. d.	£ s. d.	£ s. d.	Operating Costs.	Interest.	Depreciation.	Redemption.	Total.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1.												
1. Bellarine Peninsula	10,246 8 1	199,065 16 10	19,122 8 10	2,944 6 8	1,239 0 0	65 0 0	23,305 15 6	270,760 1 4	13,059 7 5	54 14 7	61,766 14 10	9,927 9 8
2. East Loddon	2,159 0 5	12,198 15 2	2,039 5 10	..	..	..	2,104 5 10	11,251 0 3	..	45 8 9	2,751 0 0	..
3. Loddon	1,753 11 6	11,310 14 11	1,685 2 9	7,081 2 0	1,185 0 0	..	1,708 2 9	14,061 14 11	1,550 14 5	..	..	1,077 12 3
4. Mornington Peninsula	17,864 19 4	254,033 10 4	10,549 11 9	..	..	..	19,415 13 9	296,816 9 11	..	26 5 0	48,314 12 8	..
5. Newstead	26 5 0	478 0 0	..	..	..	..	..	101 10 0	..	532 10 0	376 10 0	..
6. Normanville	9,134 3 7	59,815 9 2	8,124 13 7	..	..	..	8,601 13 7	68,557 6 3	..	134 10 6	8,741 17 1	..
7. Otway	14,323 17 3	166,835 10 7	8,779 2 10	3,154 0 5	2,024 0 0	232 3 6	14,189 6 9	163,440 14 10	255 0 0	..	..	2,221 10 10
8. Werribee	642 19 2	22,388 7 9	877 19 7	..	..	..	897 19 7	24,390 1 10	2,310 3 2	41 1 0	3,394 15 9	13,428 5 1
9. Western Wimmera	42,415 19 2	745,129 16 4	43,942 2 4	..	..	..	44,726 2 4	837,750 6 7	..	775 10 10	79,192 5 2	..
10. West Loddon	5,704 2 10	23,014 17 4	3,507 1 10	..	..	..	3,663 1 10	27,347 19 11	..	506 5 3	4,333 2 7	..
11. Wimmera United	30,015 16 6	703,431 1 6	28,811 5 8	..	..	..	29,240 5 8	756,812 16 9	..	..	24,305 1 7	..
12. Wyndell	9,473 4 7	38,073 9 6	8,897 19 4	..	..	..	8,906 19 4	62,378 11 1	..	..	..	..
Totals	143,760 7 10	2,295,795 9 5	138,336 14 4	13,779 9 1	6,471 0 0	232 3 6	158,819 6 11	2,443,668 13 8	17,175 5 0	2,116 5 11	181,090 1 3	26,654 17 10
The districts set out hereunder are those whose works will not produce sufficient revenue to cover the expense of 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 Orders in Council dated 30th June, 1938, 21st October, 1941, and 25th November, 1952, under the provisions of Section 6, <i>Water Act 1937</i> , No. 4313.)												
13. Birchip	8,353 11 9	205,004 0 3	12,443 12 5	..	..	..	12,701 12 5	290,886 16 5	4,348 0 8	..	5,077 15 6	50,805 0 8
14. Hindmarsh	1,335 15 5	32,661 18 2	1,768 6 9	..	..	..	1,919 6 9	35,362 1 4	583 11 4	..	..	2,600 3 2
15. Kacarrue	27,577 15 6	570,133 19 0	41,253 10 5	..	..	..	41,386 10 5	754,549 9 1	13,808 14 11	..	13,179 4 6	171,236 5 7
16. Kerang - North-West Lakes	882 7 7	8,725 5 8	1,271 9 1	..	..	..	1,315 9 1	12,004 2 0	433 1 6	..	83 3 9	3,195 12 7
17. Long Lake	15,400 8 6	415,472 8 6	32,077 1 8	..	..	..	32,521 1 8	612,568 6 8	17,120 13 2	..	29,289 10 10	167,806 7 4
18. Millewa	12,159 16 10	217,954 4 11	64,826 11 1	..	..	..	69,570 11 1	1,210,063 9 1	57,410 14 3	..	20,984 6 0	980,124 18 2
19. Ouyen	13,814 16 9	180,246 9 6	38,950 6 11	..	..	..	39,432 6 11	654,651 6 2	25,617 10 2	..	76,353 10 6	398,051 6 2
20. Sea Lake	13,276 3 9	376,430 7 11	18,640 10 2	..	..	..	18,931 10 2	490,576 18 2	5,655 6 5	..	8,236 19 5	105,919 10 10
21. Tyntynder	13,130 13 8	239,815 16 8	32,345 17 1	..	..	..	32,696 17 1	541,266 16 7	19,566 3 5	..	22,208 9 1	279,242 10 10
22. Tyntynder North	4,777 5 5	102,661 13 0	14,730 7 4	..	..	..	14,919 7 4	304,581 8 8	10,142 1 11	..	10,336 17 0	191,582 18 8
23. Tyrell	12,830 19 3	325,244 17 8	29,862 0 9	..	..	..	30,192 0 9	675,010 6 3	17,391 1 6	..	15,805 16 7	333,959 12 0
24. Tyrell West	7,313 18 5	102,373 1 11	15,908 19 11	..	..	..	16,171 19 11	346,757 19 10	8,858 1 6	..	10,013 19 9	234,370 18 2
25. Upper Wimmera	11,587 0 11	200,081 14 1	10,337 5 6	..	..	..	10,381 5 6	204,324 9 9	1,205 15 5	1,205 15 5	4,359 16 0	15,196 17 1
26. Upper Wimmera United	14,542 2 2	310,236 15 10	14,872 19 4	..	..	..	14,959 19 4	329,793 8 11	..	..	..	11,104 15 2
27. Walpeup West	2,485 4 3	78,227 15 8	3,306 19 4	..	..	..	3,584 19 4	89,332 10 10	..	..	..	73,151 1 0
28. Wychebrook	15,536 0 3	340,856 11 7	21,452 3 11	..	..	..	21,784 3 11	418,511 14 5	6,248 3 8	..	4,504 1 10	..
Totals	175,004 0 5	3,706,117 0 4	354,048 1 8	..	..	..	362,469 1 8	6,940,141 4 2	188,970 16 8	1,205 15 5	220,433 10 9	3,023,796 8 6
GRAND TOTALS	318,764 8 3	6,001,912 9 9	492,384 16 0	13,779 9 1	14,802 0 0	232 3 6	521,288 8 7	9,392,809 17 10	205,846 1 8	3,322 1 4	401,523 12 0	3,050,451 6 4





## URBAN DISTRICTS.

## CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st May, 1906, to 30th June, 1955; also of Interest charged at the rate of 3·546 per cent. on Capital Debits as at 30th June, 1943, and 3 per cent. on Capital Debits subsequent to 30th June, 1943, and of Redemption and Depreciation charged for Financial Year 1954-55. (State Works of Water Supply excluded.)

District.	Receipts.			Expenditure.						Total 1906 to 30th June, 1955.	Excess Expenditure over Receipts, 1954-55.	Excess Receipts over Expenditure, 1954-55.	Accumulated.			Deficiency Chargeable to State Account at 30th June, 1955.		
	Year ended 30th June, 1955.			Year ended 30th June, 1955.									12.	13.	14.			
	2.	3.	4.	5.	6.	7.	8.	9.	10.								11.	
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1. Allansford ..	527	1	3	3,885	0	3	27	15	10	23	0	0	607	0	1	3,717	6	7
2. Antwerp ..	90	19	1	1,889	11	4	8	18	6	6	0	0	112	13	10	1,856	10	4
3. Barwon Heads-Ocean Grove ..	6,267	15	11	55,950	16	11	277	8	3	565	0	0	4,743	4	4	52,482	14	1
4. Berriwillock ..	566	6	9	10,037	2	8	0	2	4	33	0	0	530	15	8	11,696	18	5
5. Berwick ..	2,850	8	3	34,017	3	3	1,728	17	7	263	0	0	2,850	8	3	31,996	14	3
6. Birregurra ..	1,221	9	3	5,785	19	6	727	14	2	109	0	0	856	14	2	6,129	2	4
7. Birr ..	369	10	11	8,921	0	4	527	6	7	50	0	0	589	0	6	9,581	14	2
8. Camperdown ..	8,597	12	4	96,736	13	10	5,633	4	7	690	0	0	8,363	17	4	96,649	1	1
9. Chelsea-Frankston ..	57,000	0	2	60,483	7	11	21,335	14	3	3,869	0	0	65,728	16	2	593,948	0	9
10. Cobden ..	3,815	15	4	29,468	4	2	2,892	13	4	171	0	0	3,541	14	9	29,923	13	3
11. Cranbourne ..	911	17	4	18,197	5	11	131	14	7	72	0	0	978	7	5	17,421	6	4
12. Culgoa ..	514	11	7	11,899	13	6	335	14	11	30	0	0	464	16	6	12,274	18	1
13. Dandenong-Springvale ..	50,751	7	7	648,149	0	9	22,598	4	6	3,663	0	0	56,133	18	3	500,664	1	5
14. Dimboola ..	3,707	1	9	90,566	18	7	2,468	9	7	350	0	0	3,294	5	8	89,762	6	8
15. Dromana-Portsea ..	32,801	10	7	292,684	0	9	8,504	18	10	2,081	0	0	27,608	4	10	161,016	13	5
16. Geelong ..	1,772	0	2	38,526	19	7	1,057	19	5	120	0	0	1,452	13	7	38,660	4	5
17. Longwarry ..	1,355	16	5	19,637	12	11	1,266	11	4	151	0	0	1,938	18	3	17,483	16	6
18. Marnoo ..	339	13	11	9,310	19	3	222	18	11	99	0	0	401	14	4	9,054	0	0
19. Morbin ..	3,798	1	11	60,931	1	7	2,820	14	1	408	0	0	3,402	11	4	63,245	18	8
20. Minyip ..	1,846	2	5	38,865	1	3	1,257	10	1	141	0	0	1,528	7	2	38,185	12	9
21. Mornington ..	14,742	4	5	180,324	18	4	7,354	16	1	1,231	0	0	14,060	7	2	167,140	13	6
22. Natimuk ..	653	6	4	22,159	2	4	432	2	3	69	0	0	664	19	4	22,722	1	8
23. Paknam ..	2,963	14	2	40,278	11	0	1,258	16	6	179	0	0	2,376	6	2	34,015	6	5
24. Pimpino ..	8	11	3	54	9	7	...	...	...	...	...	...	...	...	...	49	0	8
25. Pyramid Hill ..	964	8	2	18,149	14	8	634	8	0	127	0	0	902	11	6	17,065	16	3
26. Queenscliff-Point Lonsdale ..	9,860	6	1	97,753	14	7	5,569	5	4	1,111	0	0	7,398	8	10	106,383	17	3
27. Rainbow ..	1,811	10	3	46,592	4	11	906	5	4	174	0	0	1,373	2	11	42,573	2	2
28. Rupanyup ..	1,686	10	11	35,421	6	4	949	16	6	110	0	0	1,225	0	3	34,809	17	10
29. Somerville ..	855	0	11	12,934	18	8	419	7	11	82	0	0	782	7	2	12,400	13	4
30. South Frankston ..	7,109	7	5	84,214	11	10	3,384	18	6	1,921	12	10	5,987	13	6	74,761	6	11
31. Trarung ..	5,771	16	7	62,500	18	9	4,300	10	5	529	0	0	5,873	13	10	62,664	7	4
32. Watchem ..	402	10	11	14,151	11	10	677	3	11	85	0	0	766	10	8	15,855	6	11
Totals	225,334	10	5	2,510,379	17	1	139,359	12	6	17,131	0	0	2,082	11	6	2,376,192	3	9
																14,586	16	9
																15,721	12	2
																14,197	5	10



## URBAN DISTRICTS

## PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.

STATEMENT of Revenue Assessment (inclusive of Rate, Water Sales, Interest, and Miscellaneous) and Expenditure (Inclusive of Debts for Urban Water), Interest, Depreciation, and Redemption charged and Amounts Written Off.

District.	Revenue Assessment.		Expenditure.						Profit and Loss.				
	Operating Costs.		Interest.	Depreciation.	Redemption.	Amounts Written Off.	Total.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years prior to 1954-55.	Interest and other Losses prior to 30th June, 1938, Borne by State.	Loss since 30th June, 1938.	Gain as at 30th June, 1955.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	
1. Allansford ..	524	1 11	27 15 10	23 0 0	2 1 11	3 0 0	612 2 0	10 12 6	..	..	..	200 17 3	
2. Antwerp ..	96	16 9	8 18 6	6 0 0	0 13 6	..	113 7 4	..	..	..	..	63 16 8	
3. Barwon Heads—Ocean Grove ..	6,516	0 10	277 8 3	565 0 0	20 15 8	..	4,743 4 4	23 12 8	(B) 7 6 11	216 18 8	..	5,506 10 2	
4. Berwick ..	574	12 6	751 6 7	263 0 0	62 0 3	1 10 0	2,806 14 5	3 12 9	..	..	468 12 6	2,375 9 9	
5. Birregurra ..	1,970	15 5	159 0 0	109 0 0	..	..	836 14 2	..	(B) 0 10 0	..	212 6 7	..	
6. Birnie ..	1,062	10 11	11 13 11	50 0 0	0 18 7	2 8 0	589 19 1	..	..	..	592 1 9	..	
7. Brim ..	367	0 2	1,900 10 1	690 0 0	140 2 8	2 12 6	8,366 5 4	176 3 11	(B) 115 4 9	9,188 12 3	..	751 0 10	
8. Camperdown ..	5,653	4 7	21,335 14 3	3,869 0 0	1,738 11 0	..	67,469 19 8	..	..	538 9 1	109 19 8	30,062 8 6	
9. Chelsea-Frankston ..	55,006	0 6	445 4 4	171 0 0	32 12 4	2 12 6	3,541 14 9	..	..	3,601 18 7	278 14 11	1,408 16 9	
10. Cobden ..	3,028	15 4	131 14 7	30 0 0	10 18 6	..	989 5 11	..	..	..	..	..	
11. Colac ..	954	17 11	22 508 4 6	3,063 0 0	1,829 15 8	..	57,963 13 11	43 5 6	(A) 6 5 0	..	..	57,049 4 8	
12. Crolwa ..	355	14 11	78 2 5	350 0 0	33 15 1	1 19 8	3,294 5 8	102 0 6	(B) 848 12 10	..	..	2,208 18 1	
13. Dandenong-Springvale ..	49,865	4 11	8,504 18 10	2,081 0 0	712 17 11	..	27,610 4 6	..	..	..	..	45,854 16 2	
14. Dandenong-Springvale ..	3,588	12 9	2,081 0 0	2,081 0 0	40 8 3	..	1,393 5 7	..	..	..	..	201 9 6	
15. Dromana-Portsea ..	29,929	15 11	200 9 2	120 0 0	14 17 0	..	1,979 6 6	..	..	..	..	3,310 3 5	
16. Epsom ..	1,690	14 6	521 6 11	151 0 0	46 5 2	..	407 19 6	..	..	..	..	321 17 10	
17. Longwarry ..	1,657	3 1	79 15 5	99 0 0	60 8 3	..	3,381 5 1	8 8 9	(B) 0 8 9	510 10 1	1,120 7 2	724 2 5	
18. Marnoo ..	341	8 7	222 18 11	151 0 0	46 5 2	..	3,381 5 1	..	..	..	..	15,992 3 11	
19. Marnoo ..	3,809	16 0	141 14 0	408 0 0	10 17 0	..	1,328 4 3	0 2 4	(B) 97 6 6	..	..	7,150 19 2	
20. Minyip ..	1,257	10 1	120 8 2	141 0 0	9 6 0	..	322 6 11	252 7 9	..	491 12 0	..	6 13 3	
21. Mornington ..	16,015	19 10	5,068 11 4	1,231 0 0	405 19 9	..	14,060 7 2	..	..	..	..	1,143 4 9	
22. Natimuk ..	673	3 4	143 17 1	69 0 0	10 7 2	..	675 6 6	45 0 3	..	..	..	..	
23. Pakinham ..	2,446	14 6	812 7 11	179 0 0	64 15 4	..	2,314 19 9	..	..	..	..	..	
24. Pimpino ..	7 18 1	..	..	..	..	1 19 10	904 11 4	..	..	..	..	..	
25. Pyramid Hill ..	949	18 7	130 11 8	127 0 0	10 11 10	..	7,288 19 10	..	(B) 142 17 6	5,763 12 5	..	4,308 12 2	
26. Queenscliff Point ..	654	8 0	..	..	..	1 2 2	1,374 5 1	6 15 0	..	..	..	727 8 0	
27. Queenscliff Point ..	10,048	18 9	566 16 1	1,111 0 0	42 2 8	..	1,225 0 3	9 1 11	(B) 20 11 6	..	..	192 9 0	
28. Rainbow ..	1,644	0 11	272 11 10	174 0 0	20 5 9	..	782 7 10	3 10 8	(B) 45 4 2	..	..	10,242 3 2	
29. Rupanyup ..	1,587	18 1	153 10 4	110 0 0	11 4 5	..	5,987 18 6	18 3 9	..	..	..	..	
30. Somerville ..	970	7 2	260 14 9	82 0 0	20 4 6	..	5,951 0 2	4 6 3	(B) 105 17 10	140 17 2	..	..	
31. South Frankston ..	6,848	11 0	1,921 12 10	529 0 0	152 7 2	0 10 8	872 16 6	..	..	..	..	..	
32. Terang ..	5,392	5 8	1,033 3 5	540 0 0	76 15 8	..	..	..	..	..	..	..	
33. Watchem ..	482	8 9	783 1 9	85 0 0	0 8 0	..	..	..	..	..	..	..	
Totals ..	221,318	12 0	67,946 1 10	17,131 0 0	5,487 10 4	15 2 10	230,045 5 4	707 4 6	{(A) 6 5 0 {(B) 1,384 0 9}	14,197 5 10	10,607 6 9	190,463 7 5	

The Districts set out hereunder 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 "Revenue Expenditure Chargeable to the State Account". (By Authority of Orders in Council dated 30th June, 1938, 9th December, 1940, 23rd October, 1943, and 24th April, 1946, respectively under the provisions of Section 6, *Water Act 1937*, No. 4513.)

33. Anglesea	3,357	7 9	1,405	15 11	0 17 4	104	0 0 0	1,510	14 9	(Cr.)	1,846	13 0	1,638	15 9	614	19 9
34. Beulah	864	15 6	776	15 5	0 1 7	181	0 0 0	857	17 0	(Cr.)	486	6 18 6	96	18 2	384	7 2
35. Birch	2,281	10 11	2,655	18 3	0 1 7	112	0 0 0	2,767	18 3	(Cr.)	99	0 9 9	873	6 5	3,695	0 3
36. Bittern-Crib Point	1,780	12 7	1,392	3 3	81 7 4	202	0 0 0	1,681	11 10	(Cr.)	301	19 7	474	1 9	965	13 8
37. Bunyip	1,350	3 3	607	2 6	305 11 6	110	0 0 0	1,048	3 8	(Cr.)	42	3 5 5	..	..	..	2,585
38. Carwarp	89	1 8	38	18 3	..	8	0 0 0	46	18 3	(Cr.)	177	19 2	218	18 1	68	14 0
39. Chillingollah	142	5 7	142	5 7	..	16	0 0 0	158	5 7	(Cr.)	14	18 8	137	15 3	1,228	0 2
40. Chinkapook	148	19 4	310	18 6	..	16	0 0 0	326	18 6	(Cr.)	413	12 10	326	16 1	..	..
41. Doon	73	16 9	44	1 8	20 18 10	175	0 0 0	88	15 5	(Cr.)	198	4 6 6	381	5 7	..	..
42. Drysdale	1,480	8 9	890	11 2	1 2 10	122	0 0 0	1,066	15 11	(Cr.)	342	12 6	448	13 9	..	..
43. Garfield	679	2 6	637	4 5	180 19 5	144	0 0 0	877	6 6	(Cr.)	16	5 5 5	580	2 10	..	..
44. Hastings	1,539	2 4	1,013	5 1	0 3 9	183	0 0 0	1,106	9 10	(Cr.)	54	0 2 2	408	17 3	738	9 7
45. Hopetoun	1,696	14 3	1,592	4 3	0 14 3	120	0 0 0	1,712	19 8	(Cr.)	12	16 4	558	14 5	1,516	4 10
46. Jung Jung	292	2 4	417	10 9	0 1 0	73	0 0 0	480	11 8	(Cr.)	38	4 4	43	8 7	..	..
47. Koonook	1,242	11 6	1,084	8 6	0 1 0	208	0 0 0	1,296	11 9	(Cr.)	58	10 9	411	15 11	..	..
48. Lake Boga	825	17 2	1,190	4 4	2 17 4	127	0 0 0	1,320	6 3	(Cr.)	92	11 6	..	..	..	..
49. Labert	434	17 5	133	9 6	0 10 2	85	0 0 0	532	6 3	(Cr.)	38	4 4	..	..	..	..
50. Lascelles	257	5 0	726	11 11	0 10 2	102	0 0 0	219	0 8	(Cr.)	501	13 7	..	..	..	..
51. Manangatang	810	7 5	726	11 11	0 2 7	80	0 0 0	868	18 2	(Cr.)	58	10 9	..	..	..	..
52. Meringur	162	4 7	625	15 7	0 1 11	38	0 0 0	663	18 2	(Cr.)	58	13 7	..	..	..	..
53. Milamo	407	10 3	392	13 4	0 1 11	73	0 0 0	465	13 4	(Cr.)	902	16 11	..	..	..	..
54. Nandaly	196	3 3	191	18 3	62 10 9	27	0 0 0	219	0 2	(Cr.)	3	9 2	..	..	..	..
55. Newstead	1,046	7 0	1,826	11 3	4 11 1	56	0 0 0	1,949	3 7	(Cr.)	..	..	..	..	..	..
56. Nullawil	249	17 1	205	11 3	9 19 2	37	0 0 0	253	6 3	(Cr.)	..	..	..	..	..	..
57. Nyah	531	18 4	431	10 8	15 7 10	95	0 0 0	526	6 3	(Cr.)	..	..	..	..	..	..
58. Nyah West	1,129	18 10	866	1 8	..	135	0 0 0	1,290	3 11	(Cr.)	..	..	..	..	..	..
59. Nyen	4,195	16 2	3,668	8 4	2 2 3	258	0 0 0	3,926	15 2	(Cr.)	..	..	..	..	..	..
60. Patchewollock	332	14 3	365	11 4	0 1 0	60	0 0 0	429	7 11	(Cr.)	..	..	..	..	..	..
61. Piangil	465	3 10	321	12 0	..	107	0 0 0	429	7 11	(Cr.)	..	..	..	..	..	..
62. Portarlington	2,324	8 5	1,596	0 8	2 5 6	311	0 0 0	1,909	10 1	(Cr.)	..	..	..	..	..	..
63. Quambatook	841	8 3	903	13 7	0 1 11	94	0 0 0	997	15 6	(Cr.)	..	..	..	..	..	..
64. Sea Lake	2,030	9 6	1,855	7 9	54 6 6	111	0 0 0	2,024	16 3	(Cr.)	..	..	..	..	..	..
65. Speed	175	14 6	156	3 9	0 0 6	78	0 0 0	234	4 3	(Cr.)	..	..	..	..	..	..
66. Tenney	182	19 8	113	15 5	0 10 4	132	0 0 0	192	6 9	(Cr.)	..	..	..	..	..	..
67. Torquay	5,079	5 9	4,347	6 2	4 5 2	68	0 0 0	4,483	19 0	(Cr.)	..	..	..	..	..	..
68. Ultima	665	15 8	946	9 8	0 10 2	27	0 0 0	1,015	0 10	(Cr.)	..	..	..	..	..	..
69. Waitchie	95	13 2	66	19 6	..	27	0 0 0	93	19 6	(Cr.)	..	..	..	..	..	..
70. Walpeup	309	11 10	466	14 0	0 14 6	55	0 0 0	522	9 8	(Cr.)	..	..	..	..	..	..
71. Werriamull	396	2 4	876	14 6	0 1 0	78	0 0 0	954	15 6	(Cr.)	..	..	..	..	..	..
72. Wonthaggi	7,405	13 11	9,673	13 0	1,474 7 0	455	0 0 0	11,723	15 2	(Cr.)	..	..	..	..	..	..
73. Woomelang	865	4 2	680	18 3	0 9 1	95	0 0 0	776	8 4	(Cr.)	..	..	..	..	..	..
74. Woorinen	415	3 5	307	5 11	20 8 8	48	0 0 0	377	5 4	(Cr.)	..	..	..	..	..	..
75. Wychebrook	3,217	1 11	2,334	11 6	..	172	0 0 0	2,506	11 6	(Cr.)	..	..	..	..	..	..
76. Yaapect	114	7 10	112	19 7	0 2 3	72	0 0 0	186	12 4	(Cr.)	..	..	..	..	..	..
Totals ..	52,240	4 8	48,638	7 8	2,473 18 1	4,028	0 0 0	55,952	11 7	{(Cr.)}	296	14 7	12,406	9 9	50,194	9 7
GRAND TOTALS ..	273,528	16 8	188,103	18 0	70,410 19 11	21,759	0 0 0	285,997	16 11	{(Cr.)}	1,003	19 1	26,603	15 7	60,801	16 4

FLOOD PROTECTION DISTRICTS.

CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st July, 1920, to 30th June, 1955, also of Interest and Depreciation charged for Financial Year 1954-55.

District.	Receipts.		Expenditure.					Excess Expenditure over Receipts 1954-55.	Excess Receipts over Expenditure 1954-55.	Accumulated.																				
	Receipts Year Ended 30th June, 1955.	Total 1920 to 30th June, 1955.	Year Ended 30th June, 1955.				Total 1920 to 30th June, 1955.			Surplus Credited to District Account, at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.																		
			Operating Costs.	Interest.	Depreciation.	Total.																								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.																		
1. Cardinia ..	8,161	7	3	92,564	3	0	12,241	11	1	121,348	17	3	4,099	3	10	..	..	25,480	15	1	3,303	19	2							
2. Kanyapella ..	160	10	9	7,341	5	6	699	4	9	6,231	19	8	538	14	0	..	1,109	5	10	..	..	..								
3. Loch Garry ..	362	4	1	22,862	18	4	327	19	8	..	..	19,749	19	10	..	34	4	5	3,112	18	6	..	..	..						
4. Lower Koo-wee-rup ..	17,928	7	11	183,356	11	8	28,272	6	10	64	0	0	23,336	6	10	11,307	18	11	..	..	44,136	3	0	7,949	1	8				
Totals ..	25,712	10	0	306,124	18	6	41,541	2	4	83	0	0	41,624	2	4	15,945	16	9	34	4	5	4,222	4	4	69,616	18	1	11,253	0	10

PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.  
STATEMENT of Revenue Assessment (inclusive of Rate, Charge, Interest and Miscellaneous) and Expenditure, Interest and Depreciation charged, and Amounts Written Off.

District.	Revenue Assessment.		Expenditure.					Profit and Loss.						
	£	s. d.	Operating Costs.	Interest.	Depreciation.	Amounts Written Off.	Total	Excess Expenditure over Assessment.	Excess Assessment over Expenditure.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years Prior to 1954-55. (A) Loss. (B) Gain.	Interest and Other Losses Prior to 30th June, 1938, Borne by State. (Act No. 5017.)	Loss since 30th June, 1938.	Gain as at 30th June, 1954-55.
1. Cardinia ..	7,903	18 4	£ 12,616	11 1*	£ 19 0 0	£ 1 16 10	£ 12,637 7 11	£ 4,733 9 7	£ ..	£ 6 16 7	£ (B) 6 16 7	£ 3,303 19 2	£ 16,701 18 6	£ ..
2. Kanyapella ..	119	8 8	699	4 9	..	..	699 4 9	579 16 1	..	..	..	..	..	1,119 6 11
3. Loch Garry ..	348	1 10	327	19 8	..	3 10 8	331 10 4	..	16 11 6	..	..	..	..	3,163 3 5
4. Lower Koo-wee-rup ..	16,936	11 7	23,272	6 10	64 0 0	19 1 0	28,355 7 10	11,418 16 3	..	8 14 3	..	7,949 1 8	43,344 9 4	..
Totals ..	25,308	0 5	41,916	2 4*	83 0 0	24 8 6	42,023 10 10	16,732 1 11	16 11 6	15 10 10	(B) 6 16 7	11,253 0 10	60,046 7 10	4,292 10 4

\* Includes Annual Contribution to Capitalized Maintenance on Four Bridges, £375.—Cardinia.

DRAINAGE DISTRICT.

CASH ACCOUNT.

STATEMENT of Moneys received and disbursed from 1st July, 1937, to 30th June, 1955; also of Depreciation charged for Financial Year 1954-55.

District.	Receipts.		Expenditure.				Accumulated.				
	Receipts 1954-55.	Total 1937, to 30th June, 1955.	Year Ended 30th June, 1955.		Total.	Total 1937, to 30th June, 1955.	Excess Expenditure over Receipts, 1954-55.	Excess Receipts over Expenditure, 1954-55.	Surplus Credited to District Account at 30th June, 1955.	Deficiency Chargeable to District Account at 30th June, 1955.	Deficiency Chargeable to State Account at 30th June, 1955.
			Operating Costs.	Depreciation.							
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Carrum .. ..	9,147 3 5	50,418 5 2	11,446 6 6	21 0 0	11,467 6 6	67,800 15 0	2,320 3 1	..	..	8,382 9 10	..
Total .. ..	9,147 3 5	50,418 5 2	11,446 6 6	21 0 0	11,467 6 6	67,800 15 0	2,320 3 1	..	..	8,382 9 10	..

PROFIT AND LOSS ACCOUNT FOR FINANCIAL YEAR 1954-55.

STATEMENT of Revenue Assessment (inclusive of Rate, Interest, and Miscellaneous) and of Expenditure, Depreciation Charged and Amounts Written Off.

District.	Expenditure.					Profit and Loss.						
	Revenue Assessment.	Operating Costs.	Depreciation.	Amounts Written Off.	Total.	Excess Expenditure over Assessment.	Excess Assessment over Expenditure.	Revenue Due for Previous Years Written Off.	Adjustments to Revenue for Years Prior to 1954-55. (A) Loss. (B) Gain.	Interest and Other Losses Prior to 30th June, 1938, Borne by State. (Act No. 5017.)	Loss since 30th June, 1938.	Gain as at 30th June, 1955.
1. Carrum .. ..	£ s. d. 8,760 14 8	£ s. d. 11,446 6 6	£ s. d. 21 0 0	£ s. d. 58 0 0	£ s. d. 11,525 6 6	£ s. d. 2,764 11 10	£ s. d. ..	£ s. d. 2 19 7	£ s. d. ..	£ s. d. ..	£ s. d. 7,284 12 7	£ s. d. ..
	8,760 14 8	11,446 6 6	21 0 0	58 0 0	11,525 6 6	2,764 11 10	..	2 19 7	..	..	7,284 12 7	..



## SUMMARY OF CASH ACCOUNTS, 1954-55.

Works.	Receipts.			Expenditure.						(D) Excess Expenditure over Receipts, 1954-55.	Accumulated Surplus or Deficiency at 30th June, 1955.	
	Year Ended 30th June, 1955.	Total 1906 to 30th June, 1955.		Year Ended 30th June, 1955.							(D) Chargeable ; or (S) Credited to District Account.	Chargeable to State Account.
		Operating Costs.	Interest.	Depreciation.	Redemption.	Total.	Total 1906 to 30th June, 1955.					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Plant Workshops	32,915 10 9	165,821 16 10	27,422 4 2	574 16 2	1,412 0 0	53 4 0	29,462 4 4	208,839 14 7	{ (D) 79 12 10 (S) 3,532 19 3 }	{ (D) 43,479 10 9 (S) 461 13 0 }	..	
Coliban System	101,381 8 8	2,446,724 10 5	130,310 4 2	10,391 10 8	8,286 0 0	..	148,987 14 10	3,594,243 19 10	{ (D) 47,606 6 2 (S) 14,912 7 7 }	{ (D) 1,132,617 19 1 (S) 10 17 3 }	1,132,617 19 1	
Irrigation Districts—												
Pumping	265,296 19 2	3,540,069 0 7	278,554 16 4	..	22,947 0 0	..	301,501 16 4	4,272,563 4 4	{ (D) 36,801 3 9 (S) 596 6 7 }	{ (D) 181,766 2 10 (S) 730,548 5 2 }	550,728 0 11	
Gravitation	700,469 15 11	9,748,273 2 7	728,222 4 7	..	49,099 0 0	..	777,321 4 7	10,966,444 10 2	{ (D) 98,626 4 0 (S) 21,774 15 4 }	{ (D) 542,656 12 5 (S) 55,033 10 0 }	542,656 12 5	
Irrigation Urban Divisions	18,200 12 2	189,393 15 0	13,904 1 8	170 0 0	1,976 0 0	13 8 7	16,063 10 3	189,924 1 4	{ (D) 598 0 3 (S) 2,735 2 2 }	{ (D) 2,343 15 6 (S) 5,431 9 10 }	3,618 0 8	
Waterworks Districts	318,764 8 3	6,001,912 9 9	492,384 16 0	13,779 9 1	14,892 0 0	232 3 6	521,288 8 7	9,392,809 17 10	{ (D) 205,846 1 8 (S) 3,322 1 4 }	{ (D) 401,523 12 0 (S) 61,077 10 3 }	3,050,451 6 4	
Waterworks Urban Districts	274,813 7 3	3,376,017 2 2	188,103 18 0	70,419 19 11	21,759 0 0	2,165 18 7	283,448 16 6	3,313,375 18 8	{ (D) 25,964 9 10 (S) 18,329 0 7 }	{ (D) 19,673 8 10 (S) 173,706 5 11 }	91,391 13 7	
Flood Protection Districts	25,712 10 0	306,124 18 6	41,541 2 4	..	83 0 0	..	41,624 2 4	382,772 13 1	{ (D) 15,945 16 9 (S) 34 4 5 }	{ (D) 69,616 18 1 (S) 4,222 4 4 }	11,253 0 10	
Carrum Drainage District	9,147 3 5	59,418 5 2	11,446 6 6	..	21 0 0	..	11,467 6 6	67,800 15 0	{ (D) 2,320 3 1 (S) .. }	{ (D) 8,382 9 10 (S) .. }	..	
Totals	1,746,701 15 7	25,833,755 1 0	1,911,889 13 9	95,335 15 10	120,475 0 0	2,464 14 8	2,130,165 4 3	32,388,774 14 10	{ (D) 433,787 18 4 (S) 50,324 9 8 }	{ (D) 1,472,246 10 7 (S) 299,943 10 7 }	5,382,716 13 10	

## SUMMARY OF PROFIT AND LOSS ACCOUNTS FOR FINANCIAL YEAR 1954-55.

Works.	Expenditure.						Profit and Loss.																					
	Revenue Assessment.		Interest.		Depreciation.		Redemption.		Amounts Written Off.		Total.		Excess— (Dr.) Expenditure (Cr.) Assessment for Year.		Revenue Due for Previous Years Written Off.		Adjustments to Revenue for Years prior to 1954-55. (A) Loss. (B) Gain.		Interest and Other Losses prior to 30th June, 1938. Borne by State. (Act No. 5017.)		Loss since 30th June, 1938.		Gain as at 30th June, 1955.					
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.		
Plant Workshops	33,386	19 7	27,422	4 2	574	16 2	1,412	0 0	48	12 11	..	29,457	13 3	{(Dr.) 79 12 10 (Cr.) 4,008 19 2}	..	..	..	..	..	31,569	13 6	461	13 0	..	..	..	..	
Colliery System	107,110	15 7	130,310	4 2	10,391	10 8	8,286	0 0	733	1 10	0 15 9	149,721	12 5	(Dr.) 42,610	16 10	43	1 1	(A) 14	18 3	828,373	18 10	313,850	5 9	12	0 9	..	..	
Irrigation Districts—																												
Pumping	294,342	16 11	278,554	16 4	..	..	22,947	0 0	..	..	21,010	14 2	322,512	10 6	(Dr.) 28,169	13 7	145	13 10	..	142,937	14 11	564,603	9 9	..	..	..	..	
Gravitation	739,234	7 10	728,222	4 7	..	..	49,099	0 0	..	..	11,415	13 10	788,736	18 5	{(Dr.) 86,740 14 3 (Cr.) 37,238 3 8}	570	10 5	{(A) 637 0 4 (B) 1,019 19 5}	529,255	8 2	628,427	0 0	92,093	5 5	..	..		
Irrigation Divisions	18,158	5 1	13,904	1 8	170	0 0	1,976	0 0	13	8 7	..	16,063	10 3	{(Dr.) 528 15 5 (Cr.) 2,623 10 3}	158	19 10	(B) 14	5 0	408	19 7	4,652	3 6	5,944	6 5	..	..		
Waterworks Districts	318,269	1 9	492,384	16 0	13,779	9 1	14,892	0 0	1,066	0 2	1,306	5 9	523,428	11 0	{(Dr.) 209,158 13 10 (Cr.) 3,999 4 7}	795	16 2	(B) 158	8 1	677,688	8 2	2,749,447	11 11	66,509	8 11	..	..	
Waterworks Districts	273,528	16 8	188,103	18 0	70,419	19 11	21,759	0 0	5,688	13 3	26	5 9	285,997	16 11	{(Dr.) 31,355 8 10 (Cr.) 18,886 8 7}	1,003	19 1	{(A) 113 4 1 (B) 1,449 11 2}	26,603	15 7	60,801	16 4	199,618	6 7	..	..		
Flood Protection Districts	25,308	0 5	41,916	2 4*	..	..	83	0 0	..	..	24	8 6	42,023	10 10	{(Dr.) 16,732 1 11 (Cr.) 16 11 6}	15	10 10	(B) 6	16 7	11,253	0 10	60,046	7 10	4,282	10 4	..	..	
Carriam Drainage District	8,760	14 8	11,446	6 6	..	..	21	0 0	..	..	58	0 0	11,525	6 6	(Dr.) 2,764	11 10	2	19 7	..	..	7,284	12 7	..	..	..	..		
Totals	1,818,099	18 6	1,912,264	13 9*	95,335	15 10	120,475	0 0	7,549	16 9	33,842	3 9	2,169,467	10 1	{(Dr.) 418,140 9 4 (Cr.) 66,772 17 9}	2,736	10 10	{(A) 765 2 8 (B) 2,649 0 3}	2,216,521	6 1	4,420,683	1 2	368,921	11 5	..	..		

\* Includes £375 instalment on Capitalized Maintenance.

## DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.						
	Capital Borne by— (A) State. (B) District.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.  Gain.	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.	
											Loss since 30th June, 1938.	Interest and Other Losses prior to 30th June, 1938, Borne by State. (Act No. 5017.)
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
PLANT WORKSHOPS.												
1. Bendigo ..	{ (A) 225,694 6 4 (B) 17,293 18 11 }	342 19 2	9,900 16 3	..	(B) 43,479 10 9	..	243,331 4 5	9,900 16 3	11,909 17 3	..	31,569 13 6	..
2. Kerang Sub-Depot ..	{ (A) 3,518 3 4 (B) 352 12 5 }	9 2 2	186 6 0	..	..	461 13 0	3,879 17 11	186 6 0	..	461 13 0	..	..
Totals ..	{ (A) 229,212 9 8 (B) 17,646 11 4 }	352 1 4	10,087 2 3	..	(B) 43,479 10 9	461 13 0	247,211 2 4	10,087 2 3	11,909 17 3	461 13 0	31,569 13 6	..
							£301,239 8s. 4d.					
COLIBAN SYSTEM.												
1. Harcourt ..	(A) 17,389 17 9	292 18 6	280 3 6	..	..	12 0 9	17,622 16 3	280 3 6	1 3 6	10 17 3	..	..
Totals ..	(A) 17,389 17 9	292 18 6	280 3 6	..	..	12 0 9	17,622 16 3	280 3 6	1 3 6	10 17 3	..	..
							£301,239 8s. 4d.					
The Districts set out hereunder 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 Orders in Council dated 8th November, 1943, 18th December, 1944, and 26th February, 1946, under the provisions of Section 6, <i>Water Act</i> 1937, No. 4513).												
2. Axe Creek ..	(A) 5,014 16 1	..	..	9 2 0	{ (A) 1,063 13 2 (B) 972 10 0 }	..	5,014 16 1	..	50 11 9	..	1,994 13 5	..
3. Coliban ..	{ (A) 2,344,141 17 3 (B) 293,199 19 6 }	13,607 12 3	20,590 14 8	240 4 4	{ (A) 1,130,396 0 0 (B) 13,729 8 9 }	..	2,637,341 16 9	20,590 14 8	19,026 1 7	..	310,573 4 11	828,373 18 10
4. Marong ..	{ (A) 2,362 19 8 (B) 22 18 10 }	15 3 10	541 18 0	..	{ (A) 1,158 5 11 (B) 210 8 10 }	..	2,400 0 7	541 18 0	87 9 1	..	1,282 7 5	..
Totals ..	{ (A) 2,351,519 13 0 (B) 293,222 18 4 }	13,622 16 1	21,132 12 8	249 6 4	{ (A) 1,132,617 19 1 (B) 14,912 7 7 }	..	2,644,756 13 5	21,132 12 8	19,164 2 5	..	313,850 5 9	828,373 18 10
Grand Total ..	{ (A) 2,368,909 10 9 (B) 293,222 18 4 }	13,855 14 7	21,412 16 2	249 6 4	{ (A) 1,132,617 19 1 (B) 14,912 7 7 }	12 0 9	2,662,379 9 8	21,412 16 2	19,165 5 11	10 17 3	313,850 5 9	828,373 18 10
							£3,845,192 13s. 7d.					

DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.						Assets.																										
	Capital Borne by State.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.																						
											Loss since 30th June, 1938.	Interest and Other Losses prior to 30th June, 1938, Borne by State (Act No. 5017.)																					
	£	s.	d.	£	s.	d.	£	s.	d.	£			s.	d.																			
IRRIGATION DISTRICTS.																																	
1. Bacchus Marsh	188,030	3	11	908	9	4	1,144	17	8	0	3	4	{ (A) 21,170 8 3 (B) 16,331 2 5 (A) 1,620 15 3 (B) 71,696 6 10 (A) 19,935 9 2 (B) 3,695 6 10 (A) 3,609 4 1	188,998	13	3	1,144	17	8	797	11	2	..	15,533	14	7	21,170	8	3				
2. Boort	324,442	4	9	215	13	8	5,753	10	7	1	1	6	..	324,657	18	5	5,753	10	7	7,348	11	2	..	64,348	17	2	1,620	15	3				
3. Calivil	200,882	3	9	153	7	2	1,747	9	7	69	18	10	13,644	8	8	201,035	10	11	1,747	9	7	4,256	6	7	9,458	0	11	19,935	9	2			
4. Campaspe	67,102	15	11	..	..	..	652	11	9	0	18	9	..	..	..	67,102	15	11	652	11	9	049	5	10	..	2,960	17	0	3,695	6	10		
5. Central Gippsland (under construction)	1,841,040	17	7	..	..	..	31	3	2	52	1	7	9,147	18	11	1,841,040	17	7	31	3	2	957	8	0	8,242	12	6	..	..	..			
6. Colona	886,894	0	4	4,025	5	5	10,603	2	8	30	13	4	..	..	..	890,919	5	9	10,603	2	8	10,476	0	4	..	3,939	0	6	15,145	0	10		
7. Deakin	99,832	13	2	506	14	4	3,007	18	3	15	6	0	..	..	..	100,339	7	6	3,007	18	3	1,591	9	0	..	11,133	12	2	2,255	4	9		
8. Dingee	94,766	15	1	198	0	9	796	4	7	34	13	3	252	18	0	94,964	15	10	796	4	7	500	18	8	..	..	..	4,766	11	5			
9. Katandra	192,758	1	8	220	9	5	855	2	10	..	..	..	3,398	11	5	192,978	11	1	855	2	10	510	13	3	2,887	18	2	..	..	27,858	0	1	
10. Kerang	398,269	6	9	1,110	12	9	7,182	1	7	17	11	2	..	..	..	399,379	19	6	7,182	1	7	8,341	0	9	..	14,934	19	1	3,766	6	2		
11. Koondrook	494,523	6	9	1,307	4	9	6,342	8	1	6	17	3	..	..	..	495,830	11	6	6,342	8	1	8,697	9	6	..	19,498	10	5	52,391	9	8		
12. Maffra-Sale	1,384,407	9	10	2,447	15	0	11,297	16	9	107	0	8	..	..	..	1,386,855	4	10	11,297	16	9	1,850	19	7	..	98,719	0	2	3,713	1	5		
13. Murray Valley	3,413,997	0	2	136	0	0	5,477	16	3	99	1	10	65,649	8	5	3,414,133	0	2	5,477	16	3	31,303	11	10	34,444	18	5	..	..	..			
14. Mystic Park	61,981	12	8	101	8	8	354	3	4	0	8	0	..	..	..	62,083	1	4	354	3	4	1,216	18	1	..	20,892	8	1	2,112	16	8		
15. North Shepparton	385,509	8	2	1,052	13	5	2,265	11	1	1	9	6	..	..	..	386,562	1	7	2,265	11	1	1,406	17	8	..	12,571	19	3	42,760	2	0		
16. Robinvale	817,783	4	4	..	..	..	32,699	9	6	0	4	4	..	..	..	817,783	4	4	32,699	9	6	10,504	14	10	..	113,366	19	0	..	..	..		
17. Rochester	1,212,178	2	6	3,408	12	1	10,285	13	0	133	15	7	..	..	..	1,215,586	14	7	10,285	13	0	18,893	3	0	..	1,552	18	6	35,162	16	0		
18. Rodney	1,631,995	14	3	2,342	14	3	29,851	13	4	100	3	10	..	..	..	1,634,338	8	6	29,851	13	4	21,924	13	7	..	64,649	2	8	86,159	15	7		
19. Shepparton	524,836	15	5	899	3	8	5,685	14	5	0	3	7	..	..	..	525,735	19	1	5,685	14	5	884	6	0	..	43,501	10	0	60,912	11	9		
20. South Shepparton	123,432	18	3	309	12	3	937	7	3	..	..	..	..	..	..	123,742	10	6	937	7	3	359	15	10	..	8,024	6	3	2,735	16	9		
21. Swan Hill	515,282	5	11	1,033	7	8	16,605	17	9	8	0	5	..	..	..	516,315	13	7	16,605	17	9	6,000	1	6	..	70,095	18	4	6,236	10	0		
22. Third Lake	52,597	16	10	82	3	11	395	19	4	0	2	9	..	..	..	52,680	0	9	395	19	4	597	8	2	..	6,055	7	1	2,439	2	2		
23. Tongala-Stanhope	977,709	10	1	2,562	12	6	6,653	15	10	32	15	3	..	..	..	980,272	2	7	6,653	15	10	9,044	5	1	..	82,166	16	6	73,622	18	2		
24. Tragowel Plains	827,065	3	3	1,461	1	9	10,592	9	9	147	10	10	..	..	..	828,526	5	0	10,592	9	9	11,135	10	3	..	42,633	14	11	42,840	6	8		
25. Werribee	344,155	16	9	1,401	5	10	3,063	14	0	24	13	6	..	..	..	345,647	2	7	3,063	14	0	4,039	8	8	..	31,841	19	4	15,475	10	3		
	17,061,475	8	1	26,094	8	7	174,283	12	4	884	15	1	{ (A) 528,776 0 10 (B) 853,765 8 10	5	5	17,087,509	16	8	174,283	12	4	163,288	8	4	55,033	10	0	728,421	11	0	526,776	0	10

The Districts set out hereunder are those whose works will not produce sufficient revenue to cover the expense of 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 Orders in Council, dated 30th July, 1938, and 16th November, 1942, under the provisions of Section 6, *Water Act* 1937, No. 4513).

26. Fish Point	..	..	40,860 1 6	..	248 10 1	0 3 10	{(A) 15,880 11 7 (B) 654 5 10}	..	40,860 1 6	248 10 1	683 5 11	..	13,372 8 0	2,479 7 4
27. Nyah	..	..	279,534 16 7	54 19 10	13,675 17 0	30 0 0	{(A) 71,249 12 7 (B) 11,264 15 0}	..	279,589 16 5	13,675 17 0	6,938 18 3	..	45,308 1 5	30,297 7 11
28. Red Cliffs-Merbetin	..	..	1,641,459 13 11	..	101,975 0 10	30 7 9	{(A) 339,534 11 8 (B) 46,583 9 7}	..	1,641,459 13 11	101,975 0 10	4,654 7 5	..	333,879 19 0	47,614 2 7
29. Tresco	..	..	130,345 1 3	..	2,244 7 3	53 8 9	{(A) 139,943 16 8 (B) 46 8 9}	..	130,345 1 3	2,244 7 3	2,968 19 5	..	72,048 10 4	65,026 4 5
Totals	..	..	2,092,199 13 3	54 19 10	118,143 15 2	114 0 4	{(A) 566,608 12 6 (B) 58,548 19 2}	..	2,092,254 13 1	118,143 15 2	15,245 11 0	..	404,608 18 9	145,417 2 3
Grand Totals	..	..	19,153,675 1 4	26,089 8 5	292,427 7 6	998 15 5	{(A) 1,093,384 13 4 (B) 912,314 8 0}	92,093 5 5	19,179,764 9 9	292,427 7 6	178,533 19 4	55,033 10 0	1,193,030 9 9	672,183 3 1
£21,570,982 19s. 5d.														£21,570,982 19s. 5d.

## DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.							
	Capital Borne by— (A) State. (B) District.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.  Gain.	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.		
											Loss since 30th June, 1938.	Interest and Other Losses prior to 30th June, 1938, Borne by State. (Act No. 5017.)	
URBAN DIVISIONS.													
1. Cohna	{ (A) 10,364 19 2 (B) 3,118 5 4 }	235 14 0	1,573 12 1	8 12 6	..	610 2 2	13,718 18 6	1,573 12 1	186 11 0	432 3 8	..	..	
2. Lockington	{ (A) 3,088 15 3 (B) 118 1 8 }	38 2 11	1,098 3 9	0 13 0	..	1,124 0 11	3,244 19 10	1,098 3 9	68 3 2	1,056 10 9	..	..	
3. Macorna	{ (A) 1,487 18 0 (B) 1,487 18 0 }	..	176 9 6	0 0 6	(B) 346 8 7	..	1,487 18 0	176 9 6	14 17 3	..	331 11 10	..	
4. Red Cliffs	{ (A) 36,106 13 11 (B) 1,582 3 11 }	280 6 10	1,232 2 7	2 9 6	(B) 1,813 16 11	..	37,969 4 8	1,232 2 7	600 6 10	..	1,215 19 7	..	
5. Robinvale	{ (A) 14,851 8 3 (B) 14,851 8 3 }	..	857 12 6	10 15 0	..	1,334 17 9	14,851 8 3	857 12 6	215 19 11	1,129 12 10	..	..	
6. Tallygaroopna	{ (A) 4,103 8 2 (B) 4,103 8 2 }	..	309 18 2	..	..	381 11 11	4,103 8 2	309 18 2	6 6 3	375 5 8	..	..	
Totals	{ (A) 70,003 2 9 (B) 4,818 10 11 }	554 3 9	5,247 18 7	22 10 6	(B) 2,160 5 6	3,450 12 9	75,375 17 5	5,247 18 7	1,092 4 5	2,993 12 11	1,547 11 5	..	
The Districts hereunder 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 of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By Authority of Orders in Council, dated 30th July, 1938, and 18th December, 1944, under the provisions of Section 6, <i>Water Act 1937</i> , No. 4513.)													
7. Corop	{ (A) 231 15 6 (B) 231 15 6 }	..	134 11 6	..	(A) 106 0 11	27 3 7	231 15 6	134 11 6	59 16 8	10 19 9	..	62 8 1	
8. Dingee	{ (A) 1,859 11 9 (B) 1,859 11 9 }	..	240 2 6	..	{ (A) 517 2 4 (B) 152 13 10 }	..	1,859 11 9	240 2 6	39 14 4	..	536 11 4	93 10 6	
9. Heyfield	{ (A) 41,062 3 8 (B) 41,062 3 8 }	..	1,557 12 1	39 10 4	(A) 160 19 2	2,027 6 4	41,062 3 8	1,557 12 1	113 1 4	1,953 15 4	..	160 19 2	
10. Leitchville	{ (A) 4,188 15 4 (B) 4,188 15 4 }	23 19 8	363 16 7	1 14 6	(A) 389 9 9	..	4,212 15 0	363 16 7	25 4 5	12 4 8	353 15 2	..	
11. Murrabit	{ (A) 1,334 7 2 (B) 1,334 7 2 }	..	353 4 9	..	{ (A) 2,336 3 8 (B) 30 16 2 }	..	1,334 7 2	353 4 9	60 12 5	..	2,214 5 7	92 1 10	
12. Stanhope	{ (A) 9,169 19 5 (B) 9,169 19 5 }	21 4 4	872 8 4	..	(A) 108 4 10	439 3 9	9,191 3 9	872 8 4	86 11 5	460 17 2	..	..	
Totals	{ (A) 57,846 12 10 (B) 57,846 12 10 }	45 4 0	3,521 15 9	41 4 10	{ (A) 3,618 0 8 (B) 183 10 0 }	2,493 13 8	57,891 16 10	3,521 15 9	385 0 7	2,437 16 11	3,104 12 1	408 19 7	
Grand Totals	{ (A) 127,849 15 7 (B) 4,818 10 11 }	599 7 9	8,769 14 4	63 15 4	{ (A) 3,618 0 8 (B) 2,343 15 6 }	5,944 6 5	133,267 14 3	8,769 14 4	1,477 5 0	5,431 9 10	4,652 3 6	408 19 7	
£154,007 6s. 6d.													
£154,007 6s. 6d.													

The Districts hereunder 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 of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By Authority of Orders in Council, dated 30th July, 1938, and 18th December, 1944, under the provisions of Section 6, *Water Act 1937*, No. 4513.)

## DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.											
	Capital Borne by— (A) State, (B) District.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency (Chargeable to — (A) State Account. (B) District Account.	Profit and Loss Account.		Works at Cost.	Depreciation Account.		Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.				
						Gain.			£	s.			d.	£	s.	d.	£
WATERWORKS DISTRICTS.																	
1. Bellarine Peninsula	{ (A) 428,011 1 5 } { (B) 83,187 4 2 }	3,588 15 1	Dr 19,836 4 4	10 0 0	{ (A) 9,927 9 8 } { (B) 61,766 14 10 }	1,509 4 3	513,985 10 8	Cr 19,836 4 4	2,099 15 7	..	61,378 9 3	9,927 9 8					
2. East Loddon ..	(A) 2,287 14 1	3,281 9 1	62 0 0	1 7 2	..	1,509 4 3	5,569 3 2	62 0 0	562 16 6	947 14 11	..	..					
3. Loddon ..	(A) 3,215 16 5	4,320 17 6	19 0 0	1 8 10	(B) 2,751 0 0	..	7,536 13 11	19 0 0	57 7 4	..	2,685 1 6	..					
4. Mornington Peninsula	{ (A) 63,541 9 0 } { (B) 245,145 4 0 }	3,538 17 11	14,822 4 9	14 4 9	(A) 1,077 12 3	53,005 5 0	311,604 8 0	14,822 4 9	5,326 0 0	48,314 12 8	..	1,077 12 3					
5. Newstead ..	{ (A) 4,636 6 10 } { (B) 4,636 6 10 }	..	..	..	..	376 10 0	4,636 6 10	..	..	376 10 0	..	..					
6. Normanville ..	(A) 52,295 4 3	222 1 11	1,516 16 9	6 12 2	(B) 8,741 17 1	..	52,517 6 2	1,516 16 9	178 16 11	..	8,569 12 4	..					
7. Otway ..	{ (A) 149,363 6 11 } { (B) 88,825 7 0 }	4,044 16 11	37,109 18 1	0 8 4	..	4,542 1 4	242,233 10 10	37,109 18 1	1,147 13 11	3,394 15 9	..	..					
8. Werribee ..	(A) 12,521 11 9	82 12 10	..	23 4 7	(A) 2,221 10 10	274 1 6	12,604 4 7	..	77 9 4	219 16 9	..	2,221 10 10					
9. Western Wimmera	(A) 1,068,349 15 2	177 10 2	9,223 19 0	34 7 6	{ (A) 13,428 5 1 } { (B) 79,192 5 2 }	..	1,068,527 5 4	9,223 19 0	2,996 0 4	..	76,230 12 4	13,428 5 1					
10. West Loddon ..	(A) 9,638 2 10	3,764 7 3	145 0 0	0 10 6	(B) 4,333 2 7	..	13,402 10 1	145 0 0	166 4 6	..	4,167 8 7	..					
11. Wimmera United	(A) 600,992 0 2	965 12 11	81 0 2	48 13 1	..	6,802 6 10	601,957 13 1	81 0 2	232 15 2	6,618 4 9	..	..					
12. Wychitella ..	(A) 193,225 6 4	..	..	65 11 4	(B) 24,305 1 7	..	193,225 6 4	..	49 16 2	..	24,320 16 9	..					
Totals ..	{ (A) 2,588,977 15 2 } { (B) 417,157 15 2 }	23,987 1 7	43,143 14 5	206 8 3	{ (A) 26,654 17 10 } { (B) 181,090 1 3 }	66,509 8 11	3,027,799 19 0	43,143 14 5	12,894 15 9	59,871 14 10	177,362 0 9	26,654 17 10					

The Districts set out hereunder 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 Orders in Council, dated 30th June, 1938, 21st October, 1941, and 25th November, 1952, under the provisions of Section 6, *Water Act 1937*, No. 4513.)

13. Birechip ..	(A) 220,941 2 8	382 17 0	189 0 0	8 16 8	{ (A) 50,805 0 8 } { (B) 5,077 15 6 }	..	221,323 19 8	189 0 0	198 9 6	..	31,849 2 0	23,844 1 4
14. Hindmarsh ..	(A) 33,065 10 9	103 4 3	3,290 19 7	..	(A) 2,600 3 2	..	33,168 15 0	3,290 19 7	77 0 7	..	2,523 2 7	..
15. Karkaroo ..	(A) 605,592 7 10	..	52 0 0	30 12 2	{ (A) 171,236 5 7 } { (B) 13,179 4 6 }	..	605,592 7 10	52 0 0	489 12 3	..	142,691 12 11	41,264 17 1
16. Kerang-North-West Lakes	(A) 4,104 0 9	..	40 0 0	7 18 1	{ (A) 3,195 12 7 } { (B) 83 3 9 }	..	4,104 0 9	40 0 0	163 15 4	..	2,291 8 8	831 10 5
17. Long Lakes ..	(A) 357,414 11 7	..	774 3 11	8 6 2	{ (A) 167,806 7 4 } { (B) 29,289 10 10 }	..	357,414 11 7	774 3 11	1,195 17 8	..	173,605 0 10	22,303 5 10
18. Milawa ..	(A) 726,891 7 4	..	34,403 14 9	24 1 0	{ (A) 980,124 18 2 } { (B) 20,984 6 0 }	..	726,891 7 4	34,403 14 9	6,744 14 3	..	793,181 14 11	201,206 16 0

NOTE.—Waterworks Districts Balance-sheets continued on next page.

DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.										
	Capital Borne by— (A) State. (B) District.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.  Gain.	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.					
											Loss since 30th June, 1938.	Interest and Other Losses prior to 30th June, 1938, Borne by State. (Act No. 5017.)				
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	
WATERWORKS DISTRICTS—continued.																
19. Onyeu ..	(A)	533,585	3	8	..	..	..	..	..	..	..	..	410,436	1	4	
20. Sea Lake ..	(A)	322,626	10	9	26	4	2	189	0	0	169	13	9	83,709	8	1
21. Tyntynder ..	(A)	510,674	14	6	..	..	..	656	10	7	1,774	7	11	219,200	12	11
22. Tyntynder North ..	(A)	218,988	8	9	..	..	..	1,934	4	6	2,465	7	2	147,208	19	6
23. Tyrrell ..	(A)	480,980	3	11	..	..	..	196	18	6	2,621	8	3	292,114	18	10
24. Tyrrell West ..	(A)	326,614	3	10	..	..	..	637	0	8	561	12	1	207,809	1	1
25. Upper Western Wimmera ..	(A)	168,084	6	0	..	..	..	169	1	2	427	17	7	1,205	15	5
26. Upper Wimmera United ..	(A)	256,833	2	10	1,003	7	5	..	..	..	235	1	6	19,274	11	4
27. Walpeup West ..	(A)	36,486	9	8	..	..	..	Dr. 1,112	2	7	763	18	11	2,151	12	0
28. Wycheproof ..	(A)	384,998	7	3	1,148	11	7	213	0	0	398	17	9	40,222	16	1
Totals ..	(A)	5,187,880	12	1	2,664	4	5	45,833	5	3	20,202	12	4	1,205	15	5
														2,572,085	11	2
														651,033	10	4
Grand Totals ..	{ (A) 7,776,858 7 3 (B) 417,157 15 2 }	26,651	6	0	503	18	3	88,976	19	8	33,097	8	1	61,077	10	3
														2,749,447	11	11
														677,688	8	2
														£11,828,632 13s. 7d.		
														£11,828,632 13s. 7d.		



## DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.									
	Capital Borne by— (A) State. (B) District.		Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency (Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.  (Gain.)	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.			
	£	s. d.										£	s. d.		
URBAN DISTRICTS.															
1. Allansford	{(A) 2,538 18 10 (B) 805 5 5}	..	35 7 6	315 15 2	7 10 4	..	200 17 3	3,377 9 10	315 15 2	42 15 10	167 13 8	..	..		
2. Antwerp	{(A) 452 17 8 (B) 251 13 10}	..	18 19 8	53 17 8	..	..	63 16 8	722 17 8	53 17 8	31 9 2	33 1 0	..	..		
3. Barwon Heads and Ocean Grove	{(A) 70,562 16 6 (B) 7,819 12 0}	..	493 12 2	Dr. 2,730 8 8	14 17 7	..	5,566 10 2	78,876 0 8	Cr. 2,730 8 8	2,113 4 11	3,468 2 10	..	..		
4. Berriwillock	{(A) 7,940 15 7 (B) 2 16 11}	..	25 6 5	112 10 1	7 15 2	{(A) 216 18 8 (B) 542 17 1}	..	7,968 18 11	112 10 1	81 19 9	..	468 12 6	216 18 8		
5. Berwick	{(A) 18,008 8 2 (B) 24,439 13 3}	..	304 19 0	5,074 6 9	1 8 4	..	2,375 9 9	42,749 4 0	5,074 6 9	360 5 6	2,020 9 0	..	..		
6. Birregurra	{(A) 35,558 7 8 (B) ..}	..	..	723 1 6	6 7 4	(B) 343 2 10	..	35,558 7 8	723 1 6	137 3 7	..	212 6 7	..		
7. Brim ..	{(A) 9,140 2 4 (B) 332 8 6}	..	49 5 10	21 12 3	1 15 9	(B) 660 13 10	..	9,512 10 9	21 12 3	79 13 9	..	592 1 9	..		
8. Camperdown	{(A) 50,023 16 10 (B) 53,502 2 11}	..	2,551 8 6	12,185 10 2	8 13 9	..	751 0 10	108,077 8 3	12,185 10 2	672 1 10	87 12 9	..	..		
9. Chelsea-Frankston	{(A) 421,493 11 8 (B) 688,298 12 11}	..	7,991 11 6	28,805 10 11	81 2 1	(A) 9,188 12 3	30,062 8 6	1,116,015 5 1	28,805 10 11	7,158 2 2	24,723 19 5	..	9,188 12 3		
10. Cobden	{(A) 16,568 6 1 (B) 12,322 17 11}	..	622 15 1	2,947 12 2	14 5 0	(B) 455 9 1	..	29,713 19 1	2,947 12 2	359 14 5	..	109 19 8	..		
11. Cranbourne	{(A) 10,480 11 5 (B) 4,291 14 5}	..	90 7 3	658 0 7	..	(A) 538 9 1	1,408 16 9	14,851 15 1	658 0 7	105 6 7	1,314 8 8	..	538 9 1		
12. Culgea	{(A) 2,382 11 9 (B) 2,382 11 9}	..	120 4 1	96 5 0	12 11 1	(B) 375 4 7	..	4,683 0 7	96 5 0	109 0 9	..	278 14 11	..		
13. Dandenong-Springvale	{(A) 193,171 12 1 (B) 724,559 4 6}	..	9,477 1 9	32,736 1 2	29 0 0	(A) 3,601 18 7	57,049 4 8	924,667 16 10	32,736 1 2	8,531 8 3	51,086 17 11	..	3,601 18 7		
14. Dimboola	{(A) 19,789 16 10 (B) 7,356 6 6}	..	572 0 0	1,410 6 5	3 12 8	..	2,208 18 1	20,718 3 4	1,410 6 5	1,407 18 10	804 11 11	..	..		
15. Dromana-Portsea	{(A) 12,789 16 10 (B) 155,177 18 4}	..	2,284 2 2	30,374 15 3	57 13 10	..	45,854 16 2	439,773 12 5	30,374 15 3	4,245 2 8	41,667 7 4	..	..		
16. Garvoc	{(A) 282,311 11 11 (B) 51 4 8}	..	..	..	..	..	..	51 4 8	..	..	..	..	..		
17. Jeparit	{(A) 8,199 9 0 (B) 5,579 0 8}	..	361 1 6	493 8 3	0 10 0	(B) 133 4 10	201 9 6	14,139 11 2	493 8 3	335 4 4	..	..	..		
18. Longwarry	{(A) 6,838 13 3 (B) 15,732 1 8}	..	487 9 6	2,611 8 0	..	..	3,310 3 5	22,979 6 7	2,611 8 0	1,235 4 10	2,153 16 5	..	..		
19. Maroo	{(A) 1,737 3 0 (B) 2,417 1 5}	..	99 8 5	1,129 19 0	..	..	321 17 10	4,260 5 8	1,129 19 0	78 5 9	256 19 3	..	..		
20. Merbein	{(A) 24,685 12 4 (B) 3,964 17 8}	..	375 5 0	1,678 2 10	6 0 10	{(A) 510 10 1 (B) 1,804 7 0}	..	29,025 15 0	1,678 2 10	690 0 8	..	1,120 7 2	510 10 1		
21. Minyip	{(A) 7,556 6 7 (B) 3,467 0 7}	..	253 14 7	196 13 8	10 9 5	..	724 2 5	11,277 1 9	196 13 8	55 3 4	679 8 6	..	..		
22. Mornington	{(A) 137,710 8 10 (B) 150,457 9 4}	..	2,938 2 4	8,903 14 1	64 0 9	..	15,992 3 11	300,106 0 6	8,903 14 1	2,871 19 10	13,184 4 10	..	..		
23. Nar-nar-geon and Tynong	{(A) 140 9 1 (B) ..}	..	..	..	..	..	..	140 9 1	..	..	..	..	..		
24. Natimuk	{(A) 1,061 16 3 (B) 4,057 19 0}	..	187 19 7	1,022 19 1	13 6 0	(B) 562 19 4	..	5,205 3 0	1,022 19 1	187 5 2	..	491 12 0	..		
25. Officer	{(A) .. (B) ..}	..	..	..	..	..	..	..	..	..	..	..	..		
26. Pakenham	{(A) 7,769 9 9 (B) 25,276 5 8}	..	606 2 3	4,294 13 3	1 13 0	..	7,150 19 2	33,651 17 8	4,294 13 3	889 7 7	6,263 4 7	..	..		
27. Pimpino	{(A) .. (B) ..}	..	..	..	..	..	6 15 3	..	..	1 6 4	5 8 11	..	..		
28. Pyramid Hill	{(A) 5,667 7 3 (B) 4,112 2 8}	..	125 4 4	1,066 1 4	3 0 0	..	1,143 4 9	9,904 14 3	1,066 1 4	62 6 4	1,083 18 5	..	..		

NOTE.—Urban District Balance-sheets continued on next page.

## DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.						
	Capital Borne by— (A) State. (B) District.	Redemption Account.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account. Gain.	Works at Cost.	Depreciation Account.	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Loss since 30th June 1938.	Interest and Other Losses prior to 30th June 1938, Borne by State. (Act No. 5017.)
<b>URBAN DISTRICTS—continued.</b>												
29. Queenscliff and Lonsdale	{(A) 135,818 8 4 (B) 15,878 9 2 (B) 3,919 16 0 (B) 7,722 8 8 (A) 6,670 1 8 (B) 4,229 4 10 (B) 2,828 16 4 (B) 7,854 2 10 (B) 57,943 3 6 (A) 59,423 2 9 (B) 32,688 7 11 (B) 29,429 18 8 (A) 4,993 9 11 (B) 122 18 7}	974 11 6	5,035 12 9	13 14 7	(B) 8,630 2 8	..	152,671 9 0	5,035 12 9	2,880 4 10	..	5,763 12 5	..
30. Rainbow	{(A) 392 13 10 (B) 250 19 11 (B) 236 7 11 (B) 1,453 10 2 (B) 1,432 0 4 (B) 39 13 5}	392 13 10	1,767 0 9	12 15 2	..	4,308 12 2	12,034 18 6	1,767 0 9	302 4 7	4,019 2 9	..	..
31. Rupanyup	{(A) 250 19 11 (B) 236 7 11 (B) 1,453 10 2 (B) 1,432 0 4 (B) 39 13 5}	250 19 11	877 12 3	7 12 0	..	727 8 0	11,168 6 5	877 12 3	123 11 6	611 8 6	..	..
32. Somerville	{(A) 236 7 11 (B) 1,453 10 2 (B) 1,432 0 4 (B) 39 13 5}	236 7 11	1,413 5 9	0 10 0	..	792 9 0	10,919 7 1	1,413 5 9	258 13 8	534 5 4	..	..
33. South Frankston	{(A) 1,453 10 2 (B) 1,432 0 4 (B) 39 13 5}	1,453 10 2	4,771 19 7	17 6 8	..	10,242 3 2	118,819 16 5	4,771 19 7	806 4 11	9,453 4 11	..	..
34. Torang	{(A) 1,432 0 4 (B) 39 13 5}	1,432 0 4	9,691 2 8	37 15 9	(B) 163 8 7	..	63,401 5 7	9,691 2 8	265 17 8	..	84 8 0	..
35. Watchem	{(A) 39 13 5 (B) 122 18 7}	39 13 5	501 16 9	0 2 6	{(A) 140 17 2 (B) 1,562 17 11}	..	5,154 1 11	501 16 9	79 8 8	..	1,485 11 9	140 17 2
Totals ..	{(A) 1,447,164 5 7 (B) 2,162,804 0 3}	34,860 5 6	158,240 6 5	435 9 7	{(A) 14,197 5 10 (B) 15,234 7 9}	190,463 7 5	3,640,177 4 5	158,240 6 5	36,557 18 0	163,619 6 11	10,607 6 9	14,197 5 10
36. Anglesea	{(A) 16,904 13 3 (B) 28 14 2 (B) 7,718 12 0 (B) 2 13 2 (A) 16,778 10 6}	2 4 7	2,495 8 10	0 3 6	(A) 3,110 10 4	614 19 9	16,935 12 0	2,495 8 10	551 0 5	1,535 17 5	..	1,638 15 9
37. Beulah	{(A) 10 5 8 (B) 12 12 3 (B) 157 17 3 (B) 56 18 11 (A) 635 19 0}	10 5 8	805 14 5	5 16 11	(A) 870 16 11	..	7,731 10 10	805 14 5	176 6 5	219 2 1	384 7 2	96 18 2
38. Birchip	{(A) 12 12 3 (B) 157 17 3 (B) 56 18 11 (A) 635 19 0}	12 12 3	305 16 6	4 8 0	{(A) 4,380 19 8 (B) 564 5 4 (A) 1,833 11 6}	..	16,791 2 9	305 16 6	381 6 4	..	3,695 0 3	873 6 5
39. Bittern-Crib Point	{(A) 23,795 10 0 (B) 2,267 7 3 (B) 2,727 1 1 (B) 10,139 1 5 (A) 635 19 0}	157 17 3	818 14 10	0 10 5	(A) 474 1 9	2,585 2 1	26,220 14 6	818 14 10	667 8 2	201 0 1	965 13 8	..
40. Bunyip	{(A) 23,795 10 0 (B) 2,267 7 3 (B) 2,727 1 1 (B) 10,139 1 5 (A) 635 19 0}	56 18 11	2,879 18 9	..	(A) 381 9 3 (B) 301 5 2 (A) 632 5 1 (B) 1,431 18 10 (B) 68 7 0 (A) 138 7 0	..	12,920 1 5	2,879 18 9	214 18 5	2,370 3 8	..	474 1 9
41. Carwarp	{(A) 2,482 1 3 (B) 2,828 14 10 (B) 698 0 0}	..	193 10 1	..	{(A) 381 9 3 (B) 301 5 2 (A) 632 5 1 (B) 1,431 18 10 (B) 68 7 0 (A) 138 7 0}	336 18 3	635 19 0	193 10 1	1,019 12 8	..	..	..
42. Chillingollah	{(A) 2,482 1 3 (B) 2,828 14 10 (B) 698 0 0}	8 14 5	81 8 8	..	{(A) 381 9 3 (B) 301 5 2 (A) 632 5 1 (B) 1,431 18 10 (B) 68 7 0 (A) 138 7 0}	..	2,490 15 8	81 8 8	1,026 17 6	..	68 14 0	218 18 1
43. Chinkapook	{(A) 2,828 14 10 (B) 698 0 0}	..	213 10 6	..	{(A) 381 9 3 (B) 301 5 2 (A) 632 5 1 (B) 1,431 18 10 (B) 68 7 0 (A) 138 7 0}	..	2,828 14 10	213 10 6	114 10 5	..	1,228 0 2	157 15 3
44. Doeen	{(A) 698 0 0 (B) 25,995 0 10 (B) 37 10 6 (A) 2,055 12 7 (B) 6,032 7 10 (A) 24,346 15 11 (B) 12,777 3 2 (B) 4,611 19 2 (A) 7,001 11 2}	2 3 4	257 11 9	..	(A) 440 6 6	..	698 7 5	257 11 9	0 3 9	..	9 14 5	130 4 9
45. Drysdale	{(A) 25,995 0 10 (B) 37 10 6 (A) 2,055 12 7 (B) 6,032 7 10 (A) 24,346 15 11 (B) 12,777 3 2 (B) 4,611 19 2 (A) 7,001 11 2}	8 16 6	1,762 1 0	7 2 0	(A) 602 8 1	738 9 7	26,041 7 10	1,762 1 0	783 13 1	75 8 11	..	326 16 1
46. Garfield	{(A) 2,055 12 7 (B) 6,032 7 10 (A) 24,346 15 11 (B) 12,777 3 2 (B) 4,611 19 2 (A) 7,001 11 2}	49 9 1	1,946 8 8	..	(A) 972 14 8	1,518 4 10	8,108 1 11	1,946 8 8	125 13 5	1,643 1 6	..	381 5 7
47. Hastings	{(A) 24,346 15 11 (B) 12,777 3 2 (B) 4,611 19 2 (A) 7,001 11 2}	12 3 0	1,306 14 5	1 14 8	(A) 840 5 2	44 10 5	24,364 1 9	1,306 14 5	280 7 8	289 18 4	..	448 13 9
48. Hopetoun	{(A) 12,777 3 2 (B) 4,611 19 2 (A) 7,001 11 2}	30 11 9	827 9 9	0 12 5	(A) 840 5 2	171 0 3	12,831 4 5	827 9 9	218 4 7	213 10 5	..	580 2 10
49. Jung Jung	{(A) 4,611 19 2 (B) 7,001 11 2}	..	933 10 4	6 2 0	{(A) 2,962 18 2 (B) 20 1 0 (A) 4,491 2 11 (B) 196 2 9}	..	4,613 11 8	933 10 4	111 13 6	..	2,337 4 9	540 2 11
50. Koondrook	{(A) 7,001 11 2 (B) 196 2 9}	..	620 1 7	2 0 2	(B) 196 2 9	..	7,001 11 2	620 1 7	533 17 1	..	3,745 11 6	408 17 3

The Districts set out hereunder 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 maintenance and management of these districts has been transferred to the "Revenue Expenditure Chargeable to the State Account." (By authority of Orders in Council dated 30th June, 1938, 9th December, 1940, 23rd October, 1945, and 24th April, 1946, respectively, under the provisions of Section 6, *Water Act* 1937, No. 4513).





DISTRICT BALANCE-SHEETS AS AT 30TH JUNE, 1955.

District.	Liabilities.					Assets.						
	Capital Borne by State.	Depreciation Reserve Account.	Sundry Creditors.	Accumulated Deficiency Chargeable to— (A) State Account. (B) District Account.	Profit and Loss Account.		Works at Cost.	Depreciation Account	Sundry Debtors.	Accumulated Surplus Credited to District Account.	Profit and Loss Account.	
						Gain.					Loss since 30th June, 1938, Borne by State. (Act No. 5017.)	Interest and Other Losses prior to 30th June, 1938, Borne by State. (Act No. 5017.)
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Carrum .. ..	42,634 1 11	..	10 0 6	(B) 8,382 9 10	..	..	42,634 1 11	..	1,107 17 9	..	7,284 12 7	..
Totals .. ..	42,634 1 11	..	10 0 6	(B) 8,382 9 10	..	..	42,634 1 11	..	1,107 17 9	..	7,284 12 7	..
DRAINAGE DISTRICT.												
£51,026 12s. 3d.												
£51,026 12s. 3d.												

DRAINAGE DISTRICT.



STATEMENT OF REVENUE SETTING OUT ARREARS AS AT 1ST JULY, 1954, AND AS AT 30TH JUNE, 1955.

	Total.	Water Act 1940 (No. 4740), Sec. 3.		General Rate.		Irrigation Charge.		Drainage Rate.		Flood Protection Charge.		Sales of Water.		Mis- cellaneous.
		Consolidated Arrears.	Interest.	Rate.	Interest.	Charge.	Interest.	Rate.	Interest.	Charge.	Interest.	Sales.	Interest.	
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Arrears as at 1st July, 1954 .. ..	263,572	19,783	1,375	50,218	7,211	24,785	1,425	3,636	383	1,591	91	146,090	790	6,194
Assessments 1954-55 .. ..	1,373,324	..	..	628,911	..	657,788	..	62,662	..	23,963	..	..	..	..
Additional Water Sales, and Interest Charges to 30th June, 1955 .. ..	544,816	..	176	..	3,334	..	2,199	..	269	..	87	373,742	1,178	163,831
Total Amount Collectable, 1954-55 ..	2,181,712	19,783	1,551	679,129	10,545	682,573	3,624	66,298	652	25,554	178	519,832	1,968	170,025
Deduct—														
(i) Revenue Collected, 1954-55 ..	1,840,345	5,156	142	624,457	2,821	618,252	1,684	62,538	263	24,239	86	341,143	926	158,638
(ii) Credits Absorbed .. ..	4,857	..	..	1,102	1	502	3	56	..	9	..	507	1	2,676
Balance .. ..	336,510	14,627	1,409	53,570	7,723	63,819	1,937	3,704	389	1,306	92	178,182	1,041	8,711
Add—Amounts Overpaid .. ..	5,394	..	..	1,059	3	462	4	70	..	15	..	743	..	3,038
Total—Gross Arrears at 30th June, 1955	341,904	14,627	1,409	54,629	7,726	64,281	1,941	3,774	389	1,321	92	178,925	1,041	11,749
Deduct—Amounts recommended for Writing off, 1954-55 .. ..	36,926	57	214	3,523	163	31,270	47	207	22	34	3	1,027	16	343
BALANCE—Net Arrears as at 30th June, 1955	304,978	14,570	1,195	51,106	7,563	33,011	1,894	3,567	367	1,287	89	177,898	1,025	11,406

This Statement is subject to Audit and minor adjustments.

# WATER SUPPLY WORKS DEPRECIATION ACCOUNTS AS AT 30TH JUNE, 1955.

District.	Balance at 1st July, 1954.	Amounts Paid into Account 1954-55.	Interest 1954-55.	Total.	Expenditure 1954-55.	Balance in Account at 30th June, 1955.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
IRRIGATION AND WATER SUPPLY DISTRICTS.						
Bacchus Marsh ..	875 0 2	248 0 0	21 17 6	1,144 17 8	..	1,144 17 8
Boort ..	3,767 6 11	1,892 0 0	94 3 8	5,753 10 7	..	5,753 10 7
Calivil ..	892 3 6	833 0 0	22 6 1	1,747 9 7	..	1,747 9 7
Campaspe ..	415 4 2	227 0 0	10 7 7	652 11 9	..	652 11 9
Central Gippsland ..	..	31 3 2*	..	31 3 2	..	31 3 2
Cohuna ..	6,018 13 2	4,438 16 8*	145 12 10	10,603 2 8	..	10,603 2 8
Deakin ..	1,974 11 0	984 0 0	49 7 3	3,007 18 3	..	3,007 18 3
Dingee ..	369 0 1	418 0 0	9 4 6	796 4 7	..	796 4 7
Fish Point ..	70 14 9	176 0 0	1 15 4	248 10 1	..	248 10 1
Katandra ..	497 14 0	345 0 0	12 8 10	855 2 10	..	855 2 10
Kerang ..	3,079 15 5	4,025 6 3*	76 19 11	7,182 1 7	..	7,182 1 7
Koondrook ..	4,222 16 8	2,014 0 0	105 11 5	6,342 8 1	..	6,342 8 1
Maffra-Sale ..	6,614 3 8	4,518 6 0*	165 7 1	11,297 16 9	..	11,297 16 9
Murray Valley ..	4,190 12 8	1,182 8 3*	104 15 4	5,477 16 3	..	5,477 16 3
Mystic Park ..	144 11 1	206 0 0	3 12 3	354 3 4	..	354 3 4
North Shepparton ..	1,422 3 11	807 16 1*	35 11 1	2,265 11 1	..	2,265 11 1
Nyah (I. and W.S.) ..	10,528 10 11	1,472 0 0	262 14 6	12,263 5 5	19 11 8	12,243 13 9
Nyah (Drainage) ..	1,304 11 0	95 0 0	32 12 3	1,432 3 3	..	1,432 3 3
Red Cliffs-Merbein (I. and W.S.) ..	116,168 2 5	12,174 0 0	1,565 12 5	129,907 14 10	53,543 5 1	76,364 9 9
Red Cliffs-Merbein (Drainage) ..	27,039 8 8	1,416 0 0	590 2 2	29,045 10 10	3,434 19 9	25,610 11 1
Robinvale ..	30,748 3 7	5,716 0 0	658 2 8	37,122 6 3	4,422 16 9	32,699 9 6
Rochester ..	5,876 14 8	4,262 0 0	146 18 4	10,285 13 0	..	10,285 13 0
Rodney ..	21,434 3 3	7,881 13 0*	535 17 1	29,851 13 4	..	29,851 13 4
Shepparton ..	3,823 4 10	1,819 1 9*	94 6 2	5,736 12 9	50 18 4	5,685 14 5
South Shepparton ..	675 15 10	258 0 0	16 11 5	950 7 3	13 0 0	937 7 3
Swan Hill (I. and W.S.) ..	10,421 18 10	1,929 11 9*	247 17 10	12,599 8 5	..	12,599 8 5
Swan Hill (Drainage) ..	3,518 10 1	400 0 0	87 19 3	4,006 9 4	..	4,006 9 4
Third Lake ..	261 8 7	128 0 0	6 10 9	395 19 4	..	395 19 4
Tongala-Stanhope ..	4,741 2 10	1,794 2 5*	118 10 7	6,653 15 10	..	6,653 15 10
Tragowel Plains ..	6,274 4 2	4,161 8 6*	156 17 1	10,592 9 9	..	10,592 9 9
Tresco ..	1,431 11 5	777 0 0	35 15 10	2,244 7 3	..	2,244 7 3
Verribee ..	2,688 9 9	308 0 0	67 4 3	3,063 14 0	..	3,063 14 0
Totals ..	281,490 12 0	66,938 13 10	5,482 13 3	353,911 19 1	61,484 11 7	292,427 7 6

\* Direct Contributions to Depreciation Fund—Central Gippsland, £31 3s. 2d.; Cohuna, £48 16s. 8d.; Kerang, £86 6s. 3d.; Maffra-Sale, £47 6s.; Murray Valley, £404 8s. 3d.; North Shepparton, £17 16s. 1d.; Rodney, £190 13s.; Shepparton, £321 1s. 9d.; Swan Hill, £214 11s. 9d.; Tongala-Stanhope, £28 2s. 5d.; Tragowel Plains, £78 8s. 6d.

## URBAN DIVISIONS OF IRRIGATION AND WATER SUPPLY DISTRICTS.

Cohuna ..	1,312 0 0	271 0 0	31 15 5	1,614 15 5	41 3 4	1,573 12 1
Corop ..	125 8 9	6 0 0	3 2 9	134 11 6	..	134 11 6
Dingee ..	194 5 4	41 0 0	4 17 2	240 2 6	..	240 2 6
Heyfield ..	1,030 16 8	501 0 0	25 15 5	1,557 12 1	..	1,557 12 1
Leitchville ..	256 8 4	101 0 0	6 8 3	363 16 7	..	363 16 7
Lockington ..	980 13 5	93 0 0	24 10 4	1,098 3 9	..	1,098 3 9
Macorna ..	126 6 4	47 0 0	3 3 2	176 9 6	..	176 9 6
Murrabit ..	622 2 3	67 0 0	6 19 8	696 1 11	342 17 2	353 4 9
Red Cliffs ..	683 1 1	532 0 0	17 1 6	1,232 2 7	..	1,232 2 7
Robinvale ..	662 1 6	179 0 0	16 11 0	857 12 6	..	857 12 6
Stanhope ..	770 3 3	83 0 0	19 5 1	872 8 4	..	872 8 4
Tallygaroopna ..	248 13 10	55 0 0	6 4 4	309 18 2	..	309 18 2
Totals ..	7,012 0 9	1,976 0 0	165 14 1	9,153 14 10	384 0 6	8,769 14 4

## WATERWORKS DISTRICTS.

Bellarine Peninsula ..	Cr. 20,482 3 3	1,158 0 0	Cr. 512 1 1	Cr. 19,836 4 4	..	Cr. 19,836 4 4
Birchip ..	..	189 0 0	..	189 0 0	..	189 0 0
East Loddon ..	..	62 0 0	..	62 0 0	..	62 0 0
Harcourt ..	248 19 0	25 0 0	6 4 6	280 3 6	..	280 3 6
Hindmarsh ..	3,079 17 3	139 0 0	72 2 4	3,290 19 7	..	3,290 19 7
Karkarooe ..	..	52 0 0	..	52 0 0	..	52 0 0
Kerang-North-West Lakes ..	..	40 0 0	..	40 0 0	..	40 0 0
Loddon ..	..	19 0 0	..	19 0 0	..	19 0 0
Long Lake ..	863 12 9	372 0 0	9 16 2	1,245 8 11	471 5 0	774 3 11
Millewa ..	37,777 17 4	4,472 0 0	730 0 10	42,979 18 2	8,576 3 5	34,403 14 9
Mornington Peninsula ..	13,412 15 8	1,137 0 0	333 15 9	14,883 11 5	61 6 8	14,822 4 9
Normanville ..	1,072 0 9	418 0 0	26 16 0	1,516 16 9	..	1,516 16 9
Otway ..	34,327 14 3	1,924 0 0	858 3 10	37,109 18 1	..	37,109 18 1
Ouyen ..	3,721 13 4	385 0 0	93 0 10	4,199 14 2	..	4,199 14 2
Sea Lake ..	..	189 0 0	..	189 0 0	..	189 0 0
Tyntynder ..	418 1 7	228 0 0	10 9 0	656 10 7	..	656 10 7
Tyntynder North ..	1,762 3 5	128 0 0	44 1 1	1,934 4 6	..	1,934 4 6
Tyrell ..	208 4 6	240 0 0	Cr. 1 1 0	447 3 6	250 5 0	196 18 6
Tyrell West ..	402 19 2	224 0 0	10 1 6	637 0 8	..	637 0 8
Upper Western Wimmera ..	169 1 2	..	..	169 1 2	..	169 1 2
Walpeup West ..	Cr. 1,338 13 3	260 0 0	Cr. 33 9 4	Cr. 1,112 2 7	..	Cr. 1,112 2 7
Western Wimmera ..	8,587 10 9	595 0 0	210 9 3	9,393 0 0	169 1 0	9,223 19 0
West Loddon ..	..	145 0 0	..	145 0 0	..	145 0 0
Wimmera United ..	476 12 4	193 0 0	Cr. 2 14 8	666 17 8	585 17 6	81 0 2
Wycheproof ..	..	213 0 0	..	213 0 0	..	213 0 0
Totals ..	84,708 6 9	12,807 0 0	1,855 15 0	99,371 1 9	10,113 18 7	89,257 3 2



## WATER SUPPLY WORKS DEPRECIATION ACCOUNTS AS AT 30TH JUNE, 1955—continued.

District.	Balance at 1st July, 1954.	Amounts Paid into Account 1954-55.	Interest 1954-55.	Total.	Expenditure 1954-55.	Balance in Account at 30th June, 1955.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
URBAN DISTRICTS OF WATERWORKS DISTRICTS.						
Allansford .. ..	288 10 11	20 0 0	7 4 3	315 15 2	..	315 15 2
Anglesea .. ..	2,341 17 11	95 0 0	58 10 11	2,495 8 10	..	2,495 8 10
Antwerp .. ..	46 16 9	6 0 0	1 0 11	53 17 8	..	53 17 8
Barwon Heads and Ocean Grove .. ..	Cr. 3,190 13 4	540 0 0	Cr. 79 15 4	Cr. 2,730 8 8	..	Cr. 2,730 8 8
Berriwillock .. ..	77 11 4	33 0 0	1 18 9	112 10 1	..	112 10 1
Berwick .. ..	4,764 16 1	258 0 0	117 9 5	5,140 5 9	65 19 0	5,074 6 9
Beulah .. ..	818 16 8	81 0 0	17 13 6	917 10 2	111 15 9	805 14 5
Birchip .. ..	266 15 5	112 0 0	4 14 7	383 10 0	77 13 6	305 16 6
Birregurra .. ..	603 19 6	104 0 0	15 2 0	723 1 6	..	723 1 6
Bittern-Crib Point .. ..	605 12 0	198 0 0	15 2 10	818 14 10	..	818 14 10
Brim .. ..	105 9 7	50 0 0	0 13 10	154 15 9	133 3 6	21 12 3
Bunyip .. ..	2,726 0 10	108 0 0	67 12 2	2,901 13 0	21 14 3	2,879 18 9
Camperdown .. ..	11,265 17 3	638 0 0	281 12 11	12,185 10 2	..	12,185 10 2
Carwarra .. ..	182 3 3	8 0 0	3 6 10	193 10 1	..	193 10 1
Chelsea-Frankston .. ..	25,341 15 11	3,732 0 0	611 11 0	29,685 16 11	879 16 0	28,805 10 11
Chillingollah .. ..	63 16 9	16 0 0	1 11 11	81 8 6	..	81 8 6
Chinook .. ..	193 12 3	16 0 0	3 18 3	213 10 6	..	213 10 6
Cobden .. ..	2,724 9 11	155 0 0	68 2 3	2,947 12 2	..	2,947 12 2
Collins .. ..	31,013 0 7	7,691 0 0	314 12 6	39,018 13 1	18,427 18 5	20,590 14 8
Cranbourne .. ..	573 13 9	79 0 0	14 6 10	658 0 7	..	658 0 7
Culgoa .. ..	64 12 8	39 0 0	1 12 4	96 5 0	..	96 5 0
Dandenong-Springvale .. ..	30,488 3 0	3,529 0 0	712 7 1	34,729 10 1	1,993 8 11	32,736 1 2
Dimboola .. ..	1,157 17 5	350 0 0	25 17 3	1,533 14 8	123 8 3	1,410 6 5
Dooen .. ..	229 16 10	22 0 0	5 14 11	257 11 9	..	257 11 9
Dromana-Portsea .. ..	27,671 19 3	2,911 0 0	691 16 0	30,374 15 3	..	30,374 15 3
Drysdale .. ..	1,553 4 5	170 0 0	38 16 7	1,762 1 0	..	1,762 1 0
Garfield .. ..	1,870 1 0	43 0 0	16 8 6	1,959 9 6	13 0 10	1,946 8 8
Hastings .. ..	1,099 4 10	180 0 0	27 9 7	1,306 14 5	..	1,306 14 5
Hopetoun .. ..	1,820 2 2	120 0 0	17 5 1	1,957 7 3	1,129 17 6	827 9 9
Jeparit .. ..	388 14 5	120 0 0	9 2 2	517 16 7	24 8 4	493 8 3
Jung Jung .. ..	840 10 7	73 0 0	20 19 9	934 10 4	1 0 0	933 10 4
Koondrook .. ..	413 4 1	208 0 0	10 1 0	631 5 1	11 3 6	620 1 7
Lake Boga .. ..	585 13 10	127 0 0	11 12 10	727 6 8	..	727 6 8
Lalbert .. ..	515 8 4	102 0 0	12 17 9	630 6 1	..	630 6 1
Lancelles .. ..	92 13 0	85 0 0	2 6 4	179 19 4	..	179 19 4
Longwarry .. ..	2,440 4 4	148 0 0	60 1 8	2,648 6 0	36 18 0	2,611 8 0
Manangatang .. ..	31 4 6	80 0 0	0 15 7	112 0 1	..	112 0 1
Marong .. ..	807 18 4	39 0 0	12 5 1	859 3 8	317 5 8	541 18 0
Marnoo .. ..	1,009 13 3	99 0 0	21 5 9	1,129 19 0	..	1,129 19 0
Merbein .. ..	1,239 3 3	108 0 0	30 19 7	1,678 2 10	..	1,678 2 10
Meringur .. ..	69 10 0	38 0 0	1 14 9	109 4 9	..	109 4 9
Minyip .. ..	172 14 9	141 0 0	1 7 2	315 1 11	118 8 3	196 13 8
Mitiamo .. ..	400 12 1	73 0 0	10 0 4	483 12 5	..	483 12 5
Mornington .. ..	7,472 1 8	1,191 0 0	188 0 10	8,854 2 6	Dr. 19 11 7	8,903 14 1
Nandaly .. ..	73 6 1	27 0 0	1 16 8	102 2 9	..	102 2 9
Natimuk .. ..	1,260 14 11	69 0 0	23 5 4	1,353 0 3	330 1 2	1,022 19 1
Newstead .. ..	1,061 9 6	51 0 0	26 10 9	1,139 0 3	..	1,139 0 3
Nullawill .. ..	79 16 4	37 0 0	1 19 11	118 16 3	..	118 16 3
Nyah .. ..	409 18 8	95 0 0	9 6 3	514 4 11	37 9 2	476 15 9
Nyah West .. ..	2,716 6 8	135 0 0	58 17 2	2,910 3 10	361 19 8	2,548 4 2
Ouyen .. ..	Cr. 735 15 6	258 0 0	Cr. 18 7 11	Cr. 496 3 5	..	Cr. 496 3 5
Pakenham .. ..	1,022 2 2	172 0 0	100 11 1	1,294 13 3	..	1,294 13 3
Patchewollock .. ..	164 1 9	60 0 0	1 2 1	228 3 10	..	228 3 10
Piangil .. ..	110 10 4	107 0 0	2 15 3	220 5 7	..	220 5 7
Portarlington .. ..	3,760 18 5	302 0 0	94 0 6	4,156 18 11	..	4,156 18 11
Pyramid Hill .. ..	916 3 3	127 0 0	22 18 1	1,066 1 4	..	1,066 1 4
Queenscliff and Point Queenscliff .. ..	609 8 0	91 0 0	15 4 8	718 12 8	..	718 12 8
Lonsdale .. ..	4,431 3 2	1,080 0 0	96 9 7	5,607 12 9	572 0 0	5,035 12 9
Rainbow .. ..	1,554 3 8	174 0 0	38 17 1	1,767 0 9	..	1,767 0 9
Rupanyup .. ..	798 1 7	110 0 0	18 14 8	926 16 0	19 3 9	877 12 3
Sea Lake .. ..	658 3 8	111 0 0	13 17 5	783 1 1	103 6 9	679 14 4
Somerville .. ..	1,300 15 4	80 0 0	32 10 5	1,413 5 9	..	1,413 5 9
South Frankston .. ..	4,135 4 4	511 0 0	103 18 6	4,750 2 10	Dr. 21 16 9	4,771 19 7
Speed .. ..	86 18 1	78 0 0	2 3 6	167 1 7	..	167 1 7
Tempy .. ..	39 3 6	78 0 0	0 19 7	118 3 1	..	118 3 1
Terang .. ..	8,961 2 1	506 0 0	224 0 7	9,691 2 8	..	9,691 2 8
Torquay .. ..	2,087 9 8	113 0 0	52 3 9	2,252 13 5	..	2,252 13 5
Ultima .. ..	135 5 0	68 0 0	2 11 4	205 16 4	32 11 2	173 5 2
Waitehio .. ..	367 13 4	27 0 0	9 3 10	403 17 2	..	403 17 2
Walpeup .. ..	139 9 8	55 0 0	3 9 9	197 19 5	..	197 19 5
Watchem .. ..	406 13 5	85 0 0	10 3 4	501 16 9	..	501 16 9
Werrimull .. ..	461 5 9	78 0 0	11 10 8	550 16 5	..	550 16 5
Wonthaggi .. ..	9,580 10 9	114 0 0	190 3 5	10,184 14 2	1,973 13 6	8,211 0 8
Woomelang .. ..	885 1 0	95 0 0	11 18 2	991 19 2	408 15 2	583 4 0
Woorinen .. ..	368 6 6	48 0 0	8 5 2	424 11 8	..	424 11 8
Wycheproof .. ..	2,176 12 9	172 0 0	46 1 11	2,394 14 8	332 17 2	2,061 17 6
Yaapect .. ..	143 4 9	72 0 0	3 11 7	218 16 4	..	218 16 4
Totals .. ..	216,414 0 2	28,810 0 0	4,712 14 8	249,936 14 10	27,617 8 10	222,319 6 0

## BUILDINGS.

Buildings .. ..	47,531 19 4	10,000 0 0	994 14 8	58,526 14 0	7,742 10 10	50,784 3 2
Totals .. ..	47,531 19 4	10,000 0 0	994 14 8	58,526 14 0	7,742 19 10	50,784 3 2

## PLANT WORKSHOPS.

Bendigo .. ..	8,371 10 6	1,320 0 0	209 5 9	9,900 16 3	..	9,900 16 3
Kerang Sub-Depot .. ..	92 0 0	92 0 0	2 6 0	186 6 0	..	186 6 0
Totals .. ..	8,463 10 6	1,412 0 0	211 11 9	10,087 2 3	..	10,087 2 3
Grand Total .. ..	645,620 9 6	121,943 13 10	13,423 3 5	780,987 6 9	107,342 10 4	673,644 16 5

WATER SUPPLY PLANT AND MACHINERY ACCOUNT (ACT 4761).

	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Balance as at 1st July, 1954 ..	..			367,053	2	1						
Amounts charged on moneys authorized for carrying out construction and maintenance of Commission works on which plant and machinery were engaged with respect to Capital Liability of £1,497,341 lls. 11d. as at 30th June, 1955												
Interest .. .. .	42,722	4	4									
Redemption .. .. .	3,560	3	8									
Depreciation .. .. .	97,382	15	6									
Cost of Operation, Maintenance, Repairs (including Holding Charges) .. .. .	354,017	10	6									
				497,682	14	0						
Interest—Depreciation Fund Investment .. .. .				20,820	11	7						
				885,556	7	8						
Interest due for year paid to Revenue No. 2 to 30th June, 1955 .. .. .										45,182	17	3
Redemption paid to Revenue No. 9 Miscellaneous to 30th June, 1955 .. .. .										3,765	4	9
Water Supply Plant and Machinery Depreciation Fund Investment in Treasury ..	97,382	15	6									
Interest on Fund Investment ..	20,820	11	7							118,203	7	1
Cost of operation Maintenance and Repairs, &c. .. .. .										233,321	9	3
Plant and Machinery Operating Account Reserve as at 30th June, 1955 .. .. .										485,083	9	4
										885,556	7	8

## WATER SUPPLY PLANT AND MACHINERY ACCOUNT (ACT 4761).

SUMMARY OF CAPITAL TRANSACTIONS FOR YEAR ENDED 30TH JUNE, 1955.

	£	s.	d.	£	s.	d.
Plant and Machinery—						
Debit Balance in Account as at 30th June, 1954 .. .. .	1,511,083	14	2			
Add—Purchases of Plant during year 1954–55 .. .. .	48,386	13	3			
				1,559,470	7	5
Deduct—						
Redemption paid to Treasury 30th June, 1955 .. .. .	3,765	4	9			
Repayments to State Loans Repayment Fund .. .. .	58,363	10	9			
				62,128	15	6
Total Capital Liability .. .. .				1,497,341	11	11

Note.—Interest paid to Treasury in respect to Capital Liability of Plant and Machinery Account—

	£	s.	d.
Plant and Machinery—			
Payments to 30th June, 1954 .. .. .	252,217	9	3
Amount due and paid for year 1954–55 .. .. .	45,182	17	3
	297,400	6	6

## RECONCILIATION OF WATER SUPPLY PLANT AND MACHINERY ACCOUNT WITH WATER SUPPLY PLANT AND MACHINERY DEPRECIATION FUND (ACT 4761).

<i>Water Supply Plant and Machinery Depreciation Account.</i>				<i>Water Supply Plant and Machinery Depreciation Fund (in Treasury).</i>			
	£	s.	d.		£	s.	d.
Credit Balance as at 30th June.				Balance as per Treasury General			
1954 .. .. .			561,823 16 4	Account at 30th June, 1954..	..		93,823 16 4
Add—				Payments to Fund during 1954-55	97,382 15 6		
Proceeds from Hire of Plant	97,382 15 6			Interest credited by Treasury on			
				Investments for year 1954-55	20,820 11 7		
							118,203 7 1
Add Interest credited for year							212,027 3 5
1954-55 .. .. .	20,820 11 7			Less Withdrawal for replacement			
				of plant .. .. .	46,394 11 5		
	118,203 7 1			Less Amount transferred by			
Less Expenditure for replacement				Treasury to Investment Account,			
of Plant .. .. .	46,394 11 5			1954-55 .. .. .	80,000 0 0		
			71,808 15 8				126,394 11 5
				Balance as per Treasury General			
				Account at 30th June, 1955	..		85,632 12 0
				Amount Invested in Treasury			
				Investment Account	..		548,000 0 0
			633,632 12 0				633,632 12 0

## CAPITAL EXPENDITURE.

STATEMENT OF MONEYS EXPENDED UNDER WATER SUPPLY LOAN ACTS FOR THE YEAR ENDED  
30TH JUNE, 1955.

Works.	Water Supply Loan Funds.						Treasurer's Advance.
	Act 5748.		Act 5821.		Total Ordinary Loan Funds.		
Main Supply Works, Stores, and Workshops.	£	s. d.	£	s. d.	£	s. d.	£ s. d.
Bonnie Doon, Removal of Township .. ..	17,642	0 7	19,910	14 4	37,552	14 11	..
Bulk Store and Storeyard .. ..	..	..	60	14 8	60	14 8	..
Cairn Curran Reservoir .. ..	12,379	13 6	300,000	8 4	312,380	1 10	90,926 14 11
Central Plant Workshops—Golden Square .. ..	470	4 6	5,242	16 11	5,713	1 5	..
East Goulburn Main Channel .. ..	1,980	13 8	5,504	8 5	7,485	2 1	..
Eildon Reservoir Enlargement .. ..	1,783,913	17 0	3,416,828	18 7	5,200,742	15 7	..
Eppalock Reservoir .. ..	778	0 0	64	16 8	842	16 8	..
Glenelg River Works to Wimmera—Mallee Section .. ..	1,817	13 0	10,289	19 10	12,107	12 10	..
Glenmaggie Reservoir .. ..	260	4 1	2,035	2 6	2,295	6 7	..
Goulburn Weir .. ..	..	..	784	4 8	784	4 8	..
Goulburn—Waranga Channel Duplication .. ..	138,040	8 2	372,182	10 4	510,222	18 6	..
Goulburn System Enlargement Investigation .. ..	1,437	1 10	8,382	1 0	9,819	2 10	..
Hallam—East Dandenong Pipe Line .. ..	4,490	16 2	7,832	18 8	12,323	14 10	..
Hydraulic Experimental Station .. ..	63	5 4	123	2 2	186	7 6	..
Kow Swamp Works .. ..	3,019	6 1	5,045	1 7	8,064	7 8	..
Lake Lonsdale Reservoir .. ..	..	..	614	1 11	614	1 11	..
Loddon Weir .. ..	3,220	18 3	39,722	6 11	42,943	5 2	..
Melton Reservoir .. ..	12	14 2	1	1 8	13	15 10	..
Plant and Machinery .. ..	33,321	3 1	15,065	10 2	48,386	13 3	..
River Improvements .. ..	..	..	2,529	3 0	2,529	3 0	..
River Murray Agreement Works .. ..	16,750	0 0	92,000	0 0	108,750	0 0	..
Rocklands Outlet Channel .. ..	1,150	5 1	1,914	1 2	3,064	6 3	..
Rocklands Reservoir .. ..	4,348	0 9	15,794	5 8	20,142	6 5	..
Survey and Investigations .. ..	13,962	3 6	54,937	13 10	68,899	17 4	..
Tallangatta Township Removal .. ..	2,160	5 1	3,654	13 11	5,814	19 0	..
Tarago Offtake and Main Race .. ..	100,246	2 7	252,620	14 3	352,866	16 10	..
Toolondo Outlet Channel .. ..	645	1 6	401	3 2	1,046	4 8	..
Toolondo Reservoir .. ..	5	4 10	8,336	6 0	8,341	10 10	..
Torrumbarry System .. ..	38,473	4 2	38,928	1 10	77,401	6 0	..
Waranga Reservoir—Enlargement .. ..	476	16 4	570	9 1	1,047	5 5	..
Waranga Western Main Channel Enlargement .. ..	209	10 0	773	16 10	983	6 10	..
Waranga Western Channel to Diversion .. ..	1	0 0	2,111	10 0	2,112	10 0	..
Water Supply Stores Suspense .. ..	..	..	100,000	0 0	100,000	0 0	..
Wimmera Main Channels .. ..	..	..	6,669	2 3	6,669	2 3	..
Wimmera Storages .. ..	..	..	392	10 3	392	10 3	..
Irrigation and Water Supply Districts.							
Bacchus Marsh .. ..	..	..	36	16 3	36	16 3	..
Boort .. ..	107	19 10	10	1 8	118	1 6	..
Calivil .. ..	231	2 2	713	9 7	944	11 9	..
Campaspe .. ..	404	14 4	44	16 5	449	10 9	..
Central Gippsland .. ..	57,730	7 9	142,077	10 10	199,807	18 7	..
Cohuna .. ..	1,536	11 2	9,424	3 8	10,960	14 10	..
Deakin .. ..	1	5 0	851	17 11	853	2 11	..
Dingee .. ..	71	18 7	259	7 2	331	5 9	..
Fish Point .. ..	..	..	1	18 10	1	18 10	..
Katandra .. ..	4	12 11	1,198	10 0	1,203	2 11	..
Kerang .. ..	1,699	12 6	3,509	14 9	5,209	7 3	..
Koondrook .. ..	1,570	9 0	3,253	19 1	4,824	8 1	..
Maffra—Sale .. ..	3,782	0 9	11,808	0 3	15,590	1 0	..
Murray Valley .. ..	14,677	6 2	83,396	10 3	98,073	16 5	..
Mystic Park .. ..	388	11 6	411	4 3	799	15 9	..
North Shepparton .. ..	80	3 0	2,639	11 3	2,719	14 3	..
Nyah .. ..	1,287	7 10	871	15 9	2,159	3 7	..
Red Cliffs—Merbein .. ..	11,597	8 10	13,380	13 3	24,978	2 1	..
Robinvale .. ..	26,865	12 0	106,492	12 0	133,358	4 0	..
Rochester .. ..	1,351	7 3	1,963	9 8	3,314	16 11	..
Rodney .. ..	4,065	3 10	13,458	19 6	17,524	3 4	..
Shepparton .. ..	1,309	5 9	5,526	7 11	6,835	13 8	..
South Shepparton .. ..	2	10 4	625	15 2	628	5 6	..
Swan Hill.. ..	9,302	2 6	8,626	13 7	17,928	16 1	..
Third Lake .. ..	308	17 11	393	4 3	702	2 2	..
Tongala—Stanhope .. ..	1,024	7 4	3,919	12 1	4,943	19 5	..
Tragowel Plains .. ..	2,622	13 5	6,961	14 5	9,584	7 10	..
Tresco .. ..	21	3 3	665	8 7	686	11 10	..
Werribee .. ..	15,732	12 3	6,631	12 3	22,364	4 6	..
Urban Divisions of Irrigation and Water Supply Districts.							
Cohuna .. ..	222	10 2	516	0 11	738	11 1	..
Dingee .. ..	23	5 6	Cr. 21	0 1	2	5 5	..
Heyfield .. ..	2,031	15 5	6,341	4 1	8,372	19 6	..
Murrabit .. ..	263	13 9	22	0 0	285	13 9	..
Red Cliffs .. ..	198	0 1	837	6 6	1,035	6 7	..
Robinvale .. ..	45	18 10	1,248	6 3	1,294	5 1	..
Stanhope .. ..	12	4 8	3,566	0 5	3,578	5 1	..
Carried forward .. ..	2,341,850	8 10	5,232,989	19 3	7,574,840	8 1	90,926 14 11

## CAPITAL EXPENDITURE—continued.

STATEMENT OF MONEYS EXPENDED UNDER WATER SUPPLY LOAN ACTS FOR THE YEAR ENDED  
30TH JUNE, 1955—continued.

Works.	Water Supply Loan Funds.						Treasurer's Advance.
	Act 5748.		Act 5821.		Total Ordinary Loan Funds.		
	£	s. d.	£	s. d.	£	s. d.	
Brought forward .. ..	2,341,850	8 10	5,232,989	19 3	7,574,840	8 1	90,926 14 11
<i>Waterworks Districts.</i>							
Axe Creek .. ..	6	6 5	22	18 4	29	4 9	..
Bellarine Peninsula (including Headworks) .. ..	18,550	6 8	37,636	11 1	56,186	17 9	..
Birchip .. ..	91	12 1	369	2 9	460	14 10	..
Harcourt .. ..	21	18 3	79	9 2	101	7 5	..
Karkaroc .. ..	279	0 0	2,443	5 11	2,722	5 11	..
Kerang-North-West Lakes .. ..	..	..	31	12 10	31	12 10	..
Loddon .. ..	6	2 7	64	15 4	70	17 11	..
Long Lake .. ..	133	3 0	429	1 7	562	4 7	..
Millewa .. ..	1,098	14 5	1,362	16 10	2,461	11 3	..
Mornington Peninsula (including Headworks) .. ..	26,478	3 4	215,199	0 10	241,677	4 2	..
Normanville .. ..	..	..	1	1 8	1	1 8	..
Otway .. ..	799	10 4	6,951	1 3	7,750	11 7	..
Ouyen .. ..	1,394	2 6	131	15 11	1,525	18 5	..
Sea Lake .. ..	138	0 4	806	0 6	944	0 10	..
Tyntynder .. ..	0	10 0	3,422	0 5	3,422	10 5	..
Tyntynder North .. ..	..	..	376	15 3	376	15 3	..
Tyrrell .. ..	156	11 0	2,677	5 3	2,833	16 3	..
Tyrrell West .. ..	1	0 0	1,643	13 11	1,644	13 11	..
Upper Wimmera United .. ..	4,891	13 1	1,964	6 7	6,855	19 8	..
Walpeup West .. ..	..	..	110	1 8	110	1 8	..
Western Wimmera .. ..	12	10 4	3,979	2 0	3,991	12 4	..
Wimmera United .. ..	7,792	0 8	14,212	13 2	22,004	13 10	..
Wycheproof .. ..	214	14 11	810	17 4	1,025	12 3	..
Wychitella .. ..	709	3 9	1,332	10 7	2,041	14 4	..
<i>Urban Districts of Waterworks Districts.</i>							
Allansford .. ..	3	13 8	98	14 11	102	8 7	..
Anglesea .. ..	..	..	627	10 8	627	10 8	..
Barwon Heads and Ocean Grove .. ..	55	17 3	19	4 6	75	1 9	..
Berriwillock .. ..	136	7 3	11	6 8	147	13 11	..
Berwick .. ..	4	18 11	370	15 2	365	16 3	..
Beulah .. ..	0	13 6	42	13 2	43	6 8	..
Birchip .. ..	57	14 6	386	18 5	444	12 11	..
Bittern-Crib Point .. ..	3	18 6	319	9 6	323	8 0	..
Bunyip .. ..	5	18 11	243	18 1	249	17 0	..
Camperdown .. ..	365	15 11	178	2 0	543	17 11	..
Chelsea-Frankston .. ..	2,436	11 4	14,544	11 3	16,981	2 7	..
Chinkapook .. ..	..	..	6	2 2	6	2 2	..
Cobden .. ..	41	18 6	1,453	10 11	1,495	9 5	..
Coliban .. ..	19,973	2 1	83,816	2 9	103,789	4 10	..
Cranbourne .. ..	4	17 9	181	14 7	186	12 4	..
Culgoa .. ..	13	17 0	1	3 4	15	0 4	..
Dandenong-Springvale .. ..	6,056	1 0	24,607	15 5	30,663	16 5	..
Dimboola .. ..	171	4 2	191	18 11	363	3 1	..
Dromana-Portsea .. ..	134	15 2	5,325	1 9	5,459	16 11	..
Garfield .. ..	10	5 6	95	17 2	106	2 8	..
Hastings .. ..	3	0 8	247	2 8	250	3 4	..
Hopetoun .. ..	..	..	603	11 11	603	11 11	..
Koondrook .. ..	76	1 5	343	9 2	419	10 7	..
Lake Boga .. ..	4	1 11	0	6 8	4	8 7	..
Longwarry .. ..	30	18 3	462	4 7	493	2 10	..
Manangatang .. ..	89	6 8	21	17 11	111	4 7	..
Marong .. ..	224	17 11	28	6 1	253	4 0	..
Merbein .. ..	91	0 0	3,979	2 4	4,070	2 4	..
Minyip .. ..	8	0 2	138	12 9	146	12 11	..
Mornington .. ..	57	18 4	2,898	18 10	2,956	17 2	..
Natimuk .. ..	172	3 11	14	6 8	186	10 7	..
Nyah .. ..	183	10 0	241	16 2	425	6 2	..
Nyah West .. ..	692	18 8	252	8 3	945	6 11	..
Ouyen .. ..	23	19 0	1,098	4 1	1,122	3 1	..
Pakenham .. ..	5	2 10	565	16 3	570	19 1	..
Piangil .. ..	549	7 2	89	9 11	638	17 1	..
Portarlington .. ..	6	14 6	0	11 8	7	6 2	..
Pyramid Hill .. ..	..	..	1,019	0 6	1,019	0 6	..
Quambatook .. ..	95	0 1	7	18 4	102	18 5	..
Queenscliff-Point Lonsdale .. ..	1,512	2 0	1,341	10 11	2,853	12 11	..
Carried forward .. ..	2,437,919	9 1	5,674,925	6 5	8,112,844	15 6	90,926 14 11

CAPITAL EXPENDITURE—*continued.*STATEMENT OF MONEYS EXPENDED UNDER WATER SUPPLY LOAN ACTS FOR THE YEAR ENDED  
30TH JUNE, 1955—*continued.*

Works.	Water Supply Loan Funds.						Treasurer's Advance.
	Act 5748.		Act 5821.		Total Ordinary Loan Funds.		
	£	s. d.	£	s. d.	£	s. d.	
Brought forward .. ..	2,437,919	9 1	5,674,925	6 5	8,112,844	15 6	90,926 14 11
<i>Urban Districts of Waterworks Districts—continued.</i>							
Rupanyup .. ..	5	4 5	0	8 4	5	12 9	..
Sea Lake .. ..	198	12 6	16	11 8	215	4 2	..
Somerville .. ..	2	0 5	171	12 5	173	12 10	..
South Frankston .. ..	2,023	10 11	1,913	19 0	3,937	9 11	..
Terang .. ..	40	3 8	128	3 9	168	7 5	..
Torquay .. ..	749	3 11	7,959	16 1	8,709	0 0	..
Ultima .. ..	182	0 1	29	19 10	211	19 11	..
Walpeup .. ..	..	..	6	2 2	6	2 2	..
Wonthaggi .. ..	803	6 4	575	0 5	1,378	6 9	..
Worren .. ..	..	..	216	5 7	216	5 7	..
Wycheproof .. ..	220	18 11	19	10 0	240	8 11	..
<i>Drainage District.</i>							
Carrum .. ..	1,075	10 5	2,836	10 0	3,912	0 5	..
<i>Flood Protection Districts.</i>							
Cardinia .. ..	623	15 5	828	3 0	1,451	18 5	..
Lower Koo-wee-rup .. ..	17,203	9 4	26,877	6 3	44,080	15 7	..
Loch Garry .. ..	..	..	2	15 0	2	15 0	..
<i>Works under General Supervision of Commission.</i>							
Waterworks Trusts and Local Governing Bodies ..	118,843	12 11	504,891	4 9	623,734	17 8	..
River Improvement Trusts .. ..	6,841	7 5	80,232	7 6	87,073	14 11	..
Latrobe Valley Drainage .. ..	Cr. 270,101	3 7	559,569	4 2	289,468	0 7	..
Totals .. ..	2,316,631	2 2	6,861,200	6 4	9,177,831	8 6	90,926 14 11

## SUMMARY.

	£	s. d.
Ordinary Loan Funds (Acts 5748 and 5821) .. ..	9,177,831	8 6
Treasurer's Advance .. ..	90,926	14 11
Total .. ..	9,268,758	3 5

## COUNTRY SEWERAGE AUTHORITIES.

	£	s. d.
Country Sewerage Loan Application Act 5746—Expenditure for year ended 30th June, 1955 .. ..	231,239	6 5

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## LOAN CAPITAL ACCOUNTS

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# LOAN CAPITAL ACCOUNTS.

## WORKS UNDER CONTROL OF COMMISSION.

The following statement gives a brief description, summary of Loan Capital expenditure under Loan Application Acts, and other particulars relative to the undermentioned works:—

### A.—CAPITAL WORKS AND CHARGES.

	Capital Charges Borne by the State Account.		Capital Charges Borne by Districts and Works.		Total.		Totals at 30th June, 1955.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Geelong (inclusive of Loan Flotation Expenses) ..	..	..	..	..	..	..	..	..
Eppalock Reservoir ..	..	..	164,187	8 2	164,187	8 2	..	..
Goulburn Levees ..	..	..	119,875	2 3	119,875	2 3	..	..
Torrumbarry System (excluding Weir) ..	..	..	30,797	0 1	30,797	0 1	..	..
Lang Lang River Works ..	..	..	134,619	18 10	134,619	18 10	..	..
Surveys and Preliminary Investigations ..	..	..	48,543	8 9	48,543	8 9	..	..
Loan Flotation Expenses ..	..	..	669,756	5 4	669,756	5 4	..	..
River Improvements ..	..	..	1,639,921	3 5	1,639,921	3 5	..	..
	..	..	18,095	16 11	18,095	16 11	..	..
	..	..	..	..	2,825,706	1 0	..	..
Bulk Store and Storeyard, South Melbourne, and Dynon Rd. Storeyard ..	..	..	7,453	5 1	7,453	5 1	..	..
Water Supply Stores Suspense ..	..	..	1,206,000	0 0	1,206,000	0 0	..	..
Plant and Machinery Suspense ..	..	..	1,497,341	11 11	1,497,341	11 11	..	..
Central Plant Workshops, Bendigo (Land, Buildings, and Services, £152,219 2s. 10d.; Equipment, £40,893 10s. 11d.; Residences, £49,875 11s. 6d.) ..	..	..	17,293	18 11	225,691	6 1	..	..
Plant, Sub-Depot, Kerang ..	..	..	352	12 5	3,518	3 4	..	..
Commission Buildings ("Carlisle House," £54,645 7s. 4d.; Fine Arts Building £28,637 9s. 4d.; Hydraulic Experimental Station, Werribee, £29,278 17s. 6d. including residences; Engineering Laboratory, Hawthorn, £10,736 17s. 7d.; Office etc. Tatura £2,278 8s. 5d.) ..	..	..	..	..	125,696	15 2	..	..
Little River Weir ..	..	..	..	..	10,733	9 5	..	..
Tallangatta Township Removal ..	..	..	5,814	19 0	5,814	19 0	..	..
	..	..	..	..	3,099,809	1 7	..	..
	..	..	..	..	5,925,605	5 7	..	..

### B.—STATE WORKS OF WATER SUPPLY.

CAPITAL COST OF WHICH IS CHARGEABLE TO CAPITAL EXPENDITURE BORNE BY THE STATE ACCOUNT.

Broken River Works.—Casey's Weir and offtake, with about 59 chains of channel to the Broken Creek; Gowangardie Weir with offtake sluice ..	14,855	13	9
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) ..	737,941	15	2
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 Tutchevop, and to the Little Murray River, with water storage works at these lakes ..	26,671	12	10
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 ..	217,183	0	3
Lake Lonsdale Reservoir.—Reservoir at Lake Lonsdale, on the Little Wimmera River, near Ledcourt ..	50,198	17	9
Loddon River Works.—Laanecoorie Weir, on the Loddon; Bridgewater Weir, on the Loddon; Kinypaniel Weir, on the Loddon; Hepburn's Lagoon 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 ..	186,029	18	6
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 ..	27,305	18	5
	8,663	12	3

1,268,850 8 11



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

	£	s.	d.	£	s.	d.	£	s.	d.
<b>Goulburn and Loddon Storages—</b>									
Investigations .. .. .	6,534	7	4						
Eildon Reservoir .. .. .	1,863,063	1	3						
Eildon Reservoir Enlargement including Bonnie Doon (Township Removal) (Under construction—Not Apportioned to Districts) .. .. .	25,441,705	12	11						
Waranga Reservoir Enlargement .. .. .	611,400	2	9						
Laanecoorie Weir Improvements .. .. .	2,509	9	3						
Cairn Curran Reservoir (Under Construction—Not Apportioned to Districts) .. .. .	2,716,633	0	2						
	30,641,845	13	8						
<b>Goulburn Main Channels—</b>									
East Goulburn Main .. .. .	395,867	18	11						
Goulburn—Waranga .. .. .	6,922	8	4						
Goulburn—Waranga Duplication (Under construction—Not Apportioned to Districts) .. .. .	1,407,829	6	10						
Waranga—Western Main .. .. .	1,050,777	6	8						
Waranga—Western Main (Channel Enlargement (Not Apportioned to Districts) .. .. .	3,026	12	3						
Main Distributaries .. .. .	63,375	1	1						
Goulburn System Enlargement Investigations (Not Apportioned to Districts) .. .. .	29,394	15	8						
	2,957,193	9	9						
Total Goulburn and Loddon Works .. .. .	33,599,039	3	5						
Less Debited to Wimmera—Mallee .. .. .	118,477	0	6						
	33,480,562	2	11						
<b>Bacchus Marsh and Werribee Schemes—</b>									
Ballan Tunnel .. .. .	21,677	14	8						
Pykes Creek Reservoir .. .. .	144,130	14	11						
Molton Reservoir .. .. .	100,305	7	11						
Lerderberg River Flats .. .. .	330	0	8						
	266,143	18	2						
<b>Mafrá/Sale Scheme—Glenmaggie Reservoir (includes Expenditure on Proposed Enlargement, £26,826 6s. 8d.—Not Apportioned to Districts) .. .. .</b>									
River Murray Agreement Works (Victorian Contributions under River Murray Waters Acts) .. .. .	713,465	1	7						
River Murray Agreement Works—Hume Reservoir Enlargement, &c. (Not Apportioned to Districts) .. .. .	2,990,745	13	8						
River Murray State Works—Surveys &c. .. .. .	532,750	0	0						
	7,506	18	7						
<b>Mornington Peninsula Waterworks District (exclusive of (a) cost of Distributary Works and Urban Reticulation (b) Tarago Works) (Includes £45,416 13s. 7d. Allowance—East Dandenong Pipe Line—Not Apportioned to Districts) .. .. .</b>									
Less Redemption paid to Revenue .. .. .	1,553,527	19	6						
	2,917	15	0						
<b>Tarago Works .. .. .</b>									
Bellarine Peninsula Waterworks District (exclusive of cost of Urban Reticulation) .. .. .	742,101	14	11						
Less Redemption paid to Revenue .. .. .	1,887	5	1						
	740,214	9	10						
<b>Otway Waterworks District (exclusive of cost of Urban Reticulation) .. .. .</b>									
Less Redemption paid to Revenue .. .. .	331,837	10	10						
	4,044	16	11						
	327,792	13	11						
<b>Wimmera/Mallee—</b>									
Main Channels and Storages inclusive of £118,477 0s. 6d. from Goulburn Works .. .. .	1,002,106	18	6						
Glenelg River Development Works .. .. .	2,859,542	17	10						
	3,861,649	16	4						
<b>Total .. .. .</b>	45,513,255	18	5						
<b>Less Apportioned to Districts .. .. .</b>	15,309,673	10	4						
<b>Headworks Costs Not Yet Apportioned to Districts .. .. .</b>									
	30,203,582	8	1						
<b>Carried forward .. .. .</b>	37,398,038	2	7						

LOAN CAPITAL ACCOUNTS—continued.

Totals at  
30th June, 1955.  
£ s. d.  
37,398,038 2 7

Name of District.	Loan Capital Expenditure.						Capital Expenditure borne by the State Account.						Brought forward ..					
	Headworks.			Distributary Works.			Total.			Allotted to District.			Headworks.			Distributary Works.		
	£ s. d.			£ s. d.			£ s. d.			£ s. d.			£ s. d.			£ s. d.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1. Bacchus Marsh ..	83,521	10	11	104,508	13	0	188,030	3	11	..	..	..	83,521	10	11	104,508	13	0
2. Boort ..	202,034	17	4	122,407	7	5	324,442	4	9	..	..	..	202,034	17	4	122,407	7	5
3. Calivil ..	81,225	3	0	119,657	0	9	200,882	3	9	..	..	..	81,225	3	0	119,657	0	9
4. Campaspe ..	5,000	16	6	62,101	19	5	67,102	15	11	..	..	..	5,000	16	6	62,101	19	5
5. Central Gippsland (under construction) ..	..	..	..	1,841,040	17	7	1,841,040	17	7	..	..	..	..	..	..	1,841,040	17	7
6. Cohuna ..	500,500	8	1	386,393	12	3	886,894	0	4	..	..	..	500,500	8	1	386,393	12	3
7. Deakin ..	36,701	10	11	63,131	2	3	99,832	13	2	..	..	..	36,701	10	11	63,131	2	3
8. Dingee ..	57,951	1	6	36,815	13	7	94,766	15	1	..	..	..	57,951	1	6	36,815	13	7
9. Fish Point ..	21,707	0	0	19,153	1	6	40,860	1	6	..	..	..	21,707	0	0	19,153	1	6
10. Katandra ..	78,657	14	10	114,100	6	10	192,758	1	8	..	..	..	78,657	14	10	114,100	6	10
11. Kerang ..	251,516	0	0	146,753	6	9	398,269	6	9	..	..	..	251,516	0	0	146,753	6	9
12. Koondrook ..	247,864	0	0	246,659	6	9	494,523	6	9	..	..	..	247,864	0	0	246,659	6	9
13. Maffra-Sale ..	686,638	14	11	697,768	14	11	1,384,407	9	10	..	..	..	686,638	14	11	697,768	14	11
14. Murray Valley ..	897,294	4	6	2,516,702	15	8	3,413,997	0	2	..	..	..	897,294	4	6	2,516,702	15	8
15. Mystic Park ..	39,419	19	8	22,561	13	0	61,981	12	8	..	..	..	39,419	19	8	22,561	13	0
16. North Shepparton ..	166,021	10	4	219,487	17	10	385,509	8	2	..	..	..	166,021	10	4	219,487	17	10
17. Nyah ..	74,857	0	0	204,677	16	7	279,534	16	7	..	..	..	74,857	0	0	204,677	16	7
18. Red Cliffs—Merbein ..	478,912	0	0	1,162,547	13	11	1,641,459	13	11	..	..	..	478,912	0	0	1,162,547	13	11
19. Robinvale (under construction) ..	..	..	..	817,783	4	4	817,783	4	4	..	..	..	..	..	..	817,783	4	4
20. Rochester ..	840,849	0	6	371,329	2	0	1,212,178	2	6	..	..	..	840,849	0	6	371,329	2	0
21. Rodney ..	903,940	12	8	728,055	1	7	1,631,995	14	3	..	..	..	903,940	12	8	728,055	1	7
22. Shepparton ..	301,279	10	3	223,557	5	2	524,836	15	5	..	..	..	301,279	10	3	223,557	5	2
23. South Shepparton ..	61,777	8	3	61,655	10	0	123,432	18	3	..	..	..	61,777	8	3	61,655	10	0
24. Swan Hill ..	294,033	15	4	221,248	10	7	515,282	5	11	..	..	..	294,033	15	4	221,248	10	7
25. Third Lake ..	25,637	0	0	26,960	16	10	52,597	16	10	..	..	..	25,637	0	0	26,960	16	10
26. Tongala-Stanhope ..	641,140	13	10	336,568	16	3	977,709	10	1	..	..	..	641,140	13	10	336,568	16	3
27. Tragowel Plains ..	504,795	19	10	322,269	3	5	827,065	3	3	..	..	..	504,795	19	10	322,269	3	5
28. Tresco ..	25,960	0	0	104,385	1	3	130,345	1	3	..	..	..	25,960	0	0	104,385	1	3
29. Werribee ..	182,922	7	3	161,233	9	6	344,155	16	9	..	..	..	182,922	7	3	161,233	9	6
Totals ..	7,692,160	0	5	11,461,515	0	11	19,153,675	1	4	..	..	..	7,692,160	0	5	11,461,515	0	11
																19,153,675	1	4

## E.—URBAN DIVISIONS OF IRRIGATION AND WATER SUPPLY DISTRICTS.

1. Cohuna ..	..	..	13,483	4	6	13,483	4	6	..	..	10,364	19	2	10,364	19	2
2. Copop ..	..	..	231	15	6	231	15	6	..	..	231	15	6	231	15	6
3. Dingee ..	..	..	1,859	11	9	1,859	11	9	..	..	1,859	11	9	1,859	11	9
4. Heyfield ..	..	..	41,062	3	8	41,062	3	8	..	..	41,062	3	8	41,062	3	8
5. Leitchville ..	..	..	4,188	15	4	4,188	15	4	..	..	4,188	15	4	4,188	15	4
6. Lockington ..	..	..	3,206	16	11	3,206	16	11	..	..	3,088	15	3	3,088	15	3
7. Macorna ..	..	..	1,487	18	0	1,487	18	0	..	..	1,487	18	0	1,487	18	0
8. Murrabit ..	..	..	1,334	7	2	1,334	7	2	..	..	1,334	7	2	1,334	7	2
9. Red Cliffs ..	..	..	37,688	17	10	37,688	17	10	..	..	36,106	13	11	36,106	13	11
10. Robinvale ..	..	..	14,851	8	3	14,851	8	3	..	..	14,851	8	3	14,851	8	3
11. Stanhope ..	..	..	9,169	19	5	9,169	19	5	..	..	9,169	19	5	9,169	19	5
12. Tallygaroopna ..	..	..	4,103	8	2	4,103	8	2	..	..	4,103	8	2	4,103	8	2
Totals ..	..	..	132,668	6	6	132,668	6	6	..	..	127,849	15	7	127,849	15	7

132,668 6 6

## F.—WATERWORKS DISTRICTS.

1. Axe Creek ..	..	..	5,014	16	1	5,014	16	1	..	..	5,014	16	1	5,014	16	1
2. Bellarine Peninsula ..	..	..	512,098	5	7	512,098	5	7	..	..	428,911	1	5	428,911	1	5
3. Belchup ..	..	..	115,329	4	10	115,329	4	10	..	..	105,611	17	10	220,941	2	8
4. East Loddon ..	..	..	2,287	14	1	2,287	14	1	..	..	2,287	14	1	2,287	14	1
5. Harecourt ..	..	..	17,389	17	9	17,389	17	9	..	..	17,389	17	9	17,389	17	9
6. Hindmarsh ..	..	..	16,631	8	8	33,065	10	9	..	..	16,631	8	8	33,065	10	9
7. Karkaroo ..	..	..	227,598	13	0	605,592	7	10	..	..	227,598	13	0	605,592	7	10
8. Kerang North-West Lakes ..	..	..	4,104	0	9	4,104	0	9	..	..	4,104	0	9	4,104	0	9
9. Loddon ..	..	..	3,215	16	5	3,215	16	5	..	..	3,215	16	5	3,215	16	5
10. Long Lake ..	..	..	118,859	5	7	357,414	11	7	..	..	118,859	5	7	357,414	11	7
11. Millewa ..	..	..	585,743	7	4	726,891	7	4	..	..	585,743	7	4	726,891	7	4
12. Mornington Peninsula ..	..	..	13,424	0	0	308,686	13	0	..	..	141,148	0	0	63,541	9	0
13. Newstead ..	..	..	4,636	6	10	4,636	6	10	..	..	4,636	6	10	4,636	6	10
14. Normanville ..	..	..	52,295	4	3	52,295	4	3	..	..	52,295	4	3	52,295	4	3
15. Otway ..	..	..	238,188	13	11	238,188	13	11	..	..	149,363	6	11	149,363	6	11
16. Ouyen ..	..	..	350,634	19	3	350,634	19	3	..	..	350,634	19	3	350,634	19	3
17. Sea Lake ..	..	..	164,999	10	6	164,999	10	6	..	..	157,627	0	3	322,626	10	9
18. Tyntynder ..	..	..	300,833	9	0	300,833	9	0	..	..	209,841	5	6	510,674	14	6
19. Tyntynder North ..	..	..	94,111	2	2	94,111	2	2	..	..	124,877	6	7	218,988	8	9
20. Tyrell ..	..	..	309,364	4	1	309,364	4	1	..	..	171,615	19	10	480,980	3	11
21. Tyrell West ..	..	..	214,902	12	5	214,902	12	5	..	..	111,711	11	5	326,614	3	10
22. Upper Western Wimmera ..	..	..	105,793	10	1	105,793	10	1	..	..	62,290	15	11	168,084	6	0
23. Upper Wimmera United ..	..	..	167,023	14	0	167,023	14	0	..	..	89,809	8	10	256,833	2	10
24. Walpeup West ..	..	..	36,486	9	8	36,486	9	8	..	..	36,486	9	8	36,486	9	8
25. Werribee ..	..	..	12,521	11	9	12,521	11	9	..	..	12,521	11	9	12,521	11	9
26. West Loddon ..	..	..	9,638	2	10	9,638	2	10	..	..	9,638	2	10	9,638	2	10
27. Western Wimmera ..	..	..	796,335	3	8	796,335	3	8	..	..	272,014	11	6	1,068,349	15	2
28. Wimmera United ..	..	..	358,655	12	8	358,655	12	8	..	..	242,336	7	6	600,992	0	2
29. Wycheproof ..	..	..	202,113	1	8	202,113	1	8	..	..	182,885	5	7	384,998	7	3
30. Wycheville ..	..	..	48,570	9	1	48,570	9	1	..	..	144,654	17	3	193,225	6	4
Totals ..	..	..	5,018,347	8	10	3,168,073	7	5	..	..	4,644,613	13	8	3,154,649	7	5
														7,799,263	1	1

8,216,420 16 3

64,900,802 6 8

Carried forward

LOAN CAPITAL ACCOUNTS—continued.

Total at  
30th June, 1955.

£ s. d.  
64,900,802 6 8

Brought forward

Name of District.	Loan Capital Expenditure.			Capital Expenditure borne by the State Account.			Total.		
	Headworks.			Headworks.			Distributory Works.		
	£	s.	d.	£	s.	d.	£	s.	d.
1. Allansford .. .. .	1,600	0	0	1,744	4	3	3,344	4	3
2. Anglesea .. .. .	3,773	19	2	13,159	8	3	16,933	7	5
3. Antwerp .. .. .	55,804	10	7	704	11	6	704	11	6
4. Barvon Heads and Ocean Grove .. .. .	..	..	..	22,577	17	11	78,382	8	6
5. Berriwillcock .. .. .	31,492	12	8	7,943	12	6	7,943	12	6
6. Berwick .. .. .	..	..	..	10,955	8	9	42,448	1	5
7. Beulah .. .. .	..	..	..	7,721	5	2	7,721	5	2
8. Birchup .. .. .	..	..	..	16,778	10	6	16,778	10	6
9. Birregurra .. .. .	1,963	0	0	33,595	7	8	33,595	7	8
10. Bittern-Crib Point .. .. .	19,506	8	6	6,556	8	9	26,062	17	3
11. Brim .. .. .	..	..	..	9,472	10	10	9,472	10	10
12. Bunyip .. .. .	9,981	5	1	2,881	17	5	12,863	2	6
13. Camperdown .. .. .	46,469	0	0	57,056	19	9	103,525	19	9
14. Carwarp .. .. .	..	..	..	635	19	0	635	19	0
15. Chelsea-Frankston .. .. .	822,075	7	11	287,686	16	8	1,109,762	4	7
16. Chillingollah .. .. .	..	..	..	2,482	1	3	2,482	1	3
17. Chinkapook .. .. .	..	..	..	2,828	14	10	2,828	14	10
18. Cobden .. .. .	9,213	0	0	19,878	4	0	20,091	4	0
19. Coliban .. .. .	..	..	..	2,637,341	16	9	2,637,341	16	9
20. Cranbourne .. .. .	9,785	8	11	4,986	17	5	14,772	6	4
21. Culgoa .. .. .	..	..	..	4,562	16	6	4,562	16	6
22. Dandenong-Springvale .. .. .	671,617	3	1	246,113	13	6	917,730	16	7
23. Dimboola .. .. .	..	..	..	20,146	3	4	20,146	3	4
24. Doon .. .. .	..	..	..	698	0	0	698	0	0
25. Dromana-Portsea .. .. .	292,452	16	10	145,036	13	5	437,489	10	3
26. Drysdale .. .. .	17,250	10	3	8,782	1	1	26,032	11	4
27. Garfield .. .. .	6,571	18	5	1,516	2	0	8,088	0	5
28. Garvoc .. .. .	..	..	..	51	4	8	51	4	8
29. Hastings .. .. .	15,704	0	4	8,647	18	5	24,351	18	9
30. Hopetoun .. .. .	..	..	..	12,800	12	8	12,800	12	8
31. Jeparit .. .. .	..	..	..	13,778	9	8	13,778	9	8
32. Jung Jung .. .. .	..	..	..	7,001	11	2	7,001	11	2
33. Koondrook .. .. .	..	..	..	4,613	11	8	4,613	11	8
34. Lake Boga .. .. .	..	..	..	6,915	11	4	6,915	11	4
35. Lalbert .. .. .	..	..	..	5,095	16	2	5,095	16	2
36. Lascelles .. .. .	..	..	..	4,504	8	0	4,504	8	0
37. Longwarry .. .. .	18,030	11	4	1,540	3	7	22,570	14	11
38. Manangatang .. .. .	..	..	..	9,558	3	6	9,558	3	6
39. Maroo .. .. .	..	..	..	4,174	4	5	4,174	4	5
40. Marong .. .. .	..	..	..	2,385	18	6	2,385	18	6

G.—URBAN DISTRICTS OF WATERWORKS DISTRICTS.

		H.—FLOOD PROTECTION DISTRICTS.												Totals			Totals		
		28,650	10	0	28,650	10	0	3,964	17	8	..	24,685	12	4					
41. Merbein ..	..	28,650	10	0	4,390	14	6	4,390	14	6	..	4,386	7	10	24,685	12	4		
42. Meringur ..	..	11,023	7	2	11,023	7	2	3,467	0	7	..	7,556	6	7	4,386	7	10		
43. Minyip ..	..	2,410	16	2	2,410	16	2	..	..	..	..	2,410	16	2	7,556	6	7		
44. Mitiamo ..	240,612	56,555	5	1	297,167	18	2	159,457	9	4	134,753	11	8	2	2,410	16	2		
45. Mornington ..	..	2,355	13	8	2,355	13	8	3	5	0	..	2,956	17	2	137,710	8	10		
46. Nandaly ..	..	140	9	1	5,119	15	3	4,057	19	0	..	2,352	8	8	2,352	8	8		
47. Nar-nar-noon and Tynong ..	..	5,119	15	3	7,873	19	8	1,763	13	0	..	1,061	16	3	140	9	1		
48. Natimuk ..	..	3,789	4	4	3,789	4	4	280	16	6	..	6,110	5	10	1,061	16	3		
49. Newstead ..	..	1,391	10	9	1,391	10	9	6,157	6	7	..	3,508	7	10	6,110	5	10		
50. Nullawil ..	..	7,275	15	1	7,275	15	1	..	..	..	..	1,391	10	9	3,508	7	10		
51. Nyah ..	..	23,490	8	0	23,490	8	0	..	..	..	..	1,391	10	9	1,391	10	9		
52. Nyah West ..	..	11,209	8	7	33,045	15	5	25,276	7	9	7,198	10	8	..	1,118	8	6		
53. Officer ..	..	4,358	4	2	4,358	4	2	..	12	6	..	..	..	..	1,118	8	6		
54. Ouyen ..	21,836	8,141	9	11	8,141	9	11	..	17	6	..	..	..	..	23,431	0	3		
55. Pakenham ..	..	16,441	3	3	39,436	9	11	4,112	2	8	..	..	..	..	570	19	1		
56. Patchewollock ..	..	9,779	9	11	9,779	9	11	75	17	6	22,919	8	6	..	4,356	11	8		
57. Piangil ..	22,995	5,047	6	11	5,047	6	11	3	4	11	..	..	..	..	8,141	9	11		
58. Portarlinton ..	..	34,793	11	10	151,696	17	6	15,878	9	2	110,110	9	7	..	16,441	3	3		
59. Pyramid Hill ..	..	11,642	4	8	11,642	4	8	7,722	8	8	..	..	..	..	5,667	7	3		
60. Quambatook ..	116,903	10,908	6	6	10,908	6	6	4,229	4	10	..	..	..	..	5,044	2	0		
61. Queenscliff and Point Lonsdale ..	..	9,576	14	1	9,576	14	1	1,533	3	4	..	..	..	..	25,707	18	9		
62. Rainbow ..	..	3,280	6	8	3,280	6	8	7,854	2	10	..	..	..	..	3,919	16	0		
63. Rupanyup ..	..	32,989	14	11	117,366	6	3	59,423	2	9	54,005	13	7	..	6,679	1	8		
64. Sea Lake ..	..	2,913	4	8	2,913	4	8	0	17	9	..	..	..	..	8,043	10	9		
65. Somerville ..	7,402	12	6	..	2,654	13	8	17	5	7	..	..	..	..	173	12	10		
66. South Frankston ..	84,376	11	4	..	62,118	6	7	29,429	18	8	28,860	4	6	..	2,828	16	4		
67. Speed ..	..	29,796	6	7	35,546	12	7	141	9	10	9,348	8	11	..	57,943	3	6		
68. Tempy ..	..	26,124	0	1	11,274	1	0	16	18	3	..	..	..	..	2,912	6	11		
69. Terang ..	32,322	0	0	..	2,520	14	4	..	..	..	..	..	..	..	2,637	8	1		
70. Torquay ..	9,422	12	6	..	2,581	18	4	24	3	5	..	..	..	..	3,828	3	5		
71. Ukima ..	..	2,520	14	4	2,520	14	4	..	..	..	..	..	..	..	32,688	7	11		
72. Waitchie ..	..	5,116	8	6	5,116	8	6	122	18	7	..	..	..	..	26,056	13	10		
73. Walpeup ..	..	9,224	3	11	9,224	3	11	1	12	6	..	..	..	..	11,257	2	9		
74. Watchem ..	..	78,103	11	1	78,103	11	1	47,523	16	9	..	..	..	..	2,520	14	4		
75. Werrimull ..	..	9,248	17	1	9,248	17	1	15	2	8	..	..	..	..	2,557	14	11		
76. Wonthaggi ..	..	7,105	17	3	7,105	17	3	574	13	11	..	..	..	..	4,993	9	11		
77. Woolmelang ..	..	22,583	9	10	22,583	9	10	..	..	..	..	..	..	..	9,222	11	5		
78. Woornen ..	..	2,334	11	0	2,334	11	0	3	14	4	..	..	..	..	30,579	14	4		
79. Wycheproof ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9,233	14	5		
80. Yaaapeet ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,531	3	4		
Totals	..	4,182,129	4	3	6,751,292	5	3	2,535,307	15	11	1,250,544	7	10	..	2,330	16	8		
		2,569,163	1	0	6,751,292	5	3	2,535,307	15	11	1,250,544	7	10	..	4,215,984	9	4		
		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
1. Cardinia ..	..	118,132	7	6	118,132	7	6	..	..	..	..	..	..	..	118,132	7	6		
2. Kanyapella ..	..	3,888	11	10	3,888	11	10	..	..	..	..	..	..	..	3,888	11	10		
3. Lower Koo-wee-rup ..	..	446,926	18	10	446,926	18	10	..	..	..	..	..	..	..	446,926	18	10		
4. Loch Garry ..	..	18,626	4	7	18,626	4	7	..	..	..	..	..	..	..	18,626	4	7		
Totals	..	587,574	2	9	587,574	2	9	..	..	..	..	..	..	..	587,574	2	9		
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## H.—FLOOD PROTECTION DISTRICTS.

[illegible]

LOAN CAPITAL ACCOUNTS—continued.

Totals at  
30th June, 1955.  
£ s. d.  
72,239,668 14 8

Brought forward ..

Name of District.	Loan Capital Expenditure.				Allotted to District.	Capital Expenditure borne by the State Account.			
	Headworks.		Distributory Works.			Headworks.		Distributory Works.	
	£	s. d.	£	s. d.		£	s. d.	£	s. d.
I. Carrum .. ..	..	..	42,634 1 11	42,634 1 11	..	..	42,634 1 11	42,634 1 11	
Totals .. ..	..	..	42,634 1 11	42,634 1 11	..	..	42,634 1 11	42,634 1 11	
Totals, Commission's Districts (Statements D, E, F, G, H, and I.) .. ..	15,309,670 10 3	19,574,594 3 9	34,884,264 14 0	2,957,284 2 0	13,587,318 1 11	18,339,662 10 1	31,926,980 12 0		

\* Exclusive of Plant and Machinery Suspense Account, £1,497,341 11s. 11d. Plant Workshops and Depots, £17,646 11s. 4d. Total, £1,514,988 3s. 3d. (Statement A).  
† Exclusive of following Works not apportioned to Districts, viz.: Glenelg River Development Works, £2,859,542 17s. 10d.; Cairn Curran Reservoir, £2,716,633 0s. 2d.; Goulburn-Waranga Channel Duplication, £1,407,829 6s. 10d.; Eildon Reservoir Enlargement, £25,441,705 12s. 11d.; Glenmaggie Reservoir Enlargement, £26,826 6s. 8d.; Hume Reservoir Enlargement, £532,730; Waranga-Western Main Channel Enlargement, £3,026 12s. 3d.; Goulburn System Enlargement Investigations, £29,394 13s. 8d.; Total, £33,017,708 12s. 4d. (Statement C.)

WORKS UNDER GENERAL SUPERVISION OF COMMISSION.

J.—WATERWORKS TRUSTS AND LOCAL GOVERNING BODIES.

Waterworks Trusts, First Mildura Irrigation Trust and Local Governing Bodies Loan Liability .. ..	£	s. d.	£	s. d.
Amounts Written Off and Free Grants to Local Authorities as at 30th June, 1951. (For details see Annual Report for year 1951-52) .. ..	..	..	..	..
Under Act 1953, No. 5748, Amounts Transferred to State Account, £170,082 0s. 7d.; Grants to Local Authorities £600 8s. 0d. Under Act 1954, No. 5821, Amounts Transferred to State Account £150,980 4s. 5d.; Grants to Local Authorities £14,421 6s. 11d.	3,340,844 11 10	170,682 8 7	165,401 11 4	3,676,928 11 9
	7,844,625 14 6			

K.—RIVER IMPROVEMENT TRUSTS.

River Improvement Trusts and Other Public Authorities pursuant to Part IV. of the River Improvement Act 1948 .. ..	£	s. d.	£	s. d.
Amounts Borne by State Account as at 30th June, 1952 .. ..	..	..	..	..
Under Act 1953, No. 5748, Amounts Transferred to State Account .. ..	76,520 11 9	64,447 5 1	49,645 8 11	190,613 5 9
Under Act 1954, No. 5821, Amounts Transferred to State Account .. ..	..	..	..	..
	41,030 3 10			

L.—LATROBE VALLEY.

Latrobe Valley Drainage .. ..	£	s. d.	£	s. d.
	..	..	..	..
	231,643 9 7	559,569 4 2	80,918,141 4 10	

Grand Total Net Loan Capital Expenditure (Exclusive of Equity in National Debt Sinking Fund) .. ..

# SUMMARY STATEMENT OF LOAN CAPITAL ACCOUNTS AS AT 30th JUNE, 1955.

Reference to Preceding Statements.	Works.	Capital Works and Charges and State Works of Water Supply.	Headworks.	Distributory Works.	Total Capital Expenditure.	Deduct Redemption Paid.	Net Loan Capital.	At Debit of Authorities and Borne by the Districts.	Capital Expenditure Borne by the State.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
A	Capital Works and Charges	6,459,616 1 11	..	..	6,459,616 1 11	534,010 16 4	5,925,605 5 7	1,520,803 2 3	4,404,802 3 4
B	State Works of Water Supply	1,272,669 0 8	..	..	1,272,669 0 8	3,818 11 9	1,268,850 8 11	..	1,268,850 8 11
C	Headworks Costs not yet apportioned	..	..	..	..	220,240 10 5	30,203,582 8 1	..	30,203,582 8 1
D	Irrigation and Water Supply Districts, inclusive of Headworks Costs	..	7,771,555 3 8	11,592,936 0 7	19,364,491 4 3	210,816 2 11	19,153,675 1 4	..	19,153,675 1 4
E	Urban Divisions of Irrigation Districts	..	..	135,653 10 7	135,653 10 7	2,985 4 1	132,668 6 6	4,818 10 11	127,849 15 7
F	Waterworks Districts, inclusive of Headworks Costs	..	5,031,322 2 7	3,281,816 18 0	8,313,139 0 7	96,718 4 4	8,216,420 16 3	417,157 15 2	7,799,263 1 1
G	Urban Districts of Waterworks Districts, inclusive of Headworks Costs	..	2,587,126 10 6	4,258,514 3 5	6,845,640 13 11	94,348 8 8	6,751,292 5 3	2,535,307 15 11	4,215,984 9 4
H	Flood Protection Districts	..	..	598,212 14 7	598,212 14 7	10,638 11 10	587,574 2 9	..	587,574 2 9
I	Drainage District	..	..	43,342 16 4	43,342 16 4	708 14 5	42,634 1 11	..	42,634 1 11
	Total Works under control of Commission	7,732,285 2 7	45,813,826 15 3	19,910,476 3 6	73,456,588 1 4	1,174,285 4 9	72,282,302 16 7	4,478,087 4 3	67,804,215 12 4
J	Waterworks Trusts and Local Governing Bodies	..	..	..	8,956,757 2 5	1,112,131 7 11	7,844,625 14 6	4,167,697 2 9	3,676,928 11 9
K	River Improvement Trusts	..	..	..	232,138 7 7	494 18 0	231,643 9 7	41,030 3 10	190,613 5 9
L	Latrobe Valley Drainage	..	..	..	578,493 16 11	18,924 12 9	559,569 4 2	559,569 4 2	..
		..	..	..	83,223,977 8 3	2,305,836 3 5	80,918,141 4 10	9,246,383 15 0	71,671,757 9 10

NOTE.—District Headworks Costs formerly included in Item "C" are now shown in Items "D," "F," and "G."

## RECONCILIATION STATEMENT.

COUNTRY WATER SUPPLY AND STATE DEVELOPMENT ACCOUNTS IN THE BOOKS OF THE TREASURY WITH CAPITAL ACCOUNTS IN THE BOOKS OF THE COMMISSION AS AT 30th JUNE, 1955.

	Total.	Water Supply.	State Development Account.
£ s. d.	£ s. d.	£ s. d.	£ s. d.
Net Loan Liability as per Treasurer's Finance Statement (page 79)	75,099,648 1 11	9,244,520 3 7	65,855,127 18 4
Expenditure on Account of Loan from Treasurer's Advance	90,926 14 11	..	90,926 14 11
Add—	134,034 4 3	..	134,034 4 3
Cost of Geelong Works. "Finance" (page 80)	..	..	..
National Debt Sinking Fund contributions from Consolidated Revenue pursuant to the provisions of the <i>Commonwealth and States Financial Agreement Act 1927</i> , No. 3554, as amended by Act No. 5051, 1944. "Finance" (Page 79). (These amounts not credited to Districts and Works excepting recap contributions shown below)	6,274,434 9 2	712,919 0 9	5,561,515 8 5
National Debt Sinking Fund contributions in respect of Geelong Works. "Finance" (Page 80)	30,153 3 11	..	30,153 3 11
Less—	81,629,196 14 2	9,957,439 4 4	71,671,757 9 10
Redemption recap contributions paid into Consolidated Revenue by Commission Districts and Works, Waterworks Trusts, &c.	711,055 9 4	711,055 9 4	..
Totals of amounts at debit of Authorities and Districts and the Capital Expenditure Borne by the State Account in the books of the Commission	80,918,141 4 10	9,246,383 15 0	71,671,757 9 10

## CAPITAL EXPENDITURE.

STATEMENT OF CAPITAL EXPENDITURE ON WORKS OF COUNTRY WATER SUPPLY, AS FROM THE DATE OF INCORPORATION OF THE STATE RIVERS AND WATER SUPPLY COMMISSION (1ST MAY, 1906) TO 30TH JUNE, 1955.

Year ended 30th June.	Total Expenditure under Water Supply Loans Application Acts.				Total Capital Expenditure by Commission from Unemployment Relief Funds.				Total Capital Expenditure under Water Supply Loans Application Acts and from Unemployment Relief Funds.			
	During Year.		Progressive Total at Close of Year.		During Year.		Progressive Total at Close of Year.		During Year.		Progressive Total at Close of Year.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1906 .. ..	..	..	5,885,066	12 4a	..	..	..	..	..	..	5,885,066	12 4a
1907 .. ..	161,346	7 4	6,046,412	19 8	..	..	..	..	161,346	7 4	6,046,412	19 8
1908 .. ..	276,582	17 0	5,881,843	15 0b	..	..	..	..	276,582	17 0	5,881,843	15 0b
1909 .. ..	313,615	11 3	6,195,459	6 3c	..	..	..	..	313,615	11 3	6,195,459	6 3c
1910 .. ..	286,823	8 3	6,482,282	14 6	..	..	..	..	286,823	8 3	6,482,282	14 6
1911 .. ..	311,709	7 4	6,793,992	1 10	..	..	..	..	311,709	7 4	6,793,992	1 10
1912 .. ..	259,281	0 11	7,053,273	2 9	..	..	..	..	259,281	0 11	7,053,273	2 9
1913 .. ..	267,560	1 11	7,320,833	4 8	..	..	..	..	267,560	1 11	7,320,833	4 8
1914 .. ..	229,126	17 0	7,549,960	1 8	..	..	..	..	229,126	17 0	7,549,960	1 8
1915 .. ..	304,766	9 9	7,854,726	11 5	..	..	..	..	304,766	9 9	7,854,726	11 5
1916 .. ..	347,134	18 5	8,201,861	9 10	..	..	..	..	347,134	18 5	8,201,861	9 10
1917 .. ..	302,893	11 7	8,504,755	1 5	..	..	..	..	302,893	11 7	8,504,755	1 5
1918 .. ..	302,954	14 7	8,807,709	16 0	..	..	..	..	302,954	14 7	8,807,709	16 0
1919 .. ..	412,267	8 3	9,219,977	4 3	..	..	..	..	412,267	8 3	9,219,977	4 3
1920 .. ..	570,028	2 4	9,790,005	6 7	..	..	..	..	570,028	2 4	9,790,005	6 7
1921 .. ..	692,658	14 1	10,482,664	0 8	..	..	..	..	692,658	14 1	10,482,664	0 8
1922 .. ..	968,047	8 8	11,450,711	9 4	..	..	..	..	968,047	8 8	11,450,711	9 4
1923 .. ..	1,210,484	8 9	12,661,195	18 1	..	..	..	..	1,210,484	8 9	12,661,195	18 1
1924 .. ..	1,415,109	1 5	14,076,304	19 6	..	..	..	..	1,415,109	1 5	14,076,304	19 6
1925 .. ..	1,471,566	4 7	15,547,871	4 1	..	..	..	..	1,471,566	4 7	15,547,871	4 1
1926 .. ..	1,521,533	5 9	17,069,404	9 10	..	..	..	..	1,521,533	5 9	17,069,404	9 10
1927 .. ..	1,541,900	16 9	18,611,305	6 7	..	..	..	..	1,541,900	16 9	18,611,305	6 7
1928 .. ..	1,792,407	15 9	20,403,713	2 4	..	..	..	..	1,792,407	15 9	20,403,713	2 4
1929 .. ..	1,516,022	14 3	21,919,735	16 7	..	..	..	..	1,516,022	14 3	21,919,735	16 7
1930 .. ..	1,208,567	12 6	23,128,303	9 1	..	..	..	..	1,208,567	12 6	23,128,303	9 1
1931 .. ..	696,146	5 2	23,824,449	14 3	..	..	142,703	0 0d	838,849	5 2	23,967,152	14 3
1932 .. ..	351,118	15 7	24,175,568	9 10	2,745	0 0	145,448	0 0	353,863	15 7	24,321,016	9 10
1933 .. ..	488,072	7 9	24,663,640	17 7	138,281	0 0	283,729	0 0	626,353	7 9	24,947,369	17 7
1934 .. ..	315,870	14 7	24,979,511	12 2	209,284	0 0	493,013	0 0	525,154	14 7	25,472,524	12 2
1935 .. ..	260,736	3 5	25,240,247	15 7	325,340	0 0	818,353	0 0	586,076	3 5	26,058,600	15 7
1936 .. ..	285,473	8 2	25,525,721	3 9	371,866	0 0	1,190,219	0 0	657,339	8 2	26,715,940	3 9
1937 .. ..	360,791	14 10	25,886,512	18 7	350,993	0 0	1,541,212	0 0	711,784	14 10	27,427,724	18 7
1938 .. ..	353,606	5 5	26,240,119	4 0	358,550	0 0	1,899,762	0 0	712,156	5 5	28,139,881	4 0
1939 .. ..	582,327	3 5	26,822,446	7 5	411,803	0 0	2,311,565	0 0	994,130	3 5	29,134,011	7 5
1940 .. ..	426,824	16 9	27,249,271	4 2	289,764	0 0	2,601,329	0 0	716,588	16 9	29,850,600	4 2
1941 .. ..	471,369	6 11	27,720,640	11 1	218,141	0 0	2,819,470	0 0	689,510	6 11	30,540,110	11 1
1942 .. ..	274,845	7 0	27,995,485	18 1	40,805	0 0	2,860,275	0 0	315,650	7 0	30,855,760	18 1
1943 .. ..	75,479	2 0	28,070,965	0 1	472	0 0	2,860,747	0 0	75,951	2 0	30,931,712	0 1
1944 .. ..	143,177	10 6	28,214,142	10 7	..	..	2,860,747	0 0	143,177	10 6	31,074,889	10 7
1945 .. ..	315,729	1 0	28,529,871	11 7	..	..	2,860,747	0 0	315,729	1 0	31,390,618	11 7
1946 .. ..	432,905	12 8	28,962,777	4 3	..	..	2,860,747	0 0	432,905	12 8	31,823,524	4 3
1947 .. ..	1,466,121	15 3	30,428,898	19 6	..	..	2,860,747	0 0	1,466,121	15 3	33,289,645	19 6
1948 .. ..	1,893,165	1 2	32,322,064	0 8	..	..	2,860,747	0 0	1,893,165	1 2	35,182,811	0 8
1949 .. ..	2,251,873	9 11	34,573,937	10 7	..	..	2,860,747	0 0	2,251,873	9 11	37,434,684	10 7
1950 .. ..	4,149,500	16 4	38,723,438	6 11	..	..	2,860,747	0 0	4,149,500	16 4	41,584,185	6 11
1951 .. ..	7,124,902	5 7	45,848,340	12 6	..	..	2,860,747	0 0	7,124,902	5 7	48,709,087	12 6
1952 .. ..	10,619,672	2 5	56,468,012	14 11	..	..	2,860,747	0 0	10,619,672	2 5	59,328,759	14 11
1953 .. ..	6,919,911	3 10	63,387,923	18 9	..	..	2,860,747	0 0	6,919,911	3 10	66,248,670	18 9
1954 .. ..	8,475,565	5 9	71,863,489	4 6	..	..	2,860,747	0 0	8,475,565	5 9	74,724,236	4 6
1955 .. ..	9,177,831	8 6	81,041,320	13 0	..	..	2,860,747	0 0	9,177,831	8 6	83,902,067	13 0

Notes.—(a) Total expenditure from "Loans—Country Water Supply" to 30th June, 1906, as per pages 106–108, "Finance, 1905–6" £5,885,066 12s. 4d.

(b) During year ended 30th June, 1908, the Geelong Water Supply Works were sold to the Geelong Municipal Waterworks Trust. Geelong works excluded from Progressive Total, from and including year ended 30th June, 1908.

	£	s. d.
(c) Department of Water Supply .. .. .	2,592,777	16 0
State Rivers and Water Supply Commission .. .. .	3,602,681	10 3
Total .. .. .	6,195,459	6 3

During the year ended 30th June, 1910, the Department of Water Supply was merged into the Commission, and all Water Supply Works vested in the Department or the Board of Land and Works and placed under the control of the Commission.

(d) From 1930 until 1943 grants were received and expended by the Commission from Unemployment Relief Funds. The total amount so received and expended was £3,231,050, of which £2,860,747 was spent on capital works.



## CAPITAL EXPENDITURE—continued.

CAPITAL EXPENDITURE ON WORKS OF COUNTRY WATER SUPPLY AS AT 30TH JUNE, 1955.

## RECONCILIATION STATEMENTS.

## (A) LOAN.

*Net Loan Capital as per Annual Report.*

	£	s.	d.
Total Loan Expenditure (Finance page 79) .. .. .	81,041,320	13	0
<i>Add—</i>	£	s.	d.
Discount and Expenses Less Premiums Country Water Supply (Finance page 79) .. .. .	1,639,921	3	5
Loan Liability Geelong Works (Finance page 80) .. .. .	164,187	8	2
Expenditure from Treasurer's Advance .. .. .	90,926	14	11
	1,895,035	6	6
	82,936,355	19	6
<i>Less—</i>			
Redemption—			
State Loans Repayment Fund, &c. (Finance page 79) .. .. .	1,307,159	5	4
Paid to Consolidated Revenue (Annual Report page 127) .. .. .	711,055	9	4
	2,018,214	14	8
	80,918,141	4	10
Net Loan Capital as per Annual Report .. .. .	80,918,141	4	10

## (B) UNEMPLOYMENT RELIEF FUNDS.

	£	s.	d.
Expenditure from Unemployment Relief Taxation Funds .. .. .	314,362	0	0
Unemployment Relief Loan Funds ("Finance, 1942-43," page 140) .. .. .	2,788,118	0	0
Commonwealth State Joint Loan Fund (Winter Relief) .. .. .	85,012	0	0
Commonwealth Grants (Flood Restoration) .. .. .	43,558	0	0
Total expenditure in accordance with Employment Council Allocations, 6th February, 1943 .. .. .	3,231,050	0	0
Deduct Maintenance Expenditure .. .. .	370,303	0	0
Capital Expenditure from Unemployment Relief Funds, as above .. .. .	2,860,747	0	0

## STATEMENT OF CAPITAL EXPENDITURE ON WORKS OF COUNTRY SEWERAGE AUTHORITIES.

	£	s.	d.
Expenditure as at 30th June, 1954 .. .. .	304,729	6	7
Expenditure, 1954-55—	£	s.	d.
Act 5746 .. .. .	231,239	6	5
	231,239	6	5
Total as at 30th June, 1955 .. .. .	535,968	13	0
Expenditure at Debit of Authorities .. .. .	501,532	10	2
Amounts transferred by Order in Council to Expenditure Borne by the State Account .. .. .	34,436	2	10
	535,968	13	0

## ESTIMATES 1955-56.

**PROPOSED DISBURSEMENTS.**

	Estimated Requirements.	Amount Provided in Budget.
	£	£
Coliban Works .. .. .	55,600	55,600
Irrigation, Water Supply and Drainage Districts .. .. .	755,800	651,800
Waterworks Districts .. .. .	308,600	305,000
Flood Protection and Carrum Drainage Districts .. .. .	50,000	45,000
Salaries of Permanent and Temporary Employees* .. .. .	1,385,800	1,385,800
General Expenditure* .. .. .	350,000	320,000
Removal of Sand Drift .. .. .	120,000	75,000
River Murray Works--Contribution by State .. .. .	70,000	55,000
Pay-Roll Tax .. .. .	100,000	74,000
Subsidies to Waterworks Trusts and Local Governing Bodies to enable a Reduction of 33½ per cent. to be made in Water Rates .. .. .	600	600
Totals--Water Supply .. .. .	3,196,400	2,967,800
Assistance to certain Sewerage Authorities where suspension of works is being continued .. .. .	8,000	6,000
Subsidies to Sewerage Authorities in cases where the interest paid on capital liability is in excess of the rate of 3 per cent. .. .. .	42,000	40,000
Subsidy to First Mildura Irrigation Trust towards meeting the operating costs of the Trust .. .. .	18,000	..
	3,264,400	3,013,800

\* To be apportioned over the above Districts.

**ESTIMATED RECEIPTS.**

	Amount Provided in Budget.
	£
Coliban Works .. .. .	100,000
Irrigation, Water Supply and Drainage Districts .. .. .	960,000
Waterworks Districts .. .. .	580,000
Flood Protection and Carrum Drainage Districts .. .. .	32,000
Other .. .. .	163,000
Recoup on account of amounts paid from Revenue in connexion with River Murray Commission, Loan Works, &c. .. .. .	690,000
	2,525,000
Add estimated Receipts to meet Interest and Redemption—	
Waterworks Trusts and other Corporations .. .. .	170,200
Plant and Machinery, and Land .. .. .	49,850
Totals--Water Supply .. .. .	2,745,050

Estimated amount available from Revenues of Commission—

“Paying” Districts to meet Interest .. £64,000.

## CONTRACTS.

STATEMENT OF CONTRACTS ENTERED INTO DURING THE YEAR ENDED 30TH JUNE, 1955.

No.	Name of Contractor.	Work and Supply.	Amount.
			£
3345	Humes Ltd. . . . .	Supply of concrete pipes : Bellarine Peninsula . .	35,785
3346	Rocla Pipes Ltd. . . . .	Supply of concrete pipes : Bellarine Peninsula . .	103,300
3347	Marfleet and Weight Ltd. . . . .	Supply regulating valves : Rocklands and Malmsbury	9,264
3348	J. A. Stone . . . . .	Erection of residence : Koondrook . . . . .	2,865
3349	John Holland and Co. Pty. Ltd. . . . .	Construction of concrete bridges : Goulburn-Waranga	28,600
3350	Marrows and Fletcher . . . . .	Clearing timber from Reservoir Area : Eildon . .	4,370
3351	Roche Bros. Pty. Ltd. . . . .	Enlargement of Wurdee Boluc Reservoir : Bellarine Peninsula	108,838
3352	Humes Ltd. . . . .	Supply of concrete pipes : Mornington Peninsula . .	23,583
3353	Rocla Pipes Ltd. . . . .	Supply of concrete pipes : Mornington Peninsula . .	23,083
3354	Thiess Bros. (Vic.) Pty. Ltd. . . . .	Earthworks—Wurdee Boluc Inlet Channel : Bellarine Peninsula	85,402
3355	A. E. Seidel . . . . .	Erection of general Store : Tallangatta . . . . .	23,458
3356	Dowsett Engineering (Aust.) Pty. Ltd. . . . .	Construction of embankments : Tallangatta . .	200,040
3357	A. J. Warry . . . . .	Erection of residence : Maffra-Sale . . . . .	2,911
3358	K. A. McMahon . . . . .	Modification of bridges—Wurdee Boluc Inlet Channel : Bellarine Peninsula	6,252
3359	Utah Australia Ltd. . . . .	Completion of Cairn Curran Dam : Cairn Curran . .	600,000
3360	A. B. and M. A. Chick . . . . .	Erection of butter factory : Tallangatta . . . . .	28,280
3361	Food Machinery (Aust.) Ltd. . . . .	Supply of gate structures : Torrumbarry . . . . .	20,850
3362	A. B. and M. A. Chick . . . . .	Erection of garage and service station : Tallangatta . .	5,885
3363	Humes Ltd. . . . .	Supply of steel pipes : Cairn Curran . . . . .	11,438
3364	Holloway Bros. and Jankovic . . . . .	Erection of Shire Offices : Tallangatta . . . . .	19,540
3365	Humes Ltd. . . . .	Supply of concrete pipes : Tarago . . . . .	92,707
			1,436,451

APPENDIX A.  
STATE RIVERS AND WATER SUPPLY COMMISSION.  
IRRIGATION SYSTEMS.

RETURN OF WATER DELIVERED—YEAR 1954-55.

District.	Water Assign- ment Measured at District Bound- ary.	Gross Supply at District Offtakes (excluding volumes passed to other Districts).	Total Water Rights Allotted to District.	Users in District.			Total Delivered in District.	Users Outside District from District Channels.	Total Delivered.	Users Outside District from Main Channels.	
				Under Water Rights.	Sales of Water.	Domestic and Stock Purposes.					
GOULBURN SYSTEM—											
(Main Eastern Channel.)	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.	
South Shepparton .. .. .	12,000	6,971	4,491	3,717	1,580	247	5,544	20	5,564	..	
Shepparton .. .. .	51,000	30,413	21,036	16,574	1,832	269	18,675	110	18,785	..	
North Shepparton .. .. .	44,000	(e) 39,900	13,199	10,566	5,080	707	16,353	..	16,353	69	
Katandra .. .. .	13,000	12,404	7,327	6,253	2,230	221	8,704	614	9,318	..	
Totals .. .. .	120,000	89,688	46,053	37,110	10,722	1,444	49,276	744	50,020	69	
(Waranga Reservoir.)											
Rodney .. .. .	232,000	184,305	60,910	56,244	(b) 31,075	4,509	91,828	(a) 552	92,380	..	
Tongala-Stanhope .. .. .	116,000	101,674	48,037	45,285	12,241	2,080	59,606	..	59,606	..	
Deakin .. .. .	23,000	11,254	5,698	4,911	2,688	512	8,111	..	8,111	..	
Rochester .. .. .	147,000	124,942	57,466	54,917	25,583	3,287	83,787	1,404	85,191	..	
Dingee .. .. .	9,000	6,723	4,447	4,385	1,226	256	5,867	..	5,867	..	
Calivil (including Loddon water) .. .. .	21,000	19,758	6,505	6,230	6,307	664	13,201	..	13,201	103	
Tragowel Plains (including Loddon water) .. .. .	97,000	100,679	31,214	30,702	19,111	2,209	52,022	(b) 50	52,072	12	
Boort (including Loddon water) .. .. .	35,000	38,734	11,335	10,554	10,073	860	21,487	806	22,293	..	
Loddon (including Loddon water) .. .. .	(i)	470	..	..	102	238	340	..	340	..	
East Loddon (including Loddon water) .. .. .	(i)	1,312	..	..	1,099	192	1,291	(b) 12	1,303	..	
West Loddon (including Loddon water) .. .. .	(i)	5,069	..	..	..	448	448	..	448	3,157	
Totals .. .. .	680,000	594,920	225,612	213,228	109,505	15,255	337,988	2,824	340,812	3,272	
Goulburn Grand Totals .. .. .	800,000	684,608	271,665	250,338	(f) 120,227	16,699	387,264	3,568	390,832	3,341	
MURRAY SYSTEM—											
(Yarrunga Weir.)											
Murray Valley .. .. .	196,000	(d) 214,260	89,816	72,019	(g) 47,454	2,445	121,918	216	122,134	..	
(Torrunbarry Weir.)											
Cohuna .. .. .	122,000	126,622	49,362	45,947	12,442	1,747	60,136	211	60,347	..	
Koondrook .. .. .	70,000	78,650	24,622	24,386	10,994	1,023	36,403	78	36,481	..	
Kerang .. .. .	71,000	62,307	21,449	21,407	12,239	1,558	35,204	278	35,482	..	
Third Lake .. .. .	6,000	8,924	2,513	2,390	784	66	3,240	19	3,259	..	
Mystic Park .. .. .	7,000	6,009	2,754	2,434	287	12	2,733	75	2,808	..	
Tresco .. .. .	8,000	4,705	4,094	2,541	251	..	2,792	..	2,792	..	
Fish Point .. .. .	5,000	2,693	1,845	1,793	554	70	2,417	..	2,417	..	
Swan Hill .. .. .	63,000	50,404	25,868	24,096	8,047	772	32,915	252	33,167	..	
Pental Island Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	5,546	
Kerang Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	1,695	
Kerang North-West Lakes Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	7,211	
Upper Gunbower Creek Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	5,727	
Lower Gunbower Creek Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	7,248	
Taylor's Creek Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	1,496	
Kow Swamp Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	2,417	
Pyramid Creek Private Diversions .. .. .	..	..	..	..	..	..	..	..	..	3,858	
Torrunbarry Weir Totals .. .. .	352,000	340,314	132,507	124,994	(h) 45,598	5,248	175,840	913	176,753	35,198	
(Pumped from River Murray.)											
Nyah .. .. .	12,000	10,031	7,180	7,180	749	214	8,143	203	8,346	..	
Robinvale .. .. .	21,000	11,310	10,779	8,062	..	..	8,062	..	8,062	..	
Red Cliffs .. .. .	50,000	36,268	34,169	27,744	782	..	28,526	(b) 207	28,733	..	
Merbein .. .. .	33,000	26,946	23,708	19,638	1,015	..	20,653	..	20,653	..	
Totals .. .. .	106,000	84,555	75,836	62,624	2,546	214	65,384	410	65,794	..	
Murray Grand Totals .. .. .	654,000	639,129	298,159	259,637	95,598	7,907	363,142	1,539	364,681	35,198	
CAMPASPE SYSTEM—											
Coliban .. .. .	..	25,586	..	..	(e) 9,072	(b) 8,749	17,821	..	17,821	..	
Campaspe .. .. .	(i)	3,215	..	..	1,318	155	1,473	116	1,589	..	
Totals .. .. .	..	28,801	..	..	10,390	8,904	19,294	116	19,410	..	
WERRIBEE SYSTEM—											
Bacchus Marsh .. .. .	(i)	6,001	3,392	3,033	1,033	153	4,219	(b) 688	4,907	..	
Werribee .. .. .	12,000	14,571	8,150	6,380	377	..	6,757	284	7,041	..	
Totals .. .. .	12,000	20,572	11,452	9,413	1,410	153	10,976	972	11,948	..	
MACALISTER SYSTEM—											
Maffra-Sale .. .. .	(i)	56,711	25,766	24,724	5,241	181	30,146	385	30,531	..	
Central Gippsland .. .. .	(i)	13,578	9,128	3,679	4,125	21	7,825	11	7,836	..	
Totals .. .. .	..	70,289	34,894	28,403	9,366	202	37,971	396	38,367	..	
WIMMERA SYSTEM—											
Quantong, Riverside, Burnlea, Haven, &c. .. .. .	..	10,600	..	..	5,863	..	5,863	..	5,863	..	
PRIVATE DIVERSIONS (not included above) .. .. .											
Totals .. .. .	1,466,000	1,453,999	616,170	547,891	242,854	33,865	824,510	6,591	831,101	198,539	
FIRST MILDURA IRRIGATION TRUST .. .. .	(i)	43,824	47,058	33,170	7,381	150	40,701	92	40,793	..	
GRAND TOTALS .. .. .	(j) 1,466,000	1,497,823	663,228	580,961	250,235	34,015	865,211	6,683	871,894	198,539	
										1,070,433	

(a) Includes Waterworks Trust. (b) Includes Urban Districts. (c) Includes 3,250 acre feet outfall to Broken Creek. (d) Includes 12,201 acre feet outfall to Broken Creek. (e) Includes 462 acre feet for mining. (f) Includes 39,316 acre feet Supplementary Sales and 11,538 acre feet "Out of Season" Sales. (g) Includes 17,925 acre feet Supplementary Sales. (h) Includes 8,491 acre feet Supplementary Sales and 4,572 acre feet "Out of Season" Sales. (i) Not expressed in acre feet. (j) Not including Campaspe, Bacchus Marsh, Maffra-Sale, Central Gippsland, Mildura, Loddon, East Loddon and West Loddon.

Total Supplementary Supply to Wimmera-Mallee for period 1st July, 1954, to 30th June, 1955:—

	Acre feet.
From Waranga Western Channel .. .. .	15,168
From Loddon River .. .. .	7,024
Total .. .. .	22,192

## APPENDIX B.

### LANDS UNDER IRRIGATED CULTURE.

The two Statements hereunder show the extent of Areas Irrigated—

(A) During the 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 1954-55.

Name of District.	Total Area of Holdings in Irrigation Districts in Acres.	Area classified as Irrigable within Constituted Districts in Acres.	Water Rights Apportioned (including Extra Water Rights) (Acre-Feet).	Area Irrigated, including Lands adjoining a District, in Acres.										
				Total.	Cereals.	Lucerne Grown for Pasture and Hay.	Sorghum and Other Annual Fodder Crops.	Pastures.			Vineyards.	Orchards.	Market Gardens.	Fallow and Miscellaneous.
								Native.	Annual.	Perennial.				
GOULBURN SYSTEM.														
Katandra .....	13,964	11,183	7,327	6,739		56	6	20	1,595	5,062				
North Shepparton .....	124,412	61,429	13,199	22,270	146	878	137	599	16,596	3,769			101	
Shepparton .....	24,165	21,033	21,036	16,910	55	227	49	298	2,176	4,609	103	7,861	1,376	156
South Shepparton .....	33,749	17,919	4,491	8,727		706	96	375	5,590	1,760		42	158	
Rodney .....	273,756	190,250	60,910	103,692	978	13,563	969	1,528	55,603	21,502	214	8,194	1,124	17
Tongala-Stanhope .....	76,169	47,606	48,037	43,662	141	1,060	80	150	16,092	24,459		1,404	55	214
Rochester .....	182,217	56,997	57,466	73,214	1,001	2,736	130	3,000	32,344	32,472	6	842	138	545
Dingee .....	8,826	4,447	4,447	4,368	109			20	990	3,247				
Calivil .....	61,132	32,532	6,505	13,883	1,007	338	238	1,769	6,693	3,714			46	71
Tragowel Plains .....	218,453	148,863	31,214	58,867	8,665	416	3,717	11,665	29,852	1,884	13		3	2,652
Deakin .....	160,775	21,204	5,698	9,325	170	380	79	114	5,084	3,489			9	
Boort* .....	80,212	56,530	11,335	18,125	2,444	572	963	3,587	8,853	549				1,157
Totals .....	1,257,830	669,993	271,665	379,782	14,716	20,932	6,464	23,125	181,468	106,516	353	18,386	3,010	4,812
RIVER MURRAY SYSTEM.														
(a) Torambarry Weir.														
Cohuna .....	85,576	44,737	49,362	58,954	966	567	289	11,718	14,259	30,490	17		7	641
Koondrook .....	88,168	24,572	24,622	42,953	2,324	759	894	6,349	26,222	4,435	10	806	60	1,094
Swan Hill .....	37,163	22,248	25,868	22,741	801	1,479	130	2,216	5,792	6,762	4,338	195	588	440
Third Lake .....	11,483	3,771	2,513	3,692	406	88	27	108	2,062	98		3		
Mystic Park .....	19,259	8,039	2,754	5,705	1,087	61	71	1,210	2,347	381	16	16	23	493
Tresco .....	4,650	2,047	4,094	1,552	55	10		24		7	1,171	276	9	
Fish Point .....	6,327	3,756	1,845	2,772	148	81	112	1,018	1,233	168	12			
Kerang .....	88,579	55,562	21,449	38,273	2,559	889	1,070	9,722	18,205	4,478				1,350
Kerang North-West Lakes .....	36,381			6,130	804	222	165	940	3,537		53	346	3	60
Private Diversions .....				26,455	1,162	1,278	607	2,882	13,560	6,560	191	54	18	143
Totals .....	377,586	164,732	132,507	209,227	10,312	5,434	3,365	36,187	88,117	53,379	5,808	1,696	708	4,221
(b) Yarrawonga Weir.														
Murray Valley .....	267,069	192,621	89,815	85,933	789	15,992	602	2,192	43,540	18,853	60	3,388	513	4
(c) Direct from River by Pumping.														
Nyah .....	3,843	2,616	7,180	2,936	113	70	74	30	86	70	2,359	92	42	
Red Cliffs .....	13,607	11,276	34,169	11,645		50	37			10	10,916	495	137	
Merbein .....	9,215	7,656	23,708	8,351		50	155	23	80		7,280	712	51	
Robinvale .....	8,669	4,312	10,779	3,141							2,876	265		
Totals .....	35,334	25,860	75,836	26,073	113	170	266	53	166	80	23,431	1,564	230	
(d) First Mildura Trust District.														
	45,000	15,000		13,418		211	230				12,000	977		
Total (River Murray Systems) .....	724,989	398,213	298,158	334,651	11,214	21,807	4,463	38,432	131,823	72,312	41,299	7,625	1,451	4,225
LODDON AND OTHER NORTHERN SYSTEMS.														
Boort* .....				12,843	1,419	102	768	2,209	6,952	448				945
East Loddon .....				1,288	62	223		97	906					
Loddon .....				99	30				69					
West Loddon .....				6,602	576	368	22	366	278					4,992
Coliban .....		10,970		7,855	46	284		820	325	2,658	7	3,050	665	
Campaspe .....	19,736			1,721	537	202		720	9	188				65
Western Wimmera .....		3,785		3,539		347	7			2,014		875	288	8
Wimmera United .....		172		139		52				87				
Totals .....	19,736	14,927		34,086	2,670	1,578	797	4,212	8,539	5,395	7	3,925	953	6,010
SOUTHERN SYSTEMS.														
Bacchus Marsh .....	6,744	3,300	3,302	3,042	15	316		420		1,511		198	484	98
Werribee .....	9,698	8,149	8,150	7,866		552	164	440		2,527		364	3,192	627
Maffra-Sale .....	72,916	27,174	25,766	24,697	31	466	152		426	23,609			13	
Central Gippsland .....	58,508	11,954	9,128	6,617	53	318	38		567	5,640			1	
Mornington Peninsula .....				1,544									1,185	359
Bellarine Peninsula .....				105		30							75	
Totals .....	147,866	50,577	46,346	43,871	99	1,682	354	860	993	33,287		562	4,950	1,084
PRIVATE DIVERSIONS.														
Other Private Diversions throughout the State .....				71,173	3,200	5,194	1,894	8,079	22,242	13,428	3,526	5,179	4,305	4,126
Grand Totals 1954-55 .....	2,150,421	1,133,710	616,169	863,563	31,899	51,193	13,972	74,706	345,065	230,938	45,165	35,677	14,669	20,257
Grand Totals 1953-54 .....	2,146,622	1,121,683	602,852	821,025	32,074	48,516	9,667	89,414	313,890	209,117	44,458	36,398	13,607	23,884

\* Boort District is supplied from the Goulburn and the Loddon Systems.

#### (B) COMPARATIVE STATEMENT OF THE EXTENT OF IRRIGATION—1950-51 TO 1954-55.

Source of Supply.	Area under Irrigation (Acres).				
	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Goulburn System .....	343,903	339,356	353,256	363,556	379,782
River Murray System .....	276,454	277,817	298,143	327,476	334,651
Loddon and Other Northern Systems .....	15,789	16,516	16,760	25,832	34,086
Southern Systems .....	32,401	37,690	38,464	40,979	43,871
Private Diversions .....	47,524	52,418	48,407	63,182	71,173
<b>Totals .....</b>	<b>716,051</b>	<b>723,797</b>	<b>755,030</b>	<b>821,025</b>	<b>863,563</b>

Return of water delivered to Waterworks Districts during waterings in year 1954-55, measurements being made at Headworks or at Pumping Stations.

\* Detailed statement of Wimmera-Mallee System hereunder.

### WATER SUPPLIED FROM HEADWORKS.

In addition to the above, the following quantities have been released from headworks at Pine Lake, Green Lake, and Dock Lake Storages for Irrigation Areas in Western Wimmera and Wimmera United Districts.

										Year.	Area Watered.	Gross Supply Released from Headworks.
											Acres.	Acre feet.
1951-52	..	..	..	..	..	..	..	..	..	2,834	8,299	
1952-53	..	..	..	..	..	..	..	..	..	3,180	8,249	
1953-54	..	..	..	..	..	..	..	..	..	3,812	7,624	
1954-55	..	..	..	..	..	..	..	..	..	3,677	11,322	

## APPENDIX D.

WIMMERA-MALLEE AND RIVER MURRAY DOMESTIC AND STOCK SUPPLY SYSTEMS.  
PERIODS OF ANNUAL WATERINGS.

District.	Year.	Commenced.	Completed.	Days.
Wimmera-Mallee .. .. .	1952	27.3.52	15.10.52	203
	1953	25.4.53	16.10.53	175
	1954	26.4.54	22.12.54	240*
Tyntynder North (late Coreena) .. .. .	1952	14.7.52	25.8.52	43
	1953	6.7.53	13.8.53	38
	1954	15.7.54	18.8.54	35
Millewa .. .. .	1952	2.6.52	25.8.52	85
	1953	1.6.53	20.8.53	81
	1954	2.7.54	7.9.54	67
Carwarp .. .. .	1952	14.7.52	15.8.52	31
	1953	14.7.53	9.8.53	27
	1954	22.7.54	15.8.54	25
Yelta .. .. .	1952	{ 3.9.52 3.11.52 }	{ 19.9.52 21.11.52 }	36
	1953	2.9.53	25.9.53	24
	1954	18.9.54	7.10.54	20

\* NOTE.—Watering delayed because of interruption to flow in Waranga Western Channel.

## APPENDIX E.

## COLIBAN SYSTEM WATER DELIVERIES.

The following statement shows the quantities of water taken into and released from the main storages of the Coliban System, the quantities delivered to water-users, and the percentages of efficiency of deliveries since the year 1950-51 :—

Year.	Inflow to Storages.			Output from Storages.	Delivered to Users.	Percentage Efficiency.	Remarks.
	From Coliban River.	Through Ashbourne Diversion Channel from Campaspe River to Coliban River.	Total.				
	acre feet.	acre feet.	acre feet.	acre feet.	acre feet.		
1950-51 ..	86,903	3,776	90,679	25,476	18,406	72	Water run in— Whole system
1951-52 ..	98,541	3,314	101,855	31,471	22,484	71	Whole system
1952-53 ..	98,193	3,074	101,267	27,111	18,219	67	Whole system
1953-54 ..	61,882	741	62,623	28,237	18,799	67	Whole system
1954-55 ..	45,933	664	46,597	25,586	17,821	70	Whole system

## APPENDIX F.

## STORAGES.

In 1902 the capacity of storages in Victoria exclusive of those for the service of the Melbourne and metropolitan area was 172,000 acre feet. The present capacity of the storages under the Commission's direct control is 4,808,950 acre feet.

When the storages at present under construction are completed the combined capacities of the storages under the control of the Commission will be 5,535,950 acre feet.

Storage.	Full Supply Reduced Level.	Total Capacity.
<i>Goulburn System—</i>	Feet.	Acre feet.
Eildon (100,000 acre feet below gravitation level) .. .. .	829.50	2,750,000
Goulburn Weir (8,000 acre feet below gravitation level) .. .. .	408.00	20,700
Waranga (53,000 acre feet below gravitation level) .. .. .	398.00	333,400
		3,104,100
<i>Murray—Loddon System</i>	Capacity in Acre feet.	
Hume Reservoir .. .. .	1,382,000	
Yarrowonga Weir .. .. .	95,120	
Torrumbarry .. .. .	28,900	
Euston .. .. .	31,320	
Mildura .. .. .	29,360	
Wentworth .. .. .	38,140	
	1,604,840	
Kow Swamp .. .. .	272.00	40,860
Laanecoorie .. .. .	527.00	6,300
Kerang North-West Lakes		
Third, Middle, Reddy	244.75	
Kangaroo, Racecourse, Charm } (42,100 acre feet below gravitation level)	241.00	69,400
Cullens .. .. .	240.25	
Lake Boga (23,750 acre feet below gravitation level) .. .. .	226.50	29,650
Lake Cullulleraine .. .. .	101.00	2,000
		950,630
<i>Wimmera—Mallee System—</i>		
Rocklands .. .. .	644.00	272,000
Toolondo .. .. .	538.00	60,000
Fyans Lake (800 acre feet below gravitation level) .. .. .	673.00	17,100
Lake Lonsdale (1,600 acre feet below gravitation level) .. .. .	618.25	53,300
Wartook (700 acre feet below gravitation level) .. .. .	1,451.00	23,800
Taylor's Lake (1,500 acre feet below gravitation level) .. .. .	482.33	30,000
Pine Lake (19,700 acre feet below gravitation level) .. .. .	175.00	52,000
Green Lake .. .. .	152.50	6,600
Dock Lake .. .. .	142.00	4,800
Moora (200 acre feet below gravitation level) .. .. .	723.50	5,100
Lower Wimmera Weirs .. .. .	..	2,870
Batyo Catyo (Avon Regulator) .. .. .	102.00	5,000
Lake Whitton .. .. .	375.00	1,300
Township Reservoirs and Mallee Tanks .. .. .	..	5,030
		538,900
<i>Maffra—Sale System—</i>		
Glenmaggie .. .. .	241.00	106,000
Service Basins (Stratford, Heyfield) .. .. .	..	40
		106,040
<i>Coliban System—</i>		
Upper Coliban .. .. .	1,652.00	25,700
Lauriston .. .. .	1,574.20	16,000
Mahmsbury .. .. .	1,477.00	14,400
Spring Gully .. .. .	899.00	2,000
Subsidiary Reservoirs .. .. .	..	4,630
		62,730
<i>Werribee System—</i>		
Pykes Creek .. .. .	1,306.00	19,400
Melton .. .. .	273.00	15,500
		34,900
<i>Mornington Peninsula</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>Otray System—</i>		
Service Basins .. .. .	..	1,080
<i>Miscellaneous—</i>		
Eppalock .. .. .	530.00	1,200
Wonthaggi .. .. .	238.00	1,550
Hepburn's Lagoon .. .. .	696.60	1,730
Little River Weir .. .. .	..	180
Other .. .. .	..	110
		4,770
<b>Total Capacity of Existing Storages</b> .. .. .		<b>4,808,950</b>
<b>ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE OF CONSTRUCTION.</b>		
<i>Murray—Loddon System—</i>		
Cairn Curran .. .. .	684.50	120,000
<b>FURTHER STORAGE WHICH WILL BE PROVIDED WHEN GATES ARE INSTALLED ON THE RESPECTIVE SPILLWAYS.</b>		
<i>Maffra—Sale System—</i> Glenmaggie to 154,000 acre feet .. .. .	256.00	48,000
<i>Murray System—</i> Hume Reservoir to 2,500,000 acre feet (half share to Victoria) .. .. .	636.00	559,000
		607,000
<b>TOTAL CAPACITY OF STORAGES WHEN WORKS ARE COMPLETED</b> .. .. .		<b>5,535,950</b>

(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.

Wurdec Bohue storage which was the main storage of the Bellarine System has been taken over by the Geelong Waterworks and Sewerage Trust.



## APPENDIX G.

## VICTORIAN WATER SUPPLY STATISTICS.

AREA.	1954-55.	
Area of State of Victoria .. .. .	87,884 square miles = 56,245,760 acres	
Area of rural and urban lands artificially supplied with water for domestic and stock and industrial purposes by channels, tanks, bores, and pipe lines, excluding Melbourne Metropolitan area .. .. .	17,940* square miles = 11,481,800* acres	
Area of Irrigation Districts and other lands supplied for irrigation .. .. .	2,510,000* acres	
Area Irrigated (1954-55) .. .. .	863,560 acres	
Area within Flood Protection Districts .. .. .	148,910* acres	
Area within Drainage District .. .. .	18,450* acres	

\* Gross area.

## AVERAGE ANNUAL RAINFALL.

Over State (87,884 square miles) .. .. .	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 " "

## WATERWORKS—

## Controlled by Commission—

## Storages—

Number of large reservoirs .. .. .	38
Number of subsidiary reservoirs and service basins .. .. .	240
Total capacity of storages, 1,309,237 million gallons = 4,808,950* acre feet.	

\* Includes half share of Hume Reservoir and other River Murray Works.

## Channels—Length—

Irrigation .. .. .	4,949 miles
Domestic and Stock .. .. .	8,064 miles
Drainage and Flood Protection .. .. .	2,104 miles
Total .. .. .	15,117 miles

## Pipe Lines—Length—

Mains .. .. .	272 miles
Reticulation .. .. .	970 miles
Total .. .. .	1,242 miles

## Tanks—Excavated—

Number in Wimmera-Mallee Waterworks Districts .. .. .	260 tanks
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## Bores—

Number in Waterworks Districts .. .. .	55 bores
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## Water Deliveries—

Quantity water delivered from Commission's Works to water-users (excluding deliveries to Wimmera-Mallee and Other Domestic and Stock Systems) .. .. .	1,070,433 acre feet
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## RURAL DISTRICTS—

## Administered by Commission—

	Number of Districts.	Number of Assessments.	Population.
Irrigation Districts .. .. .	29	15,976	45,598
Waterworks Districts (including rural lands, Coliban System) .. .. .	31	21,627	60,583
Flood Protection Districts .. .. .	4	1,540* (46)	4,097* (67)
Drainage District .. .. .	1	5,716	5,200
Totals .. .. .	65 districts	44,859 assessments	115,474 persons

\* Excluding figures in brackets which show the number of assessments and population in respect of lands also within an Irrigation District.

## URBAN DISTRICTS—

## Reticulated pipe supplies for domestic and industrial purposes—

	Number of Towns.	Population.
Administered by Commission .. .. .	130	194,530 persons
" " Waterworks Trusts .. .. .	127	356,470 "
" " Local Governing Bodies .. .. .	16	103,810 "
Totals .. .. .	273 towns	654,810 persons

## SEWERAGE AUTHORITIES—

	Number of Towns.	Population.
Controlled by Local Authorities supervised by Commission .. .. .	25 (Systems operating)	246,500 persons
	5 (Systems partly operating)	22,300 "
	30 (Systems not operating)	87,670 "
Totals .. .. .	60 towns	356,470 persons

## CAPITAL LIABILITY FOR WATER SUPPLY.—

Total to 30th June, 1955—(a) Borne by the State .. .. .	£71,671,757
(b) Borne by the Districts .. .. .	£9,246,384
Total .. .. .	£80,918,141

## APPENDIX H.

## RURAL WATERWORKS DISTRICTS.

## DATES OF CONSTITUTION.

## A. DISTRICTS ADMINISTERED BY WATERWORKS TRUSTS, PAST AND PRESENT.

NOTE.—Provision for the constitution of Waterworks Trusts was first made in the *Water Conservation Act* 1881, No. 716. This legislation was superseded by the consolidating *Water Conservation Act* 1887, No. 846, and then by the consolidating *Water Act* 1890, No. 1156.

Twenty Waterworks Trusts for the supply of water in rural areas were constituted under these Acts.

Although later legislation still provides for the constitution of rural Waterworks Trusts none has in fact been constituted since the passing of the *Water Act* 1905, No. 2016, by which the State Rivers and Water Supply Commission was set up. Since that date the extension of rural domestic and stock supplies has been carried out by the Commission, and Waterworks Trusts have been formed only for the purpose of providing urban supplies.

Name of Waterworks Trust and District.	Date of Constitution.	Remarks.
1. Loddon United .. ..	3.7.1882	Portions of district excised in formation of Tragowel Plains, North Boort, and East Boort Irrigation Trusts. Control of Trust taken over by Government in 1904 and transferred to Commission in 1906. Trust abolished 1st July, 1945, by Act No. 5003. Commission's Loddon, East Loddon, and West Loddon Waterworks Districts formed by subdivision of Trust's district
2. St. Arnaud Shire.. ..	3.7.1882	Portion of district excised in formation of Shire of Kara Kara Waterworks Trust in 1886. Name changed to Shire of Donald Waterworks Trust in 1908. Trust abolished and district transferred to Commission in 1926, subsequently divided between Commission's Wimmera United, Upper Wimmera United, and Wycheproof Waterworks Districts
3. Swan Hill Shire .. ..	3.7.1882	Original area of district 7,043,200 acres. Portions excised in formation of Leaghur and Meering, Koondrook, and Pine Hills Irrigation Trusts and Kerang Shire Waterworks Trust. Control taken over by Government in 1889. Trust abolished by <i>Water Act</i> 1905
4. Stawell Shire* .. ..	7.8.1882	Capital liability liquidated in 1901. Works (tanks) since maintained by Shire without Trust rating
5. Bet Bet Shire .. ..	11.9.1882	Trust abolished 22nd December, 1938, following liquidation of capital liability
6. Avoca United .. ..	27.9.1882	Control of Trust taken over by Government in 1889. Trust abolished 1st January, 1934, by Act No. 4175
7. Numurkah Shire* .. ..	4.10.1882	Portion of district excised in formation of Shepparton Shire Waterworks Trust in 1892. Most of remaining area since absorbed in Murray Valley and North Shepparton Irrigation and Water Supply Districts
8. Wimmera United .. ..	4.10.1882	Portion of district excised in formation of Shire of Wimmera Waterworks Trust, which became Western Wimmera Irrigation and Water Supply Trust in 1888. Wimmera United Waterworks Trust abolished and district transferred to Commission on 1st July, 1908. District now divided between Wimmera United, Upper Wimmera United, and part of Karkaroc Waterworks Districts
9. United Echuca and Waranga	11.10.1882	Portion of district excised in formation of Rodney Irrigation and Water Supply Trust in 1889. Trust abolished and district transferred to Commission on 1st July, 1908, becoming the Deakin Irrigation and Water Supply District, corresponding to present Deakin, Tongala-Stanhope, and part of Rochester Irrigation and Water Supply Districts
10. Lowan Shire* .. ..	26.2.1883	Portion of district excised in formation of Commission's Hindmarsh Waterworks District in 1929.
11. Yarrawonga Shire (Tungamah Shire)*	..	Name altered to Tungamah Shire Waterworks Trust in September, 1893. Portions of district excised in formation of North Shepparton, Katandra, and Murray Valley Irrigation and Water Supply Districts
12. Kara Kara Shire .. ..	2.2.1886	District excised from St. Arnaud Shire Waterworks Trust District. Portion excised in extension of Wimmera United Waterworks District under Commission. Trust abolished 13th February, 1945, following liquidation of capital liability
13. Shepparton Shire* .. ..	19.12.1892	District excised from Shire of Numurkah Waterworks Trust District. Most of remaining area since absorbed in Shepparton and North Shepparton Irrigation and Water Supply Districts

\* These Trusts are still in existence.

A. DISTRICTS ADMINISTERED BY WATERWORKS TRUSTS, PAST AND PRESENT—*continued*.

Name of Waterworks Trust and District.	Date of Constitution.	Remarks.
14. Lawloit (Shire of Kaniva)*	30.6.1896	District excised from Lowan Shire Waterworks Trust District. Name altered to Shire of Kaniva Waterworks Trust on 30th May, 1939
15. Kowrec .. .. .	3.3.1897	Trust abolished 22nd January, 1924, following liquidation of capital liability
16. Wycheproof .. .. .	19.10.1897	Trust abolished and district transferred to Commission on 1st July, 1908. Remains as Wycheproof Waterworks District
17. Birchip .. .. .	18.7.1898	Trust abolished and district transferred to Commission on 1st July, 1908. Remains as Birchip Waterworks District
18. Kerang Shire*	5.12.1900	Portions of district absorbed into Long Lake, Kerang North-West Lakes, Wycheproof, and Normanville Waterworks Districts and Boort Irrigation and Water Supply District
19. Yatchaw .. .. .	1.5.1906	Originally constituted as Irrigation and Water Supply Trust and District in November, 1888. Re-constituted as Waterworks Trust and District by <i>Water Act</i> 1905, reconstituted as Drainage Trust in 1954
20. Western Wimmera .. .. .	1.5.1906	Originally constituted as Irrigation and Water Supply Trust and District in September, 1888. Re-constituted as Waterworks Trust and District by <i>Water Act</i> 1905. Trust abolished and district transferred to Commission on 1st July, 1908. District now divided between Commission's Western Wimmera and Upper Western Wimmera Waterworks Districts

\* These Trusts are still in existence.

## RURAL WATERWORKS DISTRICTS.

## DATES OF CONSTITUTION.

## B. DISTRICTS ADMINISTERED BY THE COMMISSION.

NOTE.—Districts in the table not numbered are ones that are no longer separate, having been incorporated in one or other of the numbered districts as shown.

Name of District.	Date of Constitution.	Remarks.
1. Long Lake .. .. .	1.5.1906	Works commenced by Board of Land and Works in 1902. Constituted a waterworks district and placed under control of Commission by <i>Water Act</i> 1905. Originally supplied from Murray but linked with Wimmera-Mallee channel system in 1918
2. Sea Lake .. .. .	1.5.1906	Works commenced by Board of Land and Works in 1899. Constituted a waterworks district and placed under control of Commission by <i>Water Act</i> 1905
3. Wimmera United .. .. .	1.7.1908	Trust district transferred to Commission. Trust abolished
4. Western Wimmera .. .. .	1.7.1908	Trust district transferred to Commission. Trust abolished
5. Birchip .. .. .	1.7.1908	Trust district transferred to Commission. Trust abolished
6. Wycheproof .. .. .	1.7.1908	Trust district transferred to Commission. Trust abolished
7. Karkarooc .. .. .	1.7.1910	New district
8. Tyntynder .. .. .	1.7.1910	New district. Originally supplied from Murray but linked with Wimmera Mallee channel system in 1918
9. Axe Creek .. .. .	16.8.1910	Portion of Coliban Urban District constituted as a waterworks district
10. Harcourt .. .. .	25.8.1911	Portion of Coliban Urban District constituted as a waterworks district
11. Kerang North-West Lakes .. .. .	1.1.1913	New district
12. Walpeup West .. .. .	1.1.1913	New district. Bores and tanks
Walpeup East .. .. .	1.1.1913	New district. Originally bores and tanks. Incorporated in Tyrrell Waterworks District on 1st July, 1928
13. Tyrrell .. .. .	1.7.1913	New district. Incorporated Walpeup East on 1st July, 1928
Yelta .. .. .	1.7.1913	New district. Incorporated in Millewa Waterworks District on 1st July, 1952
14. Werribee .. .. .	1.7.1914	New district
Carwarp .. .. .	1.7.1916	New district. Incorporated in Millewa Waterworks District on 1st July, 1952
15. Upper Western Wimmera .. .. .	1.7.1921	Excised from Western Wimmera
16. Upper Wimmera United .. .. .	1.7.1921	Excised from Wimmera United

B. DISTRICTS ADMINISTERED BY THE COMMISSION—*continued.*

Name of District.	Date of Constitution.	Remarks.
17. Mornington Peninsula ..	1.7.1922	New district incorporating district of Dandenong Waterworks Trust. Works mainly for urban supplies
18. Millewa .. ..	1.7.1924	New district. Incorporated Millewa Central Waterworks District on 1st July, 1951, and Carwarp, Carwarp Central (excised from Carwarp on 1st July, 1924), and Yelta Waterworks Districts on 1st July, 1952
19. Coreena (Tyntynder North)	1.7.1928	New district. Name changed to Tyntynder North on 1st July, 1951
20. Hindmarsh .. ..	1.7.1929	New district. Excised from Lowan Shire Waterworks Trust District
21. Bellarine Peninsula ..	3.10.1932	New district. Works mainly for urban supplies
22. Tyrrell West .. ..	1.7.1935	Excised from Tyrrell Waterworks District
23. Otway .. ..	12.1.1937	New district. Works mainly for urban supplies
24. Normanville .. ..	22.8.1938	New district. Extended to include Gredgwin pumped area in 1949
25. Loddon .. ..	1.7.1945	} Districts formed by sub-division of the district of the Loddon United Waterworks Trust, which had been placed under control of Commission on 1st May, 1906, but was not abolished until 1st July, 1945
26. East Loddon .. ..	1.7.1945	
27. West Loddon .. ..	1.7.1945	
28. Wychitella .. ..	1.7.1945	New district
29. Ouyen .. ..	1.7.1949	Excised from Tyrrell West Waterworks District

## IRRIGATION TRUSTS IN VICTORIA.

## DATES OF CONSTITUTION, ABOLITION, ETC.

NOTE.—The first legislative provision in Victoria for the constitution of Trusts for the purpose of irrigation was contained in the *Water Conservation Act* 1883, No. 778. This Act was superseded by the comprehensive *Irrigation Act* 1886, No. 898, and later by the consolidating *Water Act* 1890, No. 1156. Thirty-two Trusts for the purpose of irrigation were constituted under these Acts.

In addition the First Mildura Irrigation Trust was separately constituted by the *Mildura Irrigation Trusts Act* 1895, No. 1409.

By the *Water Act* 1905, No. 2016, all the Irrigation Trusts except the First Mildura Irrigation Trust were abolished and their districts placed under the control of the State Rivers and Water Supply Commission.

Irrigation and Water Supply Trust and District.	Date of Constitution.	Effect of <i>Water Act</i> 1905.	Amalgamations, &c., of Districts under Commission.
1. Leaghur and Meering	September, 1885	Trust abolished and District transferred to control of Commission	Incorporated in Boort Irrigation and Water Supply District 1911
2. Tragowel Plains ..	March, 1886 ..	Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district
3. Cohuna .. ..	April, 1886	} Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district
Reconstituted on new basis	April, 1888 ..		
4. Benjeroop and Murra-bit	May, 1886 ..	Trust abolished and District transferred to control of Commission	Incorporated in Koondrook Irrigation and Water Supply District 1911
5. Koondrook .. ..	May, 1886	} Trust abolished and District transferred to control of Commission	Incorporated in Koondrook Irrigation and Water Supply District 1911
Amalgamated with Myall q.v.	1896		
6. Twelve Mile ..	August, 1886 ..	Trust abolished and District transferred to control of Commission	Incorporated in Boort Irrigation and Water Supply District 1911
7. Swan Hill .. ..	September, 1887	Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district
8. North Boort .. ..	September, 1888	Trust abolished and District transferred to control of Commission	Incorporated in Boort Irrigation and Water Supply District 1911
9. East Boort .. ..	September, 1888	Trust abolished and District transferred to control of Commission	Incorporated in Boort Irrigation and Water Supply District 1911
10. Western Wimmera ..	September, 1888	Reconstituted as Waterworks Trust ..	Trust abolished and district transferred to Commission in 1908. Boundaries amended but still separate waterworks district
11. Wandella .. ..	October, 1888 ..	Trust abolished and District transferred to control of Commission	Incorporated in Boort Irrigation and Water Supply District 1911
12. Werribee* .. ..	November, 1888	Trust and District abolished	
13. Yatchaw† .. ..	November, 1888	Reconstituted as Waterworks Trust ..	Became Yatchaw Drainage Trust 1954
14. Marquis Hill ..	December, 1888	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District 1910
15. Torrumbarry North† (only headworks constructed)	March, 1889 ..	Trust and District abolished	
16. Bacchus Marsh ..	April, 1889 ..	Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district

\* These were "Private" Trusts promoted by syndicates formed for the development and sale of irrigated lands.

† The real purpose of these Trusts was drainage and reclamation.

IRRIGATION TRUSTS IN VICTORIA *continued.*

Irrigation and Water Supply Trust and District.	Date of Constitution.	Effect of <i>Water Act</i> 1905.	Amalgamations, &c., of Districts under Commission.
17. Rodney .. ..	April, 1889 ..	Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district
18. Kerang East ..	April, 1889 ..	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District 1910
19. Pine Hills (no works constructed)	April, 1889 ..	Trust and District abolished	
20. Emu Valley ..	April, 1889 ..	Trust abolished and District incorporated in Coliban Urban District under Commission control	
21. Campaspe .. ..	October, 1889 ..	Trust abolished and District transferred to control of Commission	Boundaries amended but still separate district
22. Harcourt .. ..	November, 1889	Trust abolished and District incorporated in Coliban Urban District, under Commission control.	
23. Carrum† .. ..	December, 1889	Reconstituted as Waterworks Trust ..	Placed under Commission control in 1910. Trust abolished in 1941 and District transferred to Commission as "Carrum Drainage District"
24. Lerderderg (no works constructed)	April, 1890 ..	Trust and District abolished	
25. Bairnsdale (irrigation scheme abandoned 1891)	April, 1890 ..	Reconstituted as Waterworks Trust for urban supply only	
26. Myall .. .. Amalgamated with Koondrook	June, 1890 1896 {	Trust abolished and District transferred to control of Commission	Incorporated in Koondrook Irrigation and Water Supply District 1911
27. Dry Lake .. ..	June, 1890 ..	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District, 1942
28. Millewa* (no works constructed)	September, 1890	Trust and District abolished	
29. Dookie (supply for Agriculture College Reserve)	1892 .. ..	Trust and District abolished	
30. Macorna North ..	April, 1893 ..	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District 1910
31. First Mildura (Trust took over works constructed by Chaffey Bros. from 1887 onwards)	December, 1895	This was the only Irrigation Trust not abolished by <i>Water Act</i> 1905	
32. Gunbower West ..	March, 1899 ..	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District, 1910
33. South Kerang ..	September, 1899	Trust abolished and District transferred to control of Commission	Incorporated in Kerang Irrigation and Water Supply District, 1910

\* These were "Private" Trusts promoted by syndicates formed for the development and sale of irrigated lands.

† The real purpose of these Trusts was drainage and reclamation.

## IRRIGATION AND WATER SUPPLY DISTRICTS ADMINISTERED BY STATE RIVERS AND WATER SUPPLY COMMISSION.

## DATES OF CONSTITUTION.

Irrigation and Water Supply District.	Date of Constitution.	Remarks.
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## A. DISTRICTS DEVELOPED ORIGINALLY BY TRUSTS.

1. Tragowel Plains	} These districts were transferred to the Commission from Irrigation Trusts of the same respective names by the <i>Water Act</i> 1905	These districts have retained their identity under Commission administration although district boundaries have been amended from time to time
2. Cohuna*		
3. Swan Hill ..		
4. Bacchus Marsh		
5. Rodney ..		
6. Campaspe ..		
7. Deakin .. ..	2.7.1908	Area taken over in 1908 from United Echuca and Waranga Waterworks Trust
8. Kerang .. ..	1.7.1910	Incorporating districts transferred by the <i>Water Act</i> 1905 from the Gunbower West, Kerang East, South Kerang, Macorna North, and Marquis Hill Irrigation Trusts and administered separately until this amalgamation. The District of the Dry Lake Irrigation Trust which had been similarly transferred was incorporated in Kerang District in 1942

\* Leitchville Irrigations and Water Supply District constituted in 1925, was absorbed into Cohuna District in 1941.

IRRIGATION AND WATER SUPPLY DISTRICTS ADMINISTERED BY STATE RIVERS AND WATER SUPPLY  
COMMISSION--*continued.*

Irrigation and Water Supply District.	Date of Constitution.	Remarks.
A. DISTRICTS DEVELOPED ORIGINALLY BY TRUSTS-- <i>continued.</i>		
9. Boort .. ..	1.7.1911	Incorporating districts transferred by the <i>Water Act</i> 1905 from the East Boort, North Boort, Leaghur and Meering, Wandella, and Twelve Mile Irrigation Trusts and administered separately until this amalgamation
10. Koondrook ..	1.7.1911	Incorporating districts transferred by the <i>Water Act</i> 1905 from the Koondrook and Myall, and Benjeroop and Murrabit Irrigation Trusts and administered separately until this amalgamation
11. Tongala .. ..	19.8.1912	} Excised from Deakin District. Tongala and Stanhope Districts were amalgamated in 1939
Stanhope .. ..	16.7.1918	
B. DISTRICTS DEVELOPED BY COMMISSION.		
12. Merbein† .. ..	1.7.1910	Closer Settlement of Crown Lands. District was originally named White Cliffs, until 1912. Amalgamated with Red Cliffs in 1949
13. Nyah† .. ..	1.7.1910	Closer Settlement of Crown Lands
14. Shepparton ..	14.9.1910	Closer Settlement of acquired lands
15. Rochester .. ..	1.7.1912	Closer Settlement of acquired lands. Incorporated Bamawm and Nanneella Irrigation and Water Supply Districts which had been constituted on 1st July, 1911, and portions excised from the Campaspe and Deakin Irrigation and Water Supply Districts
16. Dingee .. ..	1.7.1913	Closer Settlement of acquired lands
17. Werribee .. ..	1.7.1917	Closer Settlement of acquired lands
18. Tresco .. ..	1.1.1922	} Private irrigation schemes taken over at request of land-owners
19. Mystic Park ..	1.1.1922	
20. Red Cliffs .. ..	1.12.1922	Closer Settlement of acquired lands. Amalgamated with Merbein in 1949
21. South Shepparton ..	1.7.1924	Supplied from main channel constructed to serve Shepparton
22. Third Lake .. ..	1.10.1925	} Extensions to Torrumbarry System supplied, like Mystic Park, and Tresco, via Kerang North-West Lakes
23. Fish Point .. ..	1.8.1926	
24. Maffra-Sale .. ..	1.10.1926	Originally constituted as two separate districts. Amalgamated in 1934
25. Katandra .. ..	1.10.1928	} Closer Settlement of acquired lands
26. Calivil .. ..	1.10.1928	
27. North Shepparton ..	1.10.1928	
28. Murray Valley ..	17.10.1938	Gravitational supply from Murray River obtained by construction of Yarrawonga Weir. Part of district acquired and developed for Soldier Settlement
29. Robinvale .. ..	31.8.1948	Soldier Settlement on Crown and acquired lands
30. Central Gippsland ..	13.12.1948	Part of district acquired and developed for Soldier Settlement

† White Cliffs (Merbein) and Nyah were originally constituted as Irrigation Areas under the *Murray Settlements Act* 1907, No. 2123, but were re-named as Irrigation and Water Supply Districts by the *Water Act* 1937, No. 4513, which repealed the provisions of the former Act.

## APPENDIX J.

## THE STATE RIVERS AND WATER SUPPLY COMMISSION.

Head Office      ..      ..      100-110 Exhibition-street, Melbourne, C.1.  
 Branch Office    ..      ..      31 Flinders-lane, Melbourne, C.1.

L. R. EAST, C.B.E.,  
 M.C.E., M.I.C.E., M.ASCE., M.I.E., Aust.,  
 Chairman.

H. W. McCay,  
 B.C.E., M.I.E. Aust., M.I.W.E.,  
 Deputy Chairman.

J. A. Aird,  
 B.S.Agr. (Cal.), B.Agr.Sc., Dip.Com.,  
 Commissioner.

## PRINCIPAL OFFICERS.

*Secretarial.*

Secretary      ..      ..      ..      ..      L. DUGGAN, J.P.  
 Assistant Secretary    ..      ..      ..      ..      E. BROWN, J.P.

*Finance.*

Chief Accountant ..      ..      ..      ..      L. A. KING, A.A.S.A.  
 Assistant Chief Accountant..      ..      ..      ..      C. P. HAY, Dip. Com.

*General Administration.*

Staff and Industrial Officer      ..      ..      ..      G. F. PEDLOW, J.P.  
 Chief Stores Officer      ..      ..      ..      L. J. FALCONER, A.A.S.A., A.C.A.A.  
 Chief Clerk      ..      ..      ..      J. R. MOORE  
 Chief Estates Officer      ..      ..      ..      J. F. HORWOOD  
 Chief Valuer      ..      ..      ..      E. R. INGLIS, L.S., A.C.I.V.  
 Records Officer      ..      ..      ..      I. LEE (Acting)  
 Publications and Library      ..      ..      ..      D. A. MCCOY

*Engineering and Associated Branches.*

Chief Designing Engineer      ..      ..      ..      R. G. KNIGHT, M.C., M.C.E., M.I.C.E., M.I.E. Aust.  
 Assistant Chief Designing Engineer      ..      ..      ..      R. A. HORSFALL, M.B.E., M.C.E., B.Mech.E., A.M.I.E. Aust.  
 Chief Constructional Engineer      ..      ..      ..      C. L. SANDERS, L.S., A.M.I.C.E., M.ASCE.  
 Assistant Chief Constructional Engineer      ..      ..      ..      C. A. R. EVANS, B.E., Dip.P.A., A.M.I.E. Aust. (Acting)  
 Chief Mechanical Engineer      ..      ..      ..      T. S. MOFFATT, B.E.E., Dip.Mech.E., A.M.I.E. Aust.  
 Assistant Chief Mechanical Engineer      ..      ..      ..      J. E. DALE, A.M.I.Mech.E., A.M.I.Elec.E.  
 Chief Surveyor      ..      ..      ..      R. G. MASON, L.S., M.I.S. (Aust.)  
 Assistant Chief Surveyor      ..      ..      ..      H. C. W. RIGGS, L.S., M.I.S. (Aust.)  
 Chief Irrigation Officer      ..      ..      ..      A. L. TISDALL, M.Agr.Sc.  
 Superintendent of Water Distribution      ..      ..      ..      N. G. FERGUSON

## MAJOR WORKS AND PROJECTS.

Project.	Title.	Officer.
Eildon and Cairn Curran ..	Chief Engineer ..	E. D. SHAW, M.C.E., M.I.C.E., M.I.E. Aust.
	Assistant Chief Engineer ..	V. G. SWANSON, B.C.E., M.ASCE., M.I.E. Aust.
	Executive Engineer ..	N. M. WORNER, B.C.E., A.M.I.E. Aust.
	Works Accountant ..	F. F. BLOOMFIELD, A.A.S.A.
Central Gippsland .. ..	Executive Engineer ..	J. H. STANDISH, B.C.E., A.M.I.E. Aust.
	Works Accountant ..	H. W. CAFFREY
Goulburn-Waranga Main Channel	Executive Engineer ..	F. M. SHAW, B.C.E., A.M.I.E. Aust.
	Works Accountant ..	L. B. HODGE
Murray Valley Irrigation Project	Executive Engineer ..	H. W. LEA, A.C.S.E. (N.Z.), A.M.I.E. Aust.
	Works Accountant ..	R. F. SWANELL
Tarago River Diversion Works ..	Executive Engineer ..	J. L. MAVER, M.C.E., A.M.I.E. Aust., M.S.E.
	Works Accountant ..	R. A. JACKSON
Central Plant Workshops, Bendigo	Manager .. ..	R. A. MYERS
	Accountant .. ..	T. A. CONTE, A.A.S.A., A.C.I.S., L.C.A.
Tallangatta Township Removal..	Executive Engineer ..	R. G. WEBSTER, B.C.E., A.M.I.E. Aust.
	Works Accountant ..	D. J. LENNE, B.Com., A.A.S.A., L.C.A.

## ENGINEERING AND ADMINISTRATIVE DIVISIONS.

Wimmera-Mallee .. ..	Senior Divisional Engineer	L. N. WELCH, A.M.I.E. Aust.
Wimmera-Mallee Waterworks ..	Divisional Engineer ..	N. F. I. GODKIN, A.M.I.E. Aust.
Mallee Irrigation .. ..	Divisional Engineer ..	D. CLARK, Dip.Elec.E., Dip.Mech.E., A.M.I.E. Aust.
Irrigation .. ..	Senior Divisional Engineer	H. E. HARDING, B.Sc. (Cal.)
Loddon .. ..	Divisional Engineer ..	F. ROGERSON, A.M.I.E. Aust.
Goulburn .. ..	Divisional Engineer ..	J. W. MOORE, A.M.I.E. Aust.
Gippsland and Southern	Divisional Engineer ..	S. W. ROGERSON, A.M.I.E. Aust.
Miscellaneous —		
Main Urban Supplies ..	Divisional Engineer ..	E. McD. WALKER, B.C.E., A.M.I.E. Aust.
Waterworks Trusts and Sewerage Authorities	Divisional Engineer ..	R. H. RICHMOND, B.C.E., A.M.I.E. Aust.
Rivers and Streams .. ..	Divisional Engineer ..	H. G. STROM, B.C.E., M.I.E. Aust.

## IRRIGATION DISTRICTS.

Administrative Centre.	District.	Title.	Officer.
<i>Goulburn System.</i>			
Shepparton ..	Katandra ..	District Engineer ..	M. E. GILLARD, B.C.E., A.M.I.E. Aust.
	North Shepparton	District Accounting Officer	E. D. G. CAMERON
	Shepparton		
	South Shepparton		
Tatura ..	Rodney ..	District Engineer ..	W. E. BROMFIELD, B.C.E.
		District Accounting Officer	O. E. Roder
Tongala ..	Tongala-Stanhope	District Engineer ..	G. S. GORDON, B.C.E.
	Deakin ..	District Accounting Officer	A. T. HANSFORD
Rochester ..	Rochester ..	District Officer ..	G. V. ADAMS
	Campaspe ..	District Accounting Officer	B. C. McCANNON
Pyramid ..	Dingee ..	District Engineer ..	H. E. KILMINSTER, B.E., A.M.I.E. Aust.
	Calivil		
	Tragowel Plains ..	District Accounting Officer	K. E. DANIEL
Boort ..	Boort ..	District Engineer ..	L. J. JANSEN, Dip.C.E.
		District Accounting Officer	C. L. SINN

*River Murray System.**(a) Torrumbarry Weir.*

Cohuna ..	Cohuna ..	District Engineer ..	C. G. McCoy, Dip.C.E., A.M.I.E. Aust.
		District Accounting Officer	Vacant
Kerang ..	Kerang ..	District Engineer ..	R. R. McDOWELL, B.C.E.
	Koondrook	District Accounting Officer	A. G. BOYD
	Mystic Park		
Swan Hill ..	Swan Hill ..	District Engineer ..	J. R. TYSON, B.Sc. (Eng.)
	Fish Point ..	Mechanical Engineer ..	E. V. B. PATZL (Tresco Pumping Station)
	Tresco ..	District Accounting Officer	H. K. BEARE



## IRRIGATION DISTRICTS—continued.

Administrative Centre.	District.	Title.	Officer.
<i>River Murray System—continued.</i>			
<i>(b) Yarrawonga Weir.</i>			
Cobram ..	Murray Valley ..	District Engineer ..	J. R. DUNNE, B.C.E.
		District Accounting Officer	T. P. GRIGG, A.A.S.A., A.C.I.S.
<i>(c) Pumping.</i>			
Nyah West ..	Nyah ..	District Officer ..	W. H. E. BENTLEY
		Mechanical Engineer ..	M. MILLER, M.I.Mar.E. (Lond.) (Nyah Pumping Station)
		District Accounting Officer	S. W. R. THRELFALL
Robinvale ..	Robinvale ..	District Inspector ..	H. C. POLLOCK
		Mechanical Engineer ..	Vacant (Robinvale Pumping Station)
		District Accounting Officer	K. J. HODSON
Red Cliffs ..	Red Cliffs ..	District Engineer ..	R. DRUMMOND, B.C.E., A.M.I.E. Aust.
		Mechanical Engineer ..	E. C. G. LARSEN (Red Cliffs and Merbein Pumping Stations)
		District Accounting Officer	A. W. HAYES, F.A.S.A.
	Merbein ..	District Officer ..	L. C. ANDERS
		District Accounting Officer	A. S. HINKS
<i>Gippsland and Southern Systems.</i>			
Bacchus Marsh	Bacchus Marsh ..	District Officer ..	R. T. SQUIRE
		District Accounting Officer	W. D'ARCY
Werribee ..	Werribee ..	District Officer ..	R. T. SQUIRE
		District Accounting Officer	P. CARRIGAN
Maffra ..	Maffra-Sale ..	District Engineer ..	C. G. DETHRIDGE, A.M.I.E. Aust.
		District Accounting Officer	T. J. WEBSTER, A.A.S.A.
<i>Rural Waterworks Districts.</i>			
Birchip ..	Birchip ..	District Engineer ..	G. R. UPSTILL, L.S.
	Sea Lake ..	District Accounting Officer	E. P. WATSON
	Wycheproof		
Charlton ..	Wychitella ..	District Inspector ..	R. M. JOHNSTON
		District Accounting Officer	M. P. REID
Hopetoun ..	Karkaroc ..	District Officer ..	A. M. MORGAN
	Tyrrell West ..	District Accounting Officer	W. A. RICHARDS, B.Com.
Horsham ..	Western Wimmera ..	District Engineer ..	L. K. RICHARDSON, Dip.C.E., A.M.I.E. Aust.
	Upper Western Wimmera	District Accounting Officer	A. A. DOUGLAS
	Hindmarsh		
Murtoa ..	Wimmera United	District Engineer ..	A. C. PAUL, Dip.C.E.
	Upper Wimmera	District Accounting Officer	S. G. E. GRAHAM
	United		
Ouyen ..	Tyrrell ..	District Officer ..	C. V. FLETCHER
	Walpeup West ..	District Accounting Officer	R. W. SIMPSON
	Coreena		
Werrimull ..	Millewa ..	District Inspector ..	A. C. ANNAND
	Millewa Central ..	Mechanical Engineer ..	W. E. FOREMAN (Millewa Pumping Station)
	Carwarp		
	Carwarp Central		
Nyah West ..	Long Lake ..	District Officer ..	W. H. E. BENTLEY
	Tyntynder ..	Mechanical Engineer ..	M. MILLER, M.I.Mar.E. (Lond.) (Nyah Pumping Station)
		District Accounting Officer	S. W. R. THRELFALL
Red Cliffs ..	Yelta ..	District Engineer ..	R. DRUMMOND, B.C.E., A.M.I.E. Aust.
		Mechanical Engineer ..	E. C. G. LARSEN (Red Cliffs and Merbein Pumping Stations)
		District Accounting Officer	A. W. HAYES, F.A.S.A.
		District Officer ..	L. C. ANDERS (Merbein)
		District Accounting Officer	A. S. HINKS (Merbein)
Kerang ..	Kerang North-West Lakes	District Engineer ..	R. R. McDOWELL, B.C.E.
		District Accounting Officer	A. G. BOYD
Pyramid ..	Loddon ..	District Engineer ..	H. E. KILMINSTER, B.E., A.M.I.E. Aust.
	East Loddon ..	District Accounting Officer	K. E. DANIEL
Boort ..	West Loddon ..	District Engineer ..	L. J. JANSEN, Dip.C.E.
	Normanville ..	District Accounting Officer	C. L. SINN

IRRIGATION DISTRICTS—*continued.*

## URBAN CENTRES.

Administrative Centre.	District.				Title.	Officer.
<i>Coliban System.</i>						
Bendigo ..	..	..	..	..	Executive Engineer ..	H. L. CREDLIN, A.M.I.E. Aust.
					District Accounting Officer	J. W. J. GRIFFITHS, F.A.S.A., F.C.I.S., L.C.A.
Castlemaine ..	..	..	..	..	District Accounting Officer	Vacant
<i>Mornington Peninsula System.</i>						
Frankston ..	..	..	..	..	Executive Engineer ..	B. W. ROMBACH-SHARP, B.C.E., A.M.I.E. Aust.
					District Accounting Officer	L. W. L. ALLNUTT
Chelsea ..	..	..	..	..	District Accounting Officer	T. A. ROBERTS
Dandenong ..	..	..	..	..	District Accounting Officer	R. Y. ALLINSON
Wonthaggi ..	..	..	..	..	District Accounting Officer	G. N. TURNER
<i>Otway and Bellarine Peninsula System.</i>						
Geelong ..	..	..	..	..	District Engineer ..	M. L. KING, B.C.E.
					District Accounting Officer	E. BAXTER
Camperdown ..	..	..	..	..	District Accounting Officer	A. F. BRAY
<i>Flood Protection Districts.</i>						
Koo-wee-rup	Koo-wee-rup	and			District Officer ..	A. GRANTLEY
	Cardinia				District Accounting Officer	H. E. CURNICK

STATE RIVERS AND WATER SUPPLY COMMISSION.

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CHAIRMEN AND COMMISSIONERS  
1955



**Lewis Ronald East, C.B.E.**  
M.C.E., M.I.C.E., M.ASCE., M.I.E.Aust.  
*Commissioner : 1935-1936*  
*Chairman : 1936—*



**Heywood Waring McCay**  
B.C.E., M.I.E.Aust., M.I.W.E.  
*Deputy Chairman : 1943—*

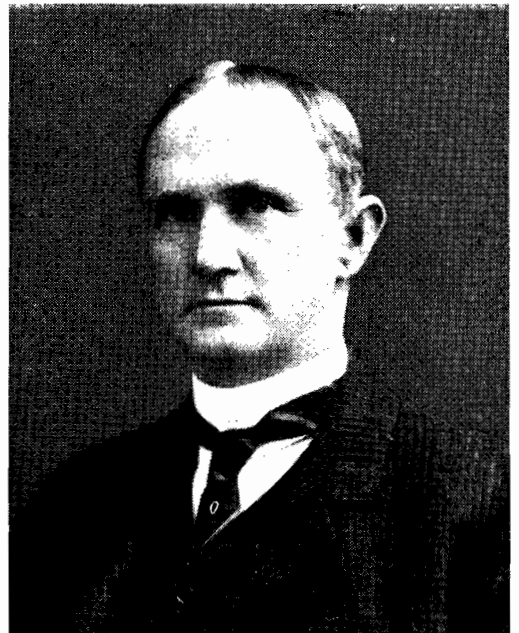


**John Allan Aird**  
B.S.Agr.(Cal.), B.Agr.Sc., Dip. Com.  
*Commissioner : 1949—*

CHAIRMEN  
1906-1936



**Stuart Murray**  
*Chairman : 1906-1907*



**Elwood Mead**  
*Chairman : 1907-1915*



**William Cattnach**  
*Commissioner : 1906-1915*  
*Chairman : 1915-1932*

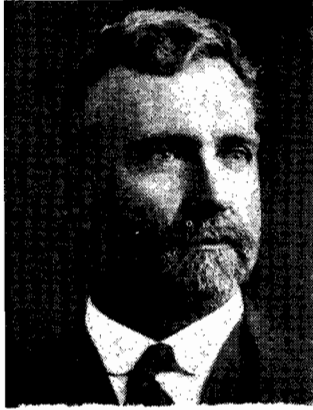


**Richard Henry Horsfield**  
*Commissioner : 1926-1933*  
*Chairman : 1933-1936*

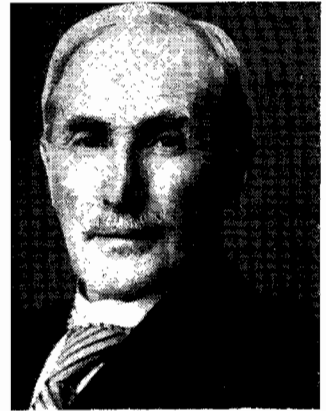
COMMISSIONERS, ACTING COMMISSIONERS AND SECRETARIES SINCE 1906



**George Garson**  
Commissioner : 1906-1911



**John Stewart Dethridge**  
Commissioner : 1911-1926



**Ebenezer Shaw**  
Commissioner : 1915-1932



**Alfred Stephen Kenyon**  
Commissioner : 1932-1935



**William Trevean**  
Commissioner : 1933-1937



**William Alexander Robertson**  
Commissioner : 1936-1943  
Deputy Chairman : 1939-1943



**Harold Hanslow**  
Commissioner : 1938-1949



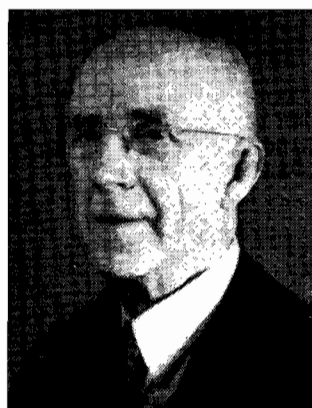
**Patrick John O'Malley**  
Commissioner : 1937-1938  
(Secretary : 1928-1940)



**George Laing**  
Acting Commissioner : 1927



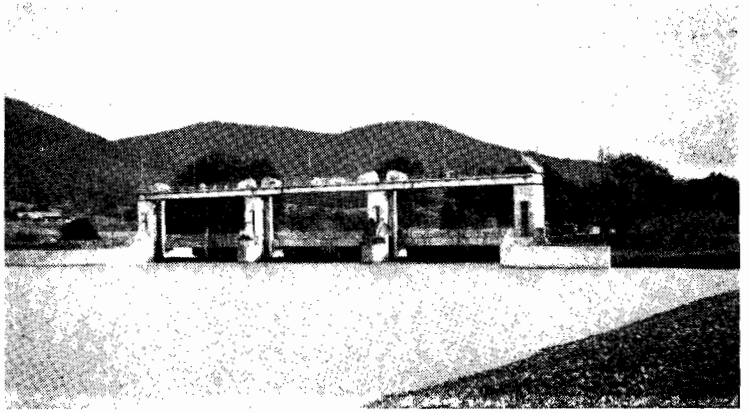
**Matthew Nally**  
Acting Secretary :  
1906-1908  
Secretary :  
1908-1928



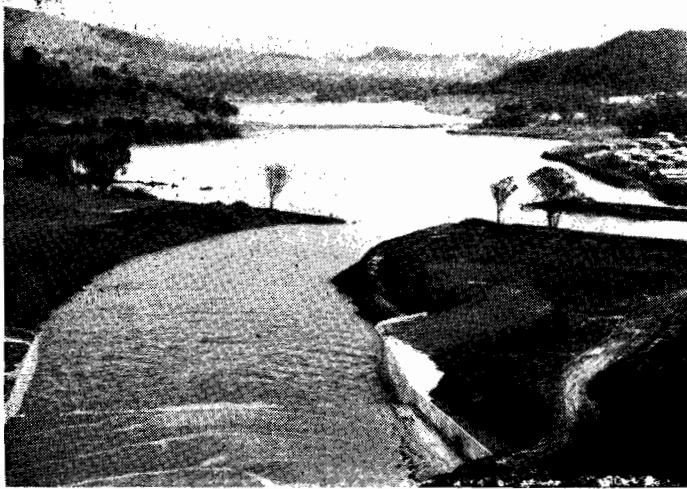
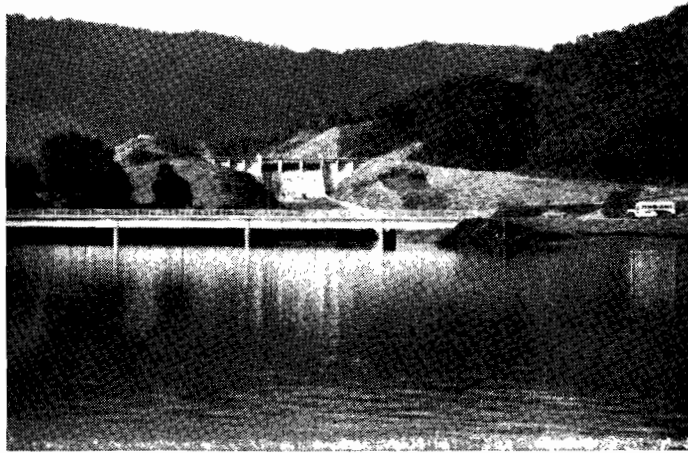
**Laurence Duggan**  
Acting  
Commissioner :  
1952.  
Secretary : 1940-

### Big Eildon Project.

**Pondage Weir.**—Concrete structure 196 feet long and 45 feet in height, with 3 electrically operated gates 65 feet 6 inches wide by 20 feet high, regulates the flow of water released from Eildon Dam down the Goulburn River. The weir is about 2 miles downstream from the dam.



**Pondage Lake.**—The lake formed behind the pondage weir extends upstream to just below the dam itself. The road bridge giving access to Eildon township and Big Eildon spillway are also shown.

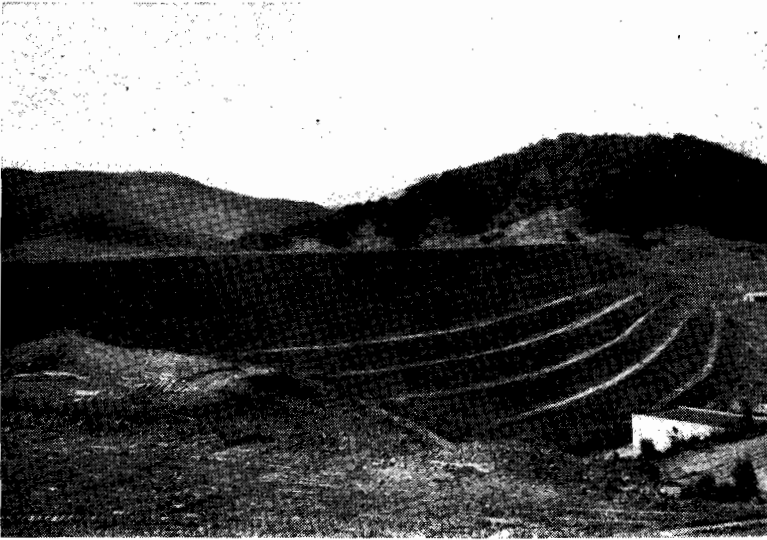


**Spillway.**—View of the lower portion of the spillway, dissipator basin, outlet channel and pondage lake. Eildon township is on the right.

**Final Stage.**—Construction work on the Big Eildon project is now in its final stage. Picture shows a Marion shovel and Euclid truck working in the outlet channel from the power house. Big Eildon Dam is in the background.

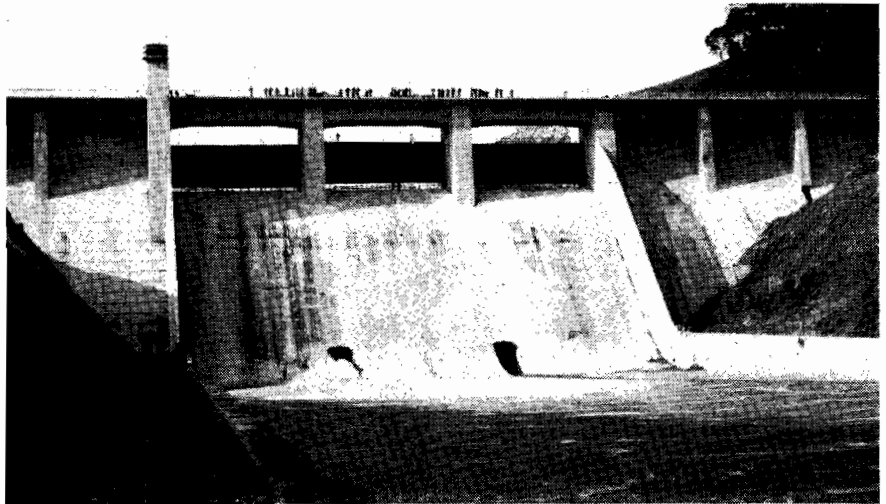




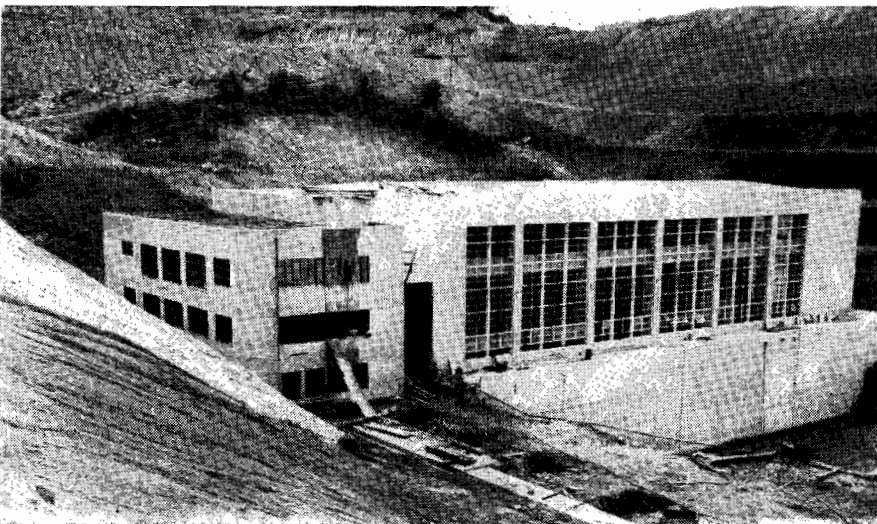
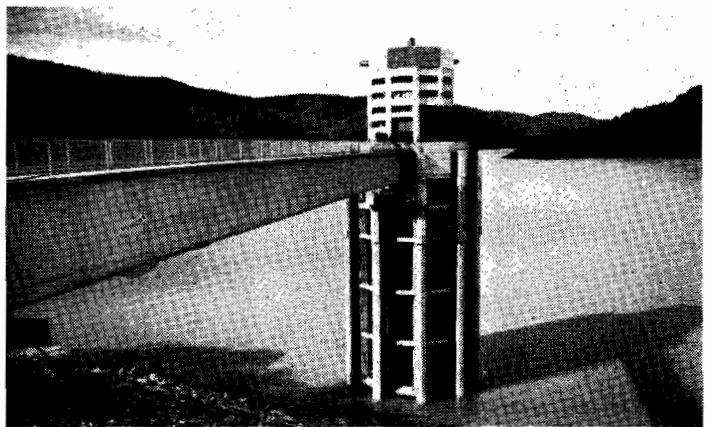


**Big Eildon Dam.**—The embankment is 260 feet high, 3,000 feet long, over 1,000 feet wide at the base, 30 feet wide at the crest, and contains 13,300,000 cubic yards of earth and rock. The new dam will have a storage capacity of 2,750,000 acre-feet, and will raise the full supply level 127 feet above the previous level.

**Big Eildon Spillway.**—The overall height of the mass concrete spillway structure is 144 feet, with the spillway crest level 100 feet above foundations. Three gates, each 65 feet 6 inches by 20 feet, have been installed on the crest. The structure contains 117,000 cubic yards of concrete and is 196 feet in length.



**Outlet Tower.**—Reinforced concrete outlet tower 235 feet high and steel access bridge 168 feet in length from Mt. Sugarloaf. The tower houses a hoist-operated cylinder gate 25 feet in diameter and ten externally-fitted bulkhead sliding gates between supporting piers at its base over the 23-ft. diameter, 1,400-ft. long steel-lined tunnel to the powerhouse.



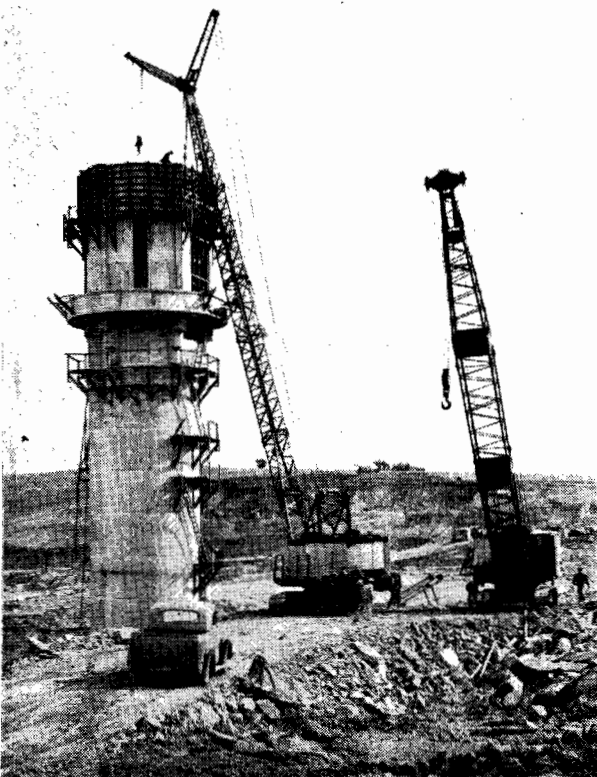
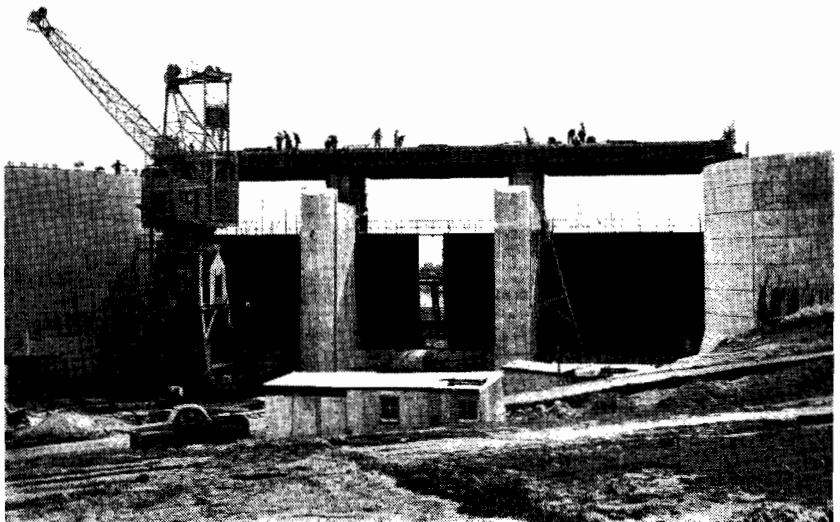
**Powerhouse.**—Installation of machines by the State Electricity Commission is still in progress, but eventually the Eildon power station, will have a generating capacity of 135,000 kW, harnessing water which will later be distributed through the Goulburn irrigation system.



Cairn Curran Dam.

Above: Cairn Curran Dam under construction, showing portion of the main embankment and irrigation outlet with the spillway structure at left. The main embankment will be 2,300 feet long and 120 feet above foundation level. Storage capacity will be 120,000 acre-feet.

Right: Spillway under construction, with installation of electrically-operated radial gates in progress.



Above: Downstream view of radial gates installed in spillway. The maximum depth of water impounded by the dam will be 92 feet.

Left: Outlet tower under construction over the upstream end of the irrigation outlet culvert. The tower will be 135 feet high and has an external diameter of 19 feet.





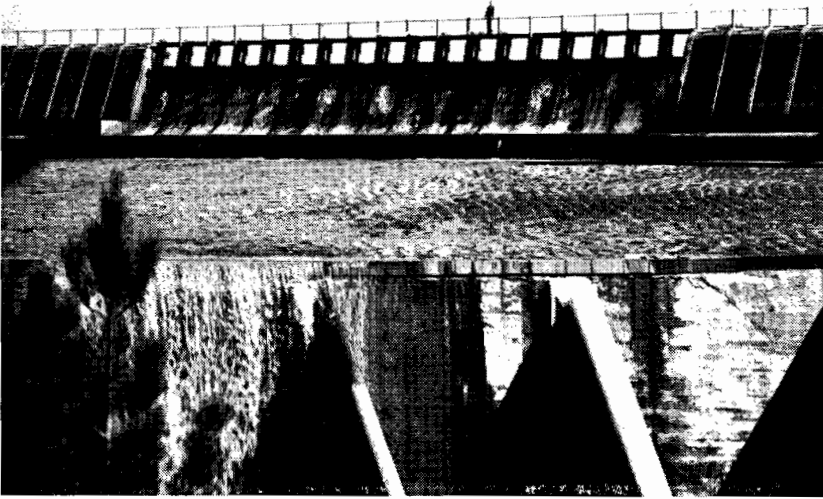
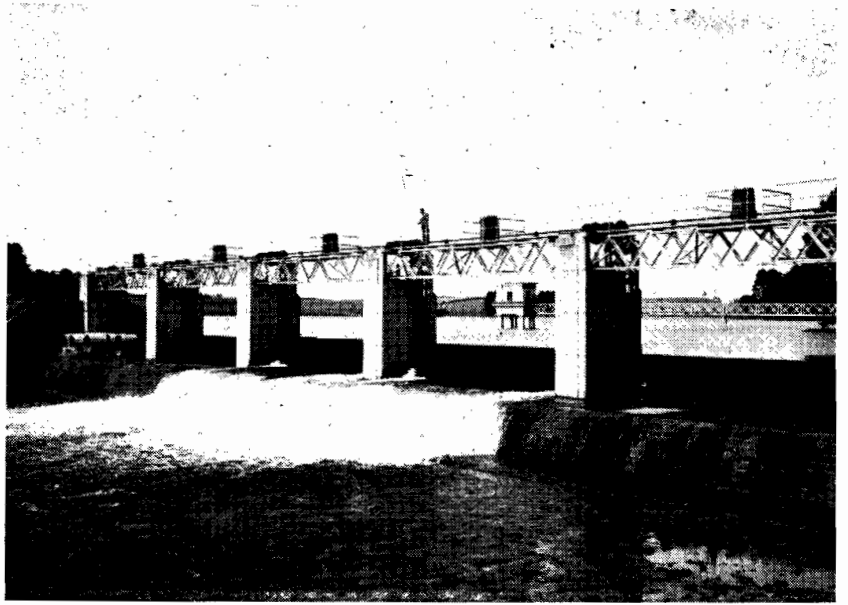
Goulburn Weir, on the Goulburn River near Nagambie, diverts water released from Eildon Reservoir to the East Goulburn Main Channel on one side of the river, and to Waranga Reservoir on the other. The weir is 550 feet long and is 57 feet in height. The structure is of mass concrete faced with granite masonry, and is fitted with flood control gates. Construction of the weir commenced in 1887 and it was thus one of the first water supply works undertaken in Victoria.

Goulburn-Waranga First Channel, between the Goulburn Weir and Waranga Reservoir, was completed in 1891. It has a capacity of 1,723 cusecs and is 23½ miles in length. Water delivered to Waranga Reservoir is distributed through the Waranga Western Main Channel to the Tongala, Stanhope, Deakin, Rochester, Dingee, Calivil, Tragowel Plains, and Boort irrigation districts.



The Goulburn - Waranga Second Channel now under construction will have a capacity of 1,500 cusecs and a length of 14½ miles. Its construction involves excavation of 5,032,000 cubic yards of earth, the cut varying from 7 to 63 feet in depth and from 20 to 48 feet in bedwidth. The new channel will permit full advantage to be taken of increased water supplies from Eildon Reservoir.

Malmsbury Reservoir.—Concrete spillway of Malmsbury Dam on the Coliban River. The dam, an earth embankment with a clay core wall, is 2,098 feet in length and has a maximum height of 80 feet. Reservoir capacity is 14,400 acre-feet. The Coliban storages supply water to the city of Bendigo and surrounding towns, and for irrigation and mining.

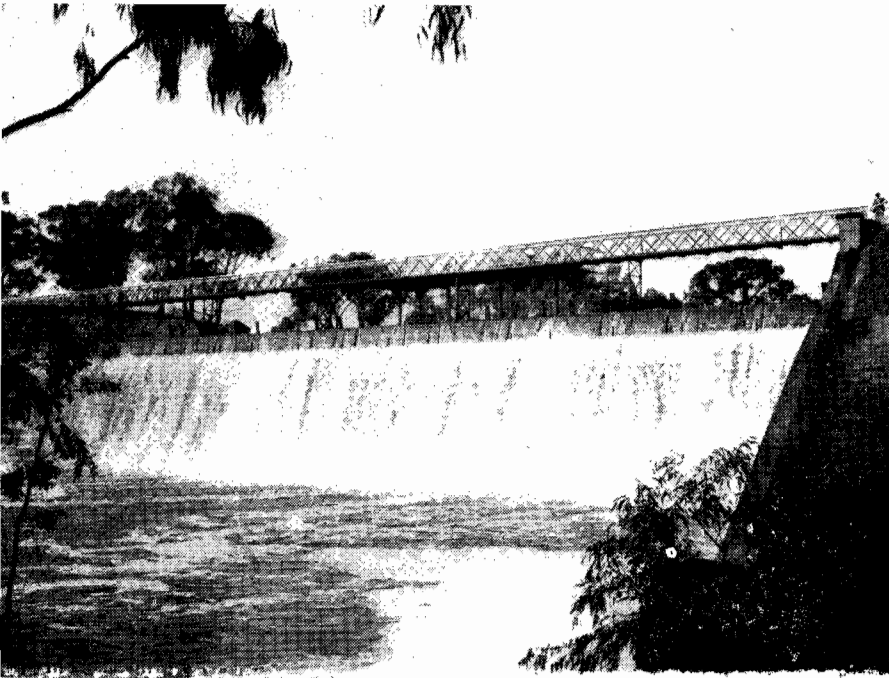


Upper Coliban Dam.—The embankment of this dam is of earth with a clay core wall, and has a maximum height of 93 feet. The syphonic spillway, shown here, is the only one of its type constructed in Victoria. The overall length of the dam is 1,283 feet. The reservoir storage capacity is 25,700 acre-feet.



Lauriston Dam.—This concrete massive buttress dam with rockfill end embankments on the Coliban River has a total length of 800 feet and a height of 116 feet. The reservoir has a capacity of 16,000 acre-feet of water, which is reserved for the maintenance of supplies in recurrent low-rainfall periods in the Coliban system.

Yarrowonga Weir, on the River Murray, diverts water to the Murray Valley Irrigation District in Victoria and to large areas in New South Wales. The weir is 380 feet in length and 90 feet in height. A similar structure 99 feet in length regulates flood flows through an overflow channel on the N.S.W. bank of the river.

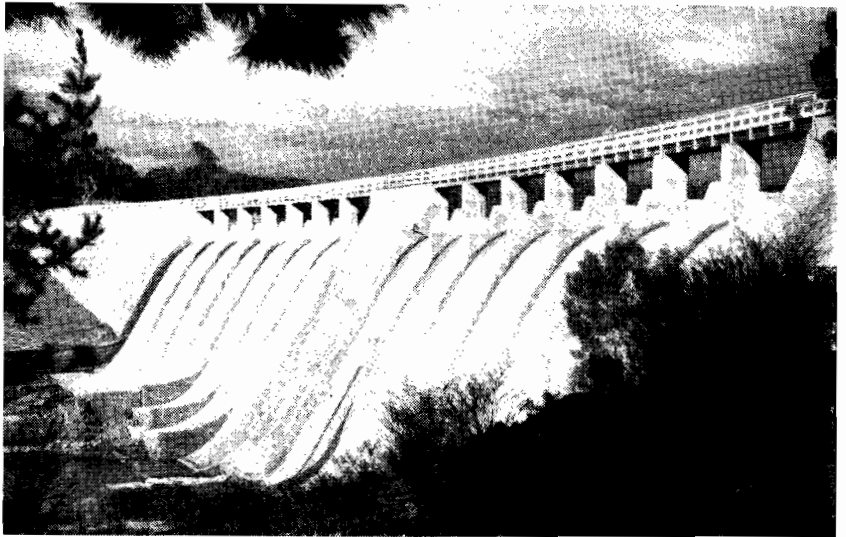


Laanecoorie Weir on the Loddon River consists of an earth embankment and masonry spillway fitted with flood control gates. It has a length of 922 feet and a maximum height of 71 feet. The storage of 6,300 acre-feet of water supplements supplies for irrigation and domestic and stock purposes in Northern Victoria.

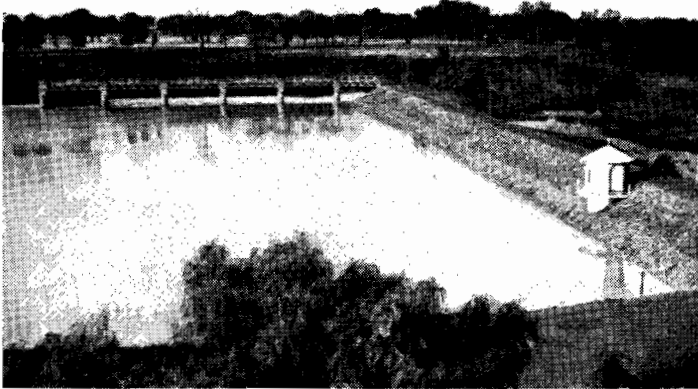
Green Lake Reservoir, with a capacity of 6,600 acre-feet, is one of the storages which supplies water to irrigate areas totalling 7,000 acres near Horsham. The reservoir is connected to the Wimmera-Mallee Domestic and Stock Supply System which supplies water through 6,600 miles of channels to an area of 11,000 square miles.



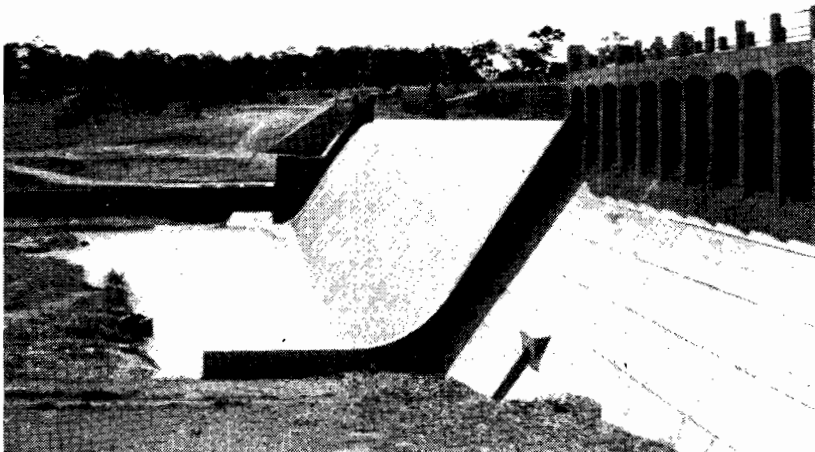
Glenmaggie Dam, on the Macalister River in Central Gippsland, is a concrete structure 961 feet in length impounding 106,000 acre-feet of water. This water is supplied for irrigation to the Maffra-Sale and the newly developed Central Gippsland Irrigation Districts. The capacity of the reservoir is to be increased to 150,000 acre-feet by installation of sector gates on the spillway to raise the maximum water level by 10 feet.



Pyke's Creek Reservoir, on the Werribee River, has a capacity of 19,400 acre-feet and supplies the Bacchus Marsh and Werribee Irrigation Districts. The embankment of earth with a clay puddle core wall is 1,270 feet long and 128 feet high. The spillway section is 290 feet long.

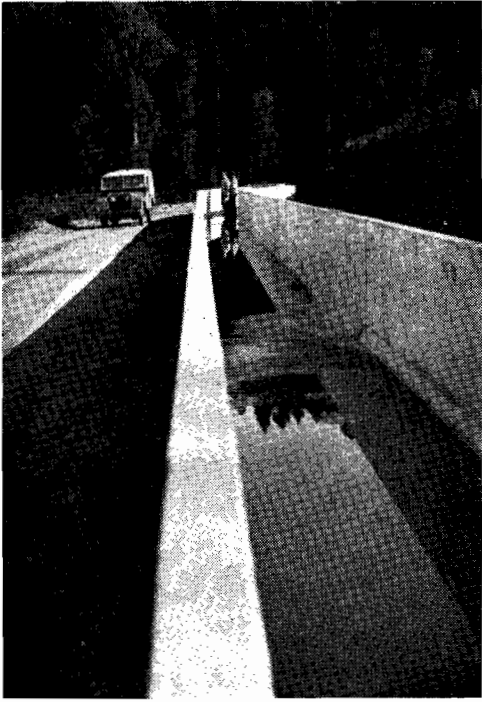


Melton Reservoir, on the Werribee River, has a capacity of 15,500 acre-feet and supplies the Werribee Irrigation District. The dam is 986 feet long and 116 feet high, consisting of rock with a concrete core wall. Five gates, each 40 feet by 5 feet, are installed in the concrete spillway.



Rocklands Dam impounds 272,000 acre-feet of water on the Glenelg River for use in the Wimmera-Mallee Domestic and Stock System. The dam is a concrete structure 1,637 feet long and 77 feet high. The central spillway section is 600 feet long.





Tarago River Diversion Works.

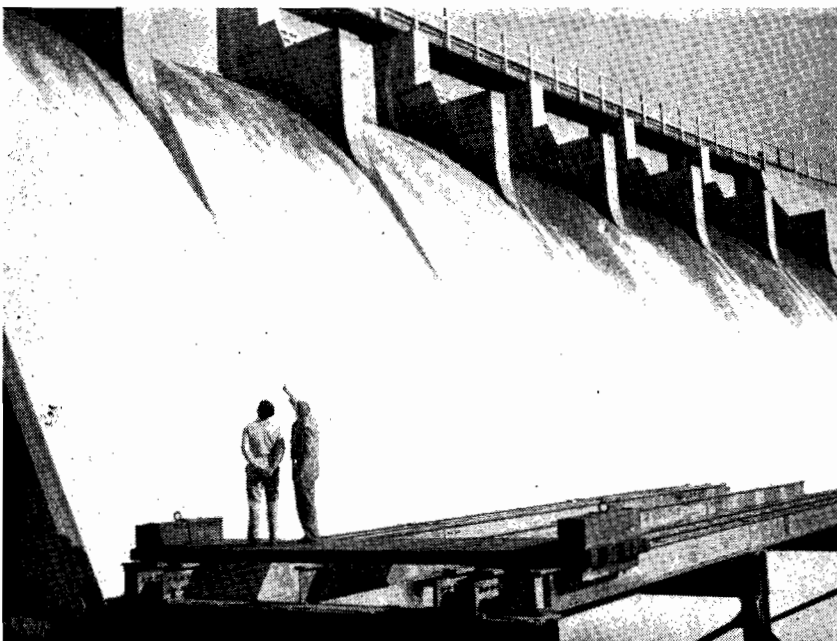
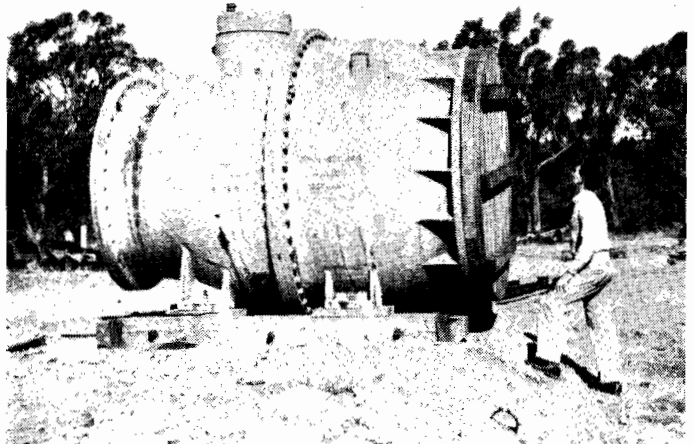
*Left :* Reinforced-concrete bench flume, part of the works now being constructed to carry water from the Tarago River into the Mornington Peninsula System. With an increase from 12,000 to 25,000 tenements served by the Mornington Peninsula System in the last nine years, the water resources of the system have been greatly overtaxed. The works under construction will supplement the existing supply by 8.6 million gallons per day, and provision is being made for this to be doubled when required.



*Right.*—Reinforced concrete pipe siphon carried over creek on pre-cast concrete bridge structure. The Tarago Main Race includes  $7\frac{1}{2}$  miles of siphons and a tunnel 2 miles long in its total length of  $16\frac{1}{2}$  miles.

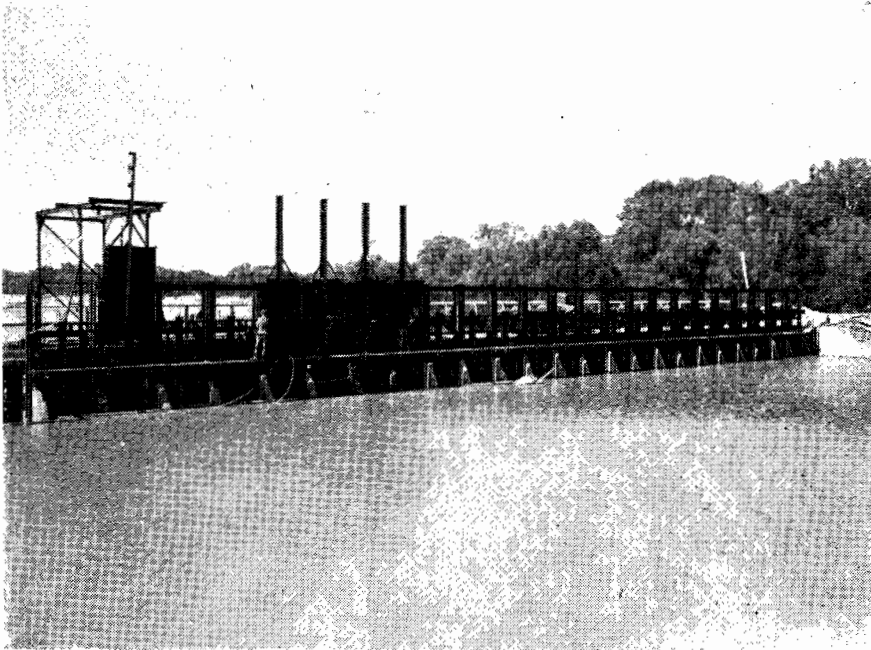
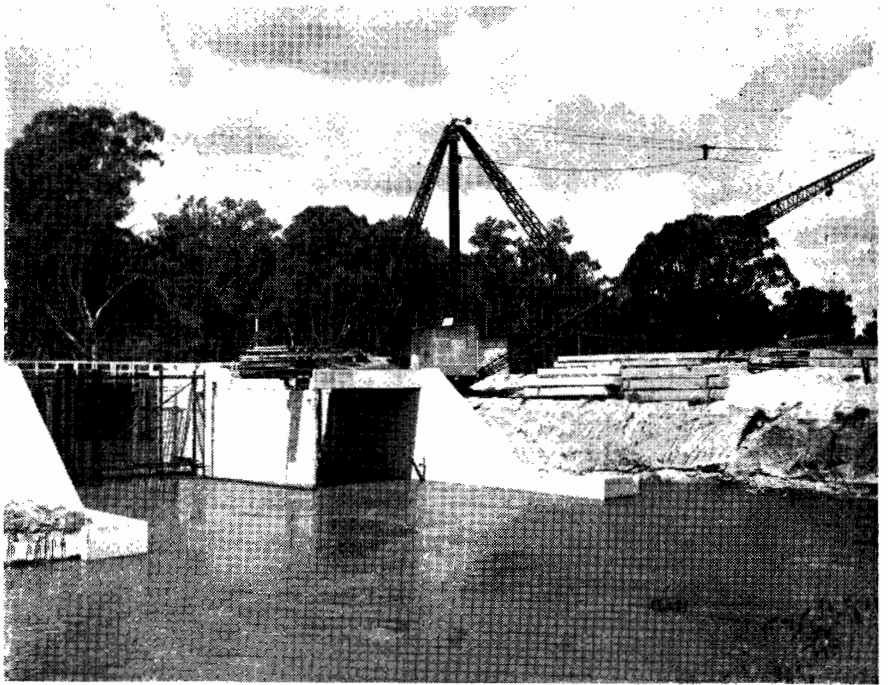
Glenmaggie Reservoir.

*Right :* One of two 59-in. diameter annular slide valves for installation in the new southern outlet at Glenmaggie Reservoir.



*Left :* Portion of trestleway for a travelling luffing gantry crane erected at the downstream face of Glenmaggie Dam prior to construction and installation of new outlet works.

**National Channel Headworks Regulator.**—Combined road bridge and regulator under construction on the National Channel (Torrumbarry System). The new regulator, with three gate openings each 12 feet by 15 feet, will replace an old timber structure built in 1889.



**Loddon Weir.**—Vertical lift steel gates being installed on the Loddon Weir, replacing wooden drop-bars which had been in use previously to control diversions at the crossing of the Loddon River and the Waranga-Western Channel. Each of the 28 new gates, which are operated in pairs, are 10 feet high by 6 feet wide.

**Macorna Channel Flume.**—Pre-cast reinforced concrete elevated flume on the Macorna Channel at the Pyramid Creek crossing. The flume is 30 feet wide, 5 feet 3 inches deep and 223 feet long, and has a capacity of 350 cusecs. It is supported on piers and beams at 9-ft. intervals. The L-sections and slabs used in construction were pre-cast at the Central Plant Workshops, Bendigo, and transported by road to the works site.





STATE RIVERS AND WATER SUPPLY COMMISSION

# MAP OF VICTORIA

SHOWING  
COUNTRY WATER CONSERVATION WORKS  
FOR  
IRRIGATION,  
DOMESTIC AND  
STOCK SUPPLY SYSTEMS  
1952



**REFERENCE**

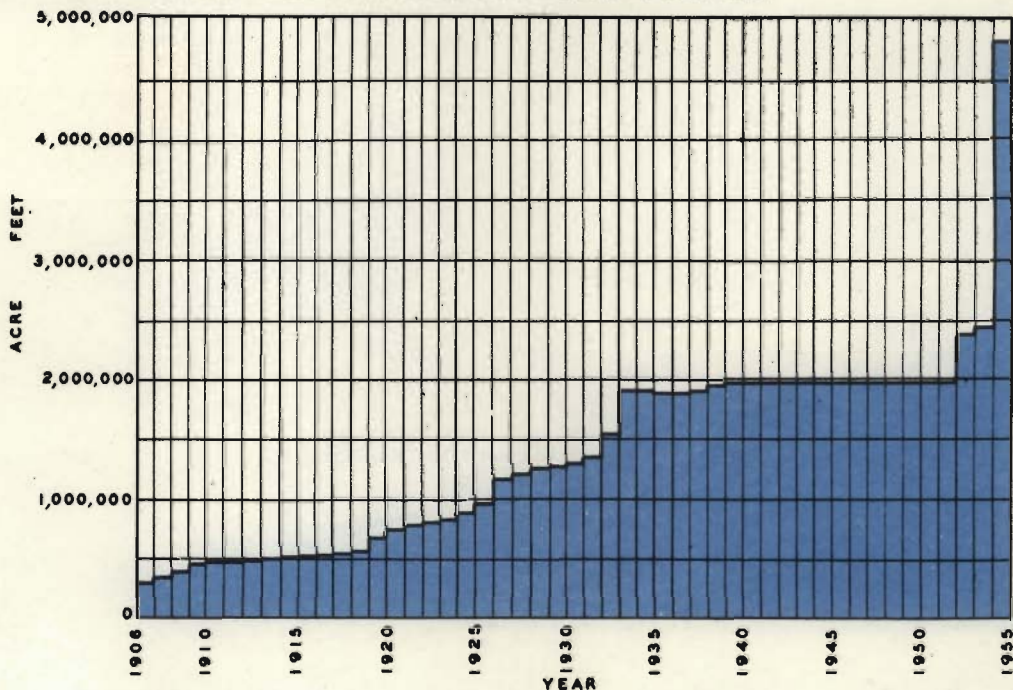
RESERVOIRS	...	...	...	...
WEIRS	...	...	...	...
MAIN CHANNELS	...	...	...	...
TOWN WATER SUPPLIES	...	...	...	...
SEWERAGE AUTHORITIES	...	...	...	...
IRRIGATION DISTRICTS	...	...	...	...
WATERWORKS DISTRICTS	...	...	...	...
FLOOD PROTECTION DISTRICTS	...	...	...	...
RIVER IMPROVEMENT DISTRICTS	...	...	...	...

SCALE — 32 MILES TO 1 INCH.

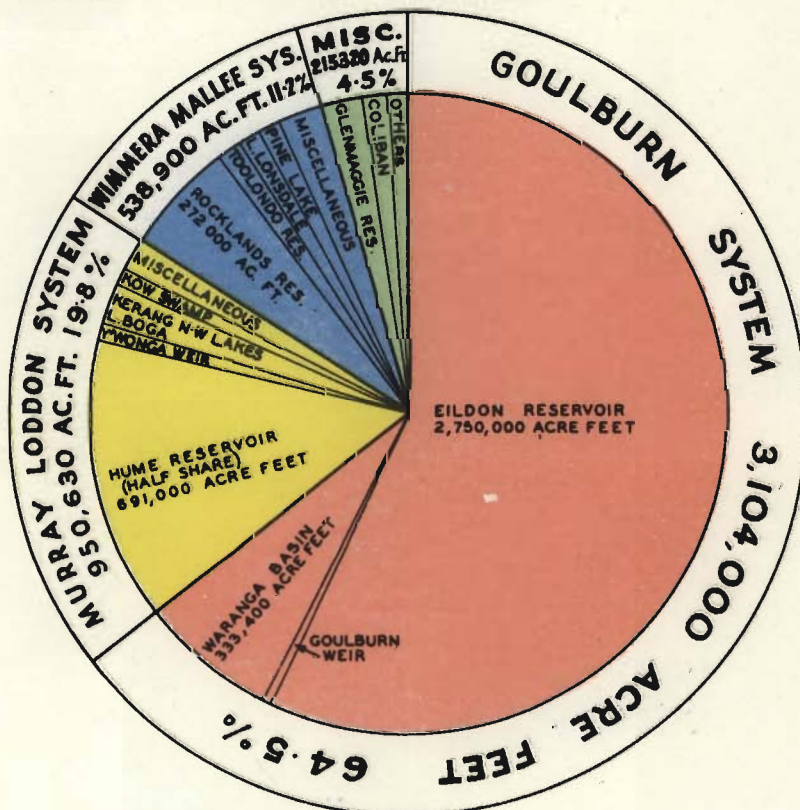


IRRIGATION AND WATER SUPPLY DEVELOPMENT SINCE THE  
FIRST ANNUAL REPORT OF THE COMMISSION IN 1906 TO THE  
FIFTIETH ANNUAL REPORT IN 1955.

1. STORAGE CAPACITY HAS RISEN FROM 280,000 ACRE FEET TO 4,808,950 ACRE FEET.



2. THE PRESENT DISTRIBUTION OF STORAGE CAPACITY IS SHOWN BELOW

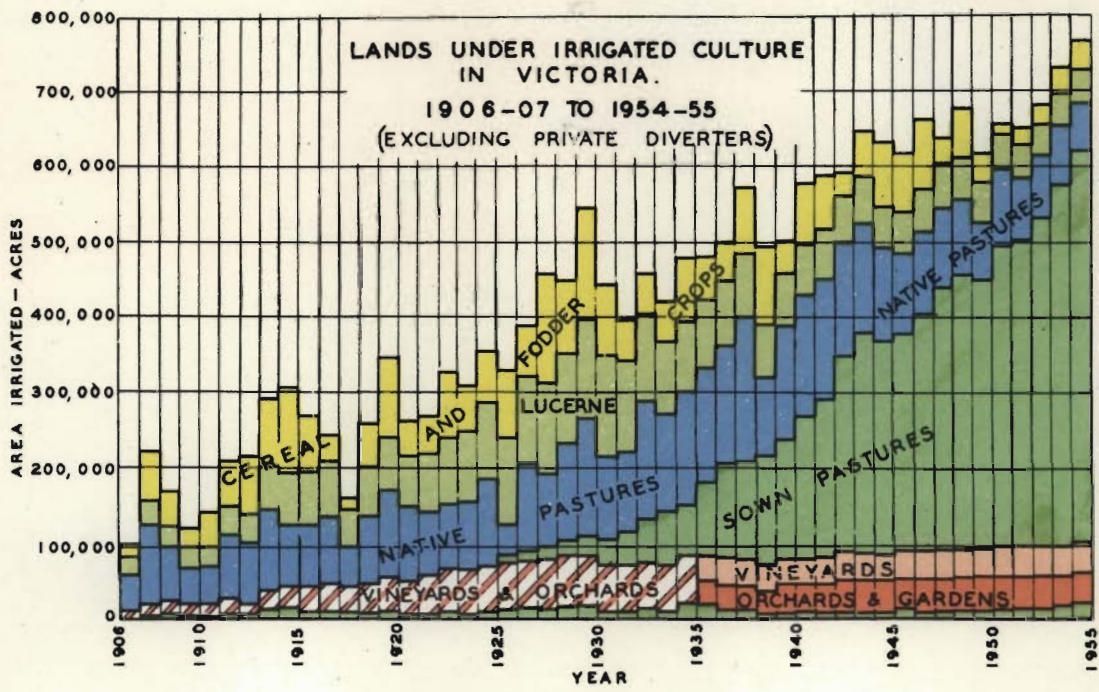


STORAGES — 30TH JUNE 1955.  
TOTAL CAPACITY 4,808,950 ACRE FEET.

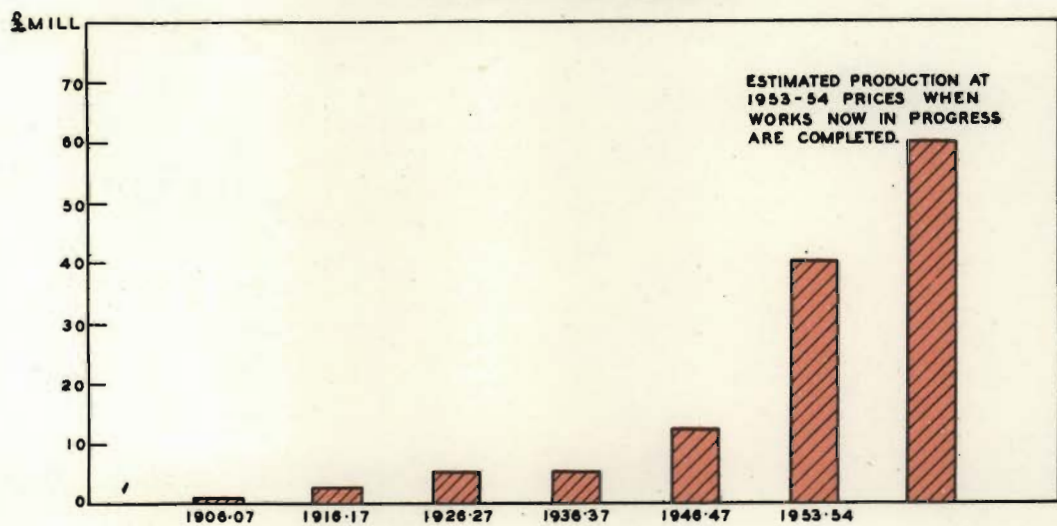


## IRRIGATION

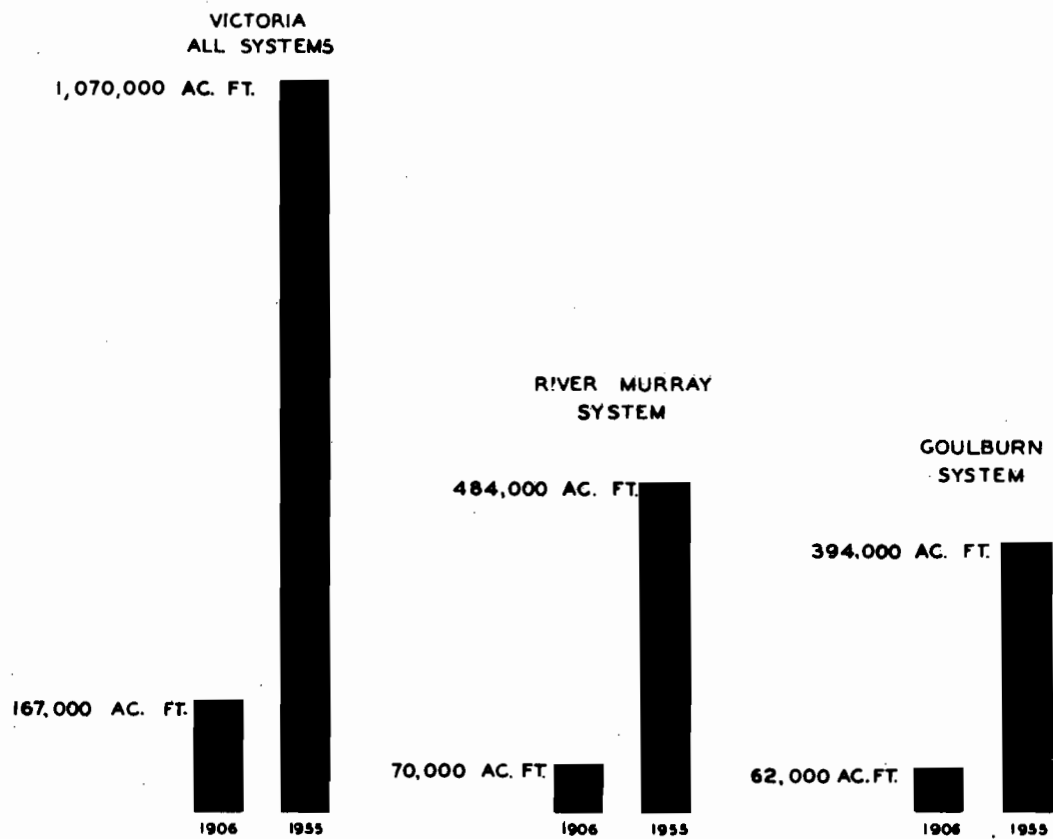
THE AREA IRRIGATED IN 1906-07 WAS 99,600  
ACRES COMPARED WITH 764 100 ACRES IN 1954-55.



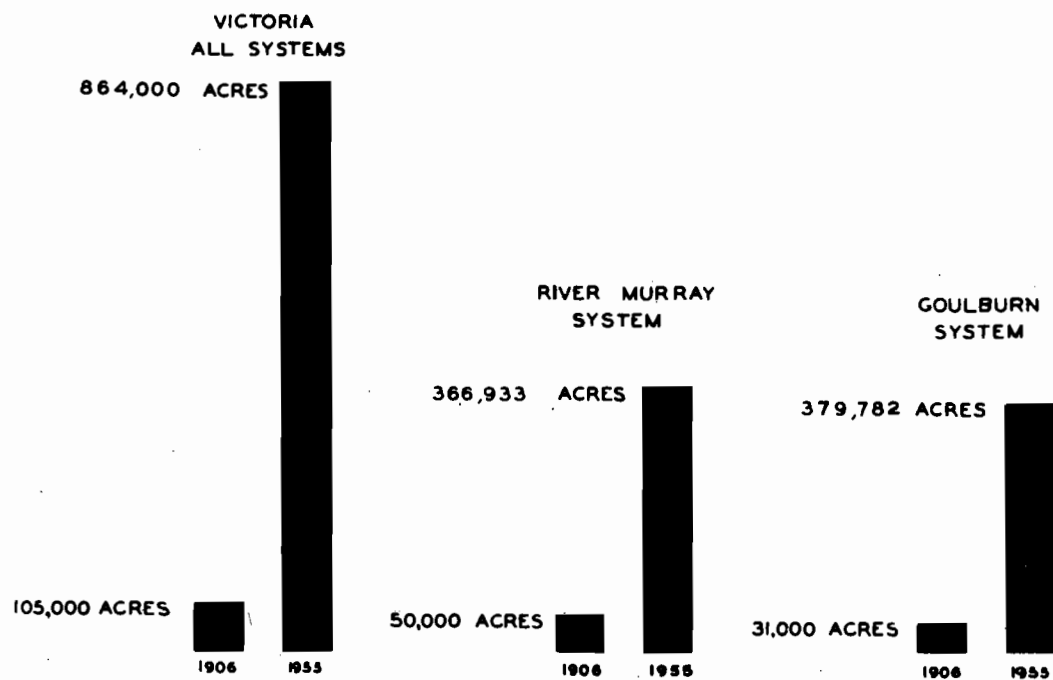
## VALUE OF PRIMARY PRODUCTION IN IRRIGATION AREAS



**INCREASE IN IRRIGATION 1906-1955**  
(INCLUDING PRIVATE DIVERTERS)  
WATER DELIVERIES

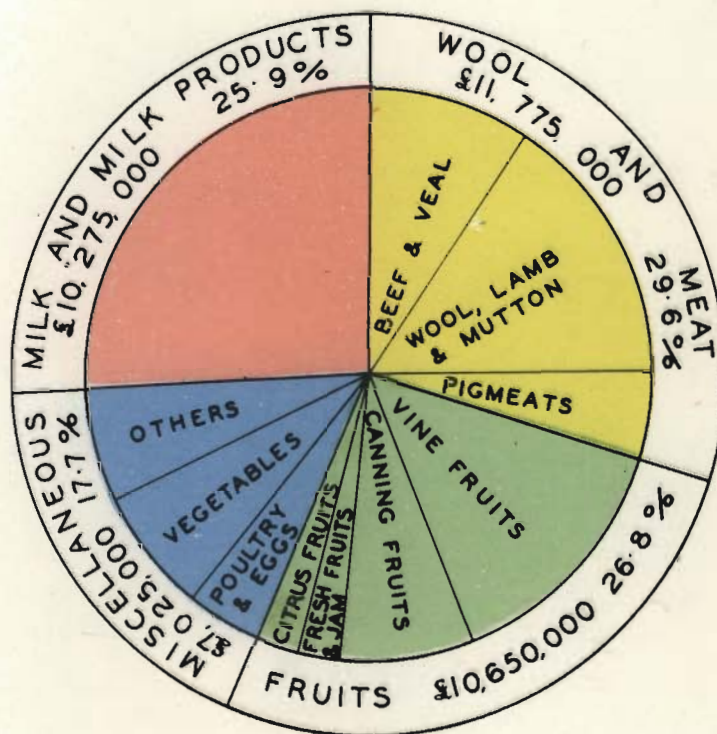


AREA IRRIGATED

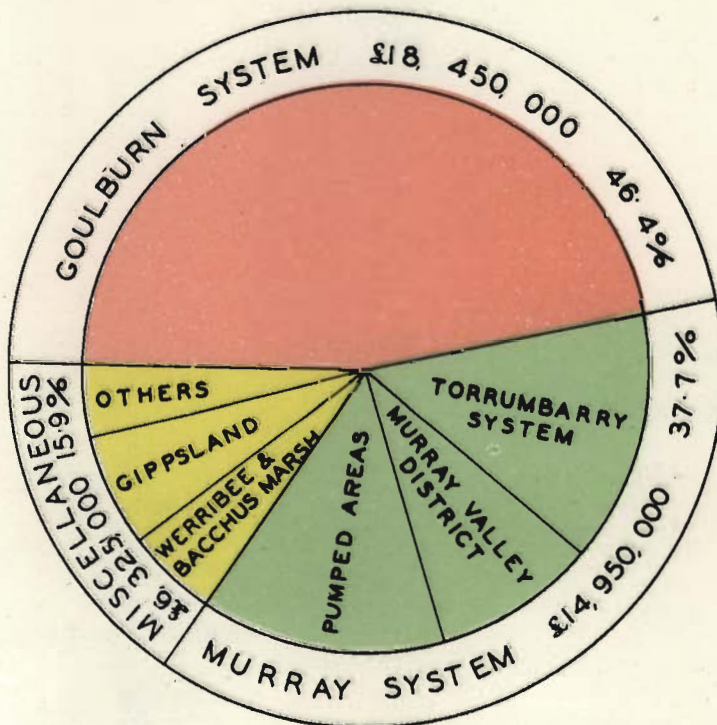


PRODUCTION IN THE IRRIGATION DISTRICTS IN  
1953-54 WAS VALUED AT £39,725,000.

**A.**  
PRODUCTION  
BY TYPES  
OF PRODUCT



**B.**  
PRODUCTION  
BY AREAS

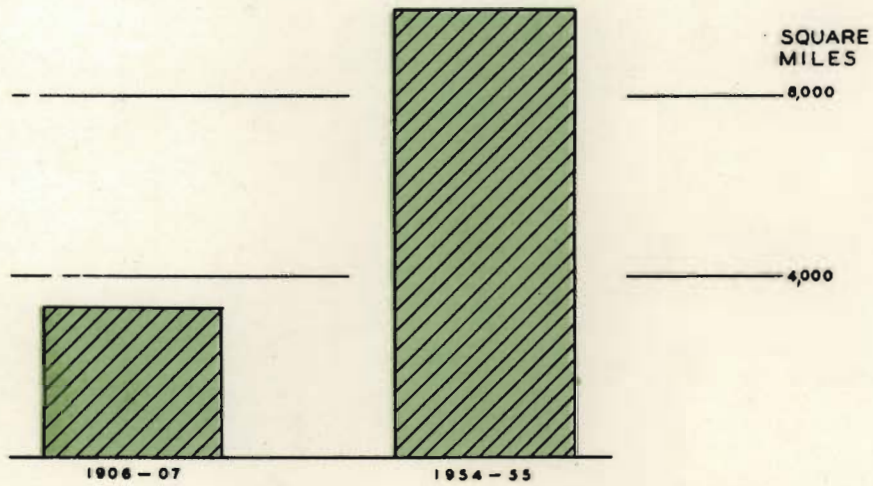




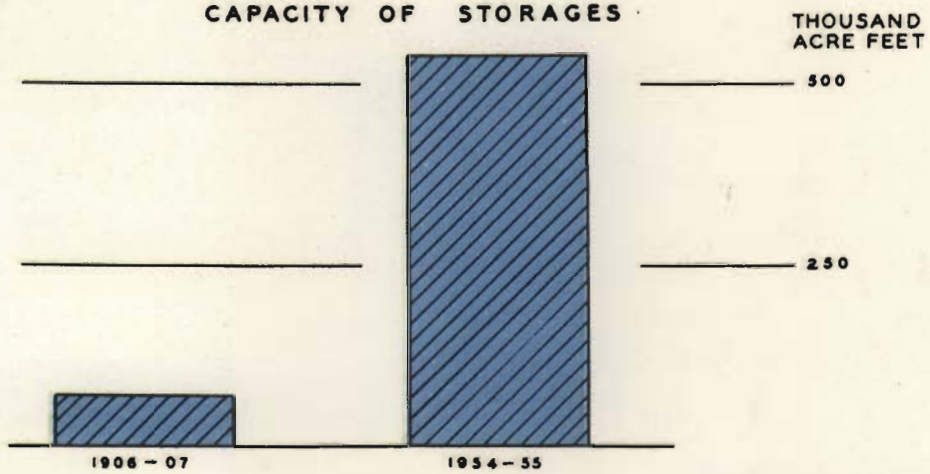
## DOMESTIC AND STOCK WATER SUPPLY FOR WIMMERA AND MALLEE

THE MAIN DOMESTIC AND STOCK SUPPLY SYSTEM IS IN THE WIMMERA-MALLEE REGION. THE DEVELOPMENT OF THE WATER SUPPLY SYSTEM IS SHOWN BELOW.

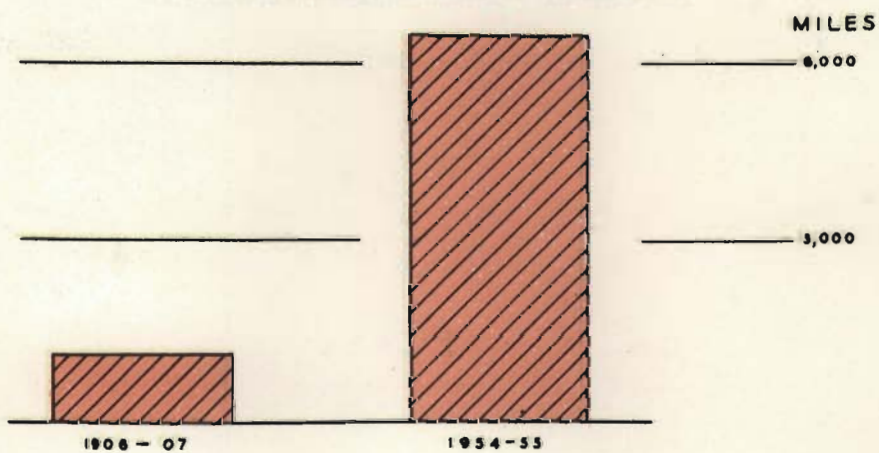
### AREA SERVED



### CAPACITY OF STORAGES



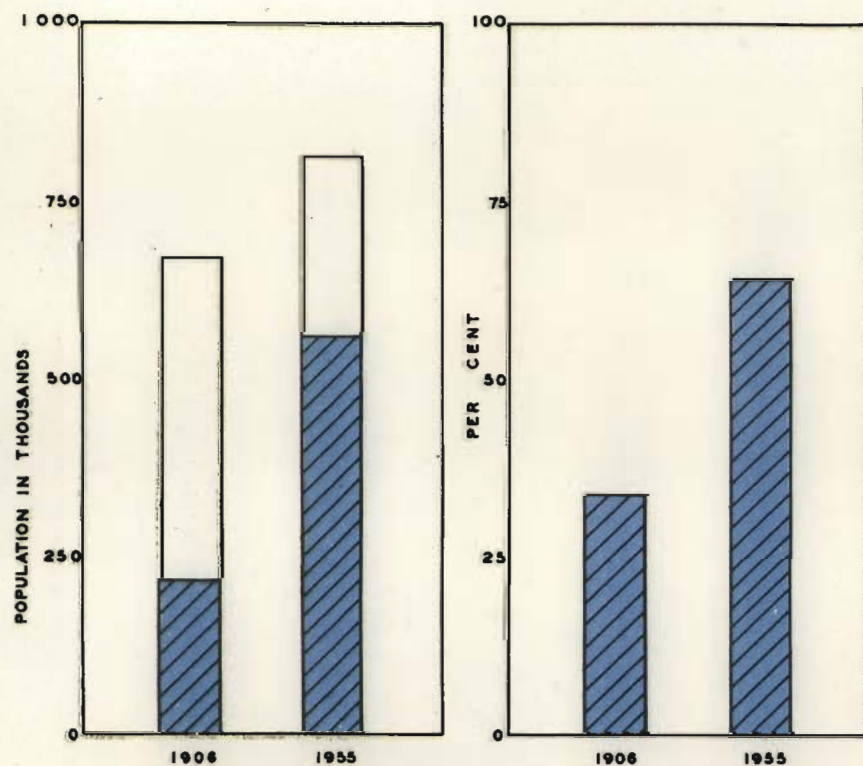
### LENGTH OF COMMISSION CHANNELS



## RETICULATED WATER SUPPLY AND SEWERAGE

POPULATION SERVED WITH  
RETICULATED WATER SUPPLY

(EXCLUDING METROPOLITAN AREA)



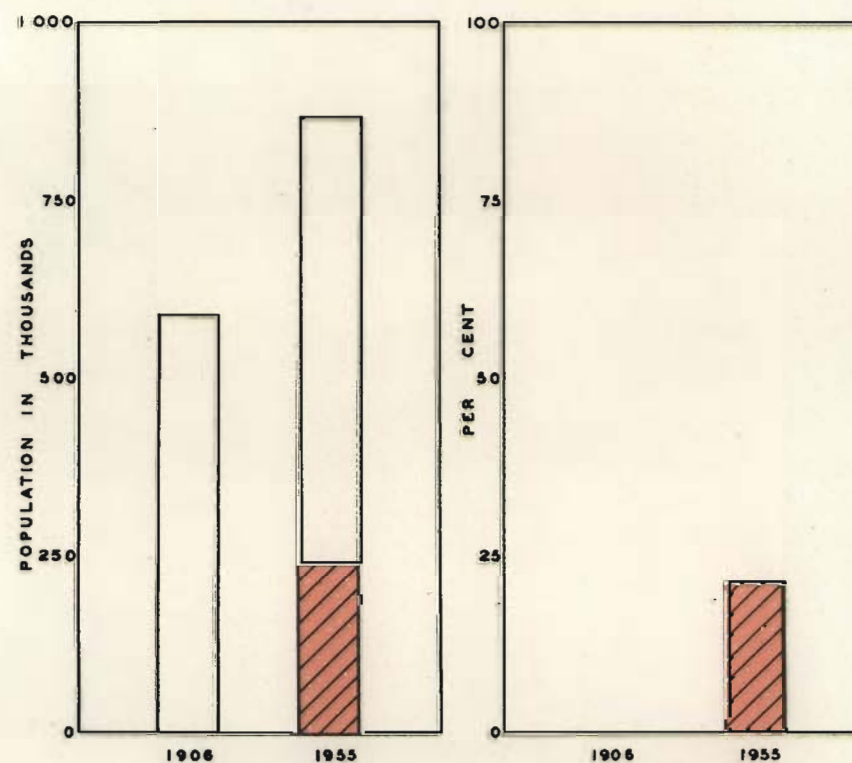
LEGEND

RETICULATED SUPPLY

NOT SUPPLIED



POPULATION SERVED WITH  
SEWERAGE SYSTEM



LEGEND

SEWERED

NOT SEWERED

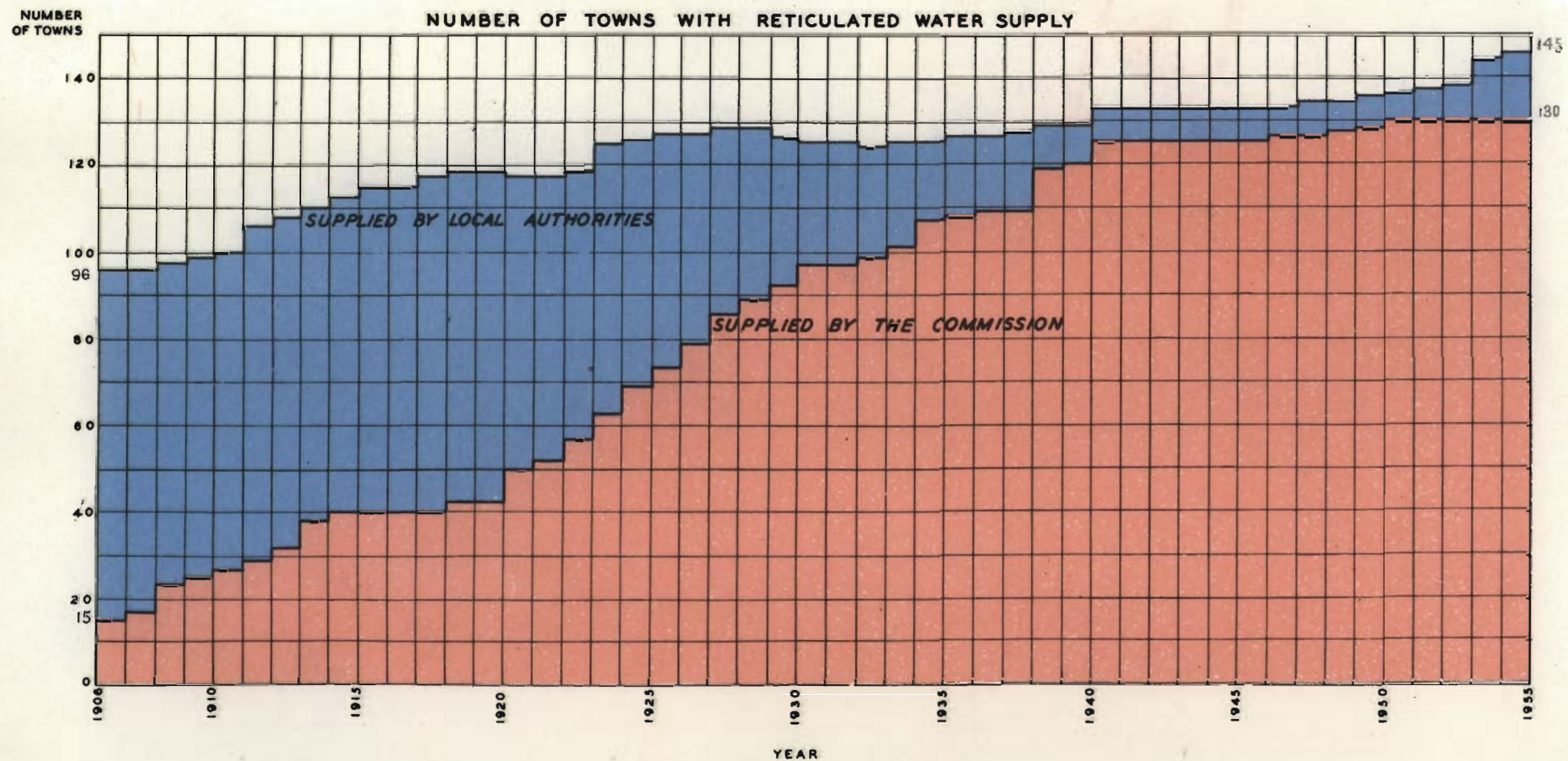




## URBAN WATER SUPPLY

THE NUMBER OF TOWNS WITH A RETICULATED WATER SUPPLY HAS RISEN FROM 111 IN 1906-07 TO 275 IN 1954-55.

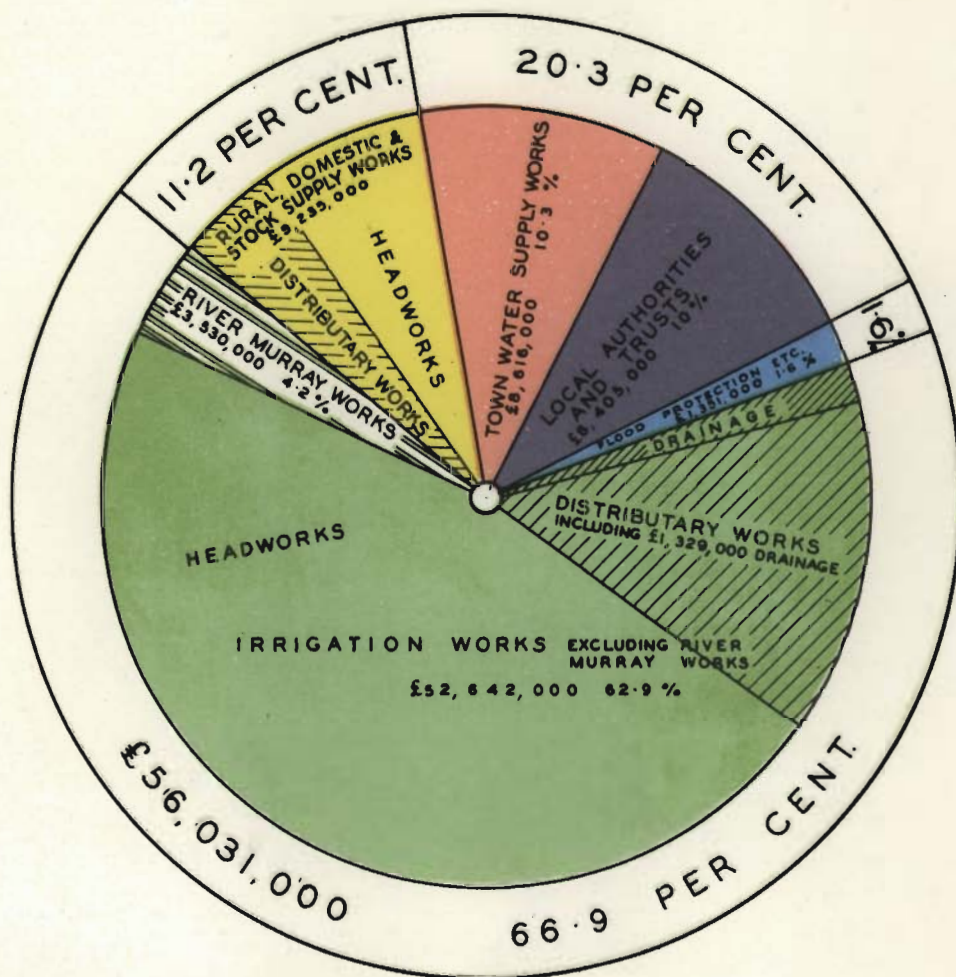
TWO-THIRDS OF VICTORIA'S COUNTRY POPULATION ARE SUPPLIED BY THE COMMISSION OR BY A LOCAL AUTHORITY UNDER THE CONTROL OF THE COMMISSION.



# CAPITAL WORKS OF WATER SUPPLY

## NET CAPITAL EXPENDITURE

The following graph shows how the net capital expenditure has been divided. The major items are:— IRRIGATION, TOWN WATER SUPPLY and DOMESTIC and STOCK SUPPLY WORKS.



DISTRIBUTION OF NET CAPITAL EXPENDITURE TO 30TH JUNE 1955,—£83,779,000.

INCLUSIVE OF £2,861,000 FROM UNEMPLOYMENT RELIEF FUNDS