

1934.

—  
LEGISLATIVE ASSEMBLY.  
NEW SOUTH WALES.

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# REPORT

OF THE

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD

For the Year ended 30th June, 1933;

TOGETHER WITH

### Annexures and Plan.

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*Ordered by the Legislative Assembly to be printed, 12 June, 1934.*

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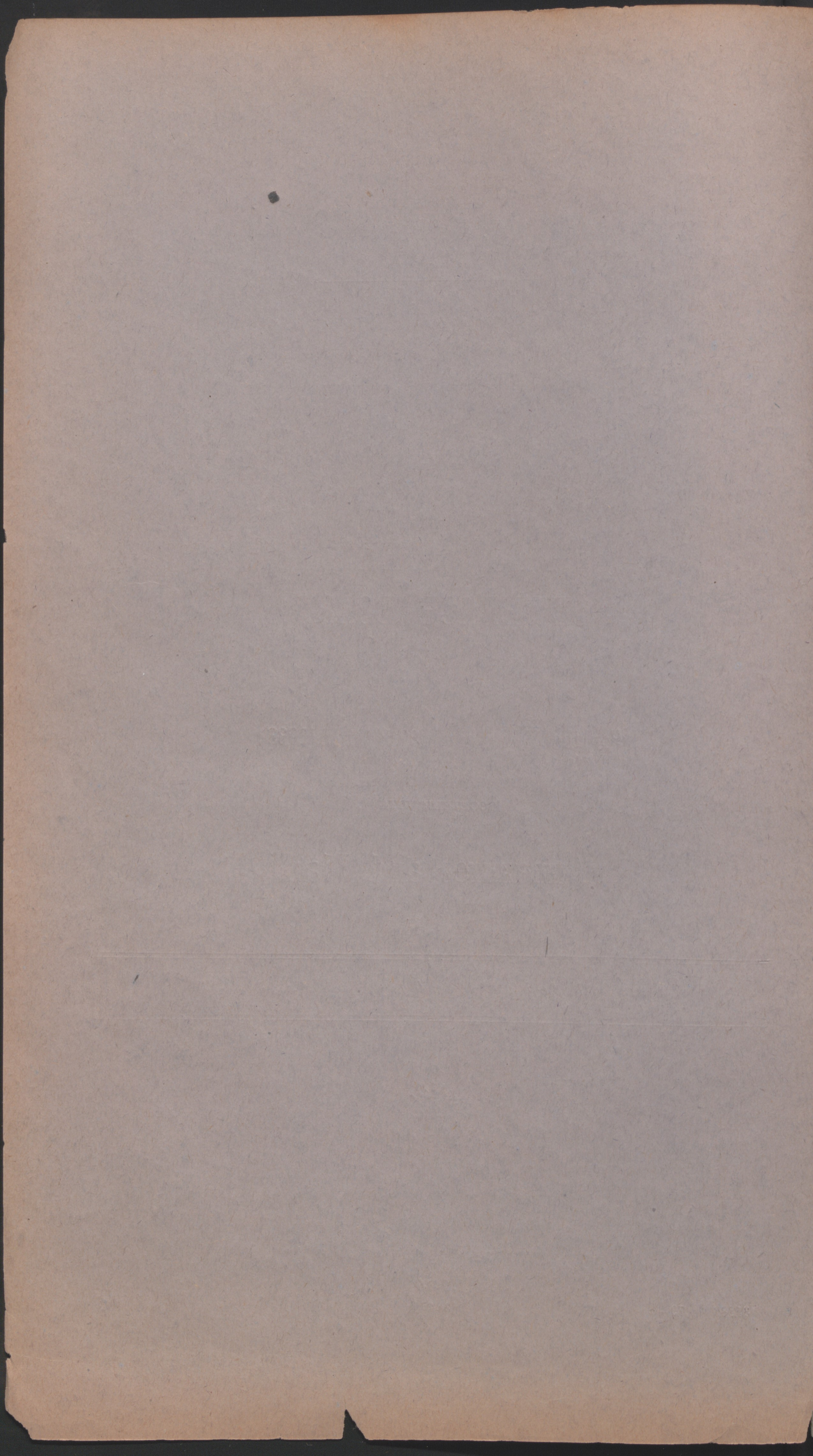


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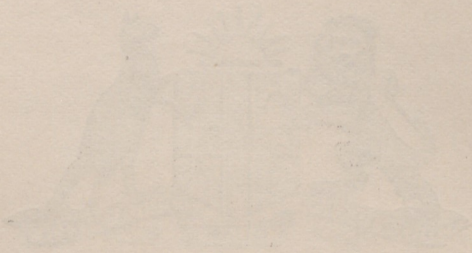
## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD

For the Year ended 30th June 1933

TOGETHER WITH

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# HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

(ANNUAL REPORT OF THE HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD  
FOR THE YEAR ENDED 30TH JUNE, 1933.)

Newcastle, 31st May, 1934.

To the Honorable the Secretary for Public Works, Sydney.

Sir,

The Hunter District Water Supply and Sewerage Board has the honor to submit to you its Report for the year ended 30th June, 1933.

## WATER SERVICE—OPERATION.

2. The attached report of the Chief Engineer (Mr. J. M. C. Corlette, B.E., M.Inst.C.E., M.Inst.E.Aust.) deals fully with the operation and maintenance of the water supply service and the preliminary investigation, design and construction of works for the amplification, improvement and extension of the water supply throughout the Hunter Water District.

The water supplied was drawn from the Chichester storage reservoir and approximately 2,961,547,300 gallons of water were used, as against 2,863,463,200 for the preceding year, showing an increase equal to 3·4 per cent.

Chichester water being soft, the practice of conserving roof water (so largely resorted to whilst the hard Hunter River water was supplied) is being largely discontinued.

Most of the coal-mines and several factories have their own private supplies of water and are, therefore, not wholly dependent upon the Board's mains. The consumptions shown above do not, therefore, at present indicate the total quantity of water used on properties connected to the Board's mains.

The Chichester supply is only supplemented on the occasions when it is found necessary to execute repairs to the Chichester trunk gravitation main and when, during periods of maximum demand, the water supply cannot be maintained by the Chichester main alone.

The consumption in the Newcastle Division showed an increase of 2·59 per cent., and in the Maitland and Cessnock Divisions (combined) an increase of 9·66 per cent., compared with figures for the preceding year.

3. At the 30th June, 1933, the following properties were rated by the Board in respect of water supply, viz.:—

Premises (connected) ... ..	42,968
Premises (not connected) ... ..	1,460
	44,428
Lands (connected)... ..	817
Lands (not connected) ... ..	10,212
	55,457
Total Properties ... ..	

The connected premises 42,968 represented an approximate population of 214,840 persons in the water-reticulated areas of the Hunter District.

The average daily consumption of water per inhabitant of the 42,968 connected properties was 37·76 gallons as against 36·57 gallons for the preceding year.

The attached report of the Officer-in-Charge of the Revenue Section of the Accounts Branch deals fully with the following subjects:—

- (a) Arrears at the 30th June, 1932, revenue struck and collected during the year 1933 and amount outstanding at 30th June, 1933.
- (b) Comparison of revenue struck, collected and outstanding during each year of the period (ten years) from 1st July, 1923, to 30th June, 1933.
- (c) Ratable properties within each division of the Water District connected and not connected to Board's water mains respectively at the 30th June, 1933.
- (d) Water supplied to large consumers during the year 1933.
- (e) Water supplied for public and charitable purposes during the year 1933, and
- (f) Properties connected to Board's mains under the provisions of the deferred payment system and meters hired from the Board at 30th June, 1933.

4. The maximum week's pumping of water for consumption during each year of the period of ten years ended 30th June, 1933, was as shown hereunder, and for the purposes of comparison, the figures for 1893-94 are also shown. It must be remembered that, during past droughts, restrictions on the use of water for domestic and public purposes were in operation. Normal consumptions of large consumers of water were also interfered with as result of industrial troubles. *The figures do not, therefore, correctly indicate*

the actual maximum weekly water requirements of the Board's Water District under conditions where no restrictions on the use of water by consumers are imposed, and where the maximum consumption for trade purposes are not curtailed as the result of industrial disputes or adverse economic conditions.—

Year.	Week ended.	Maximum Week's Consumption.
		gallons.
1893-94 ... ..	.....	3,593,995
1923-24 ... ..	19 January, 1924 ...	58,826,510
1924-25 ... ..	20 June, 1925* ... ..	53,896,260
1925-26 ... ..	20 February, 1926* ...	83,384,280
1926-27 ... ..	20 November, 1926* ...	73,426,920
1927-28 ... ..	5 November, 1927* ...	72,855,440
1928-29 ... ..	10 November, 1928* ...	82,452,320
1929-30 ... ..	25 January, 1930 ... ..	74,688,250
1930-31 ... ..	13 December, 1930 ...	73,131,415
1931-32 ... ..	30 January, 1932 ... ..	78,806,942
1932-33 ... ..	4 March, 1933 ... ..	75,104,220

\*Owing to the fact that meters were not available to accurately measure the water received from the Chichester Storage Reservoir, the figures shown are only approximate.

5. Extensive use is now being made of cement-lined cast-iron pipes for extensions of water supply reticulation. It is hoped that internal corrosion of the mains will be thereby reduced to a minimum, and their effective life considerably increased.

During the year 1,280 yards of watermains, ranging from 3 to 6 inches in diameter, were laid, and 50 yards of mains were removed and relaid or abandoned.

The length of watermains within the Hunter Water District under the Board's control as at the 30th June, 1933, was 863 miles 453 yards.

6. The following figures graphically indicate the expansion of the Water Supply System during the forty-one years which have elapsed since the Board's incorporation on the 1st July, 1892:—

Items.	First Year. (1892-93.)	Twentieth Year. (1911-12.)	Forty-first Year. (1932-33.)
Properties rated—Water supply ... ..	4,682	24,315	55,457
Properties supplied with water (including lands)...	3,421	18,177	43,785
Estimated population supplied ... ..	17,105	88,980	214,840
Water supplied ... ..	164 mil. gals.	739 mil. gals.	2,961 mil. gals.
Daily supply per inhabitant ... ..	26.37 gals.	22.77 gals.	37.76 gals.
Capacity of service reservoirs ... ..	3.52 mil. gals.	6.35 mil. gals.	60.48 mil. gals.
Lengths of water mains ... ..	134 miles.	296 miles.	863 miles.

The length of the watermains of various sizes transferred to and vested in the Board upon its incorporation on the 1st July, 1892, was 134 miles. On the 30th June, 1933, the length of watermains under the Board's control had reached 863 miles, showing an increase for the forty-one years of no less than 729 miles.

7. The following comparative statement shows the annual water supply charges, the total output of water supplied for consumption and cost of same, in pence per 1,000 gallons, for 1932-33, and each of the three preceding years:—

Annual Charges (Water Supply only).*	Year 1929-30.	Year 1930-31.	Year 1931-32.	Year 1932-33.
<b>Expenditure Uncontrollable:—</b>	£	£	£	£
Interest on Capital Debt ... ..	142,660	144,720	137,132	124,103
Exchange on Overseas Interest ... ..	.....	15,578	25,916	22,719
Sinking Fund Instalment for Re- newal of Works ... ..	.....	.....	.....	.....
Sinking Fund Instalment for Ex- tinction of Debt ... ..	7,260	8,117	8,105	8,843
	149,920	168,415	171,153	155,665
<b>Expenditure Controllable:—</b>				
Working Expenses ... ..	60,496	47,762	42,211	41,882
Management Expenses ... ..	30,497	29,944	28,003	25,596
Totals ... ..	£ 240,913	246,121	241,367	223,143
Average Cost per 1,000 Gallons (in pence) ... ..	19.088d.	20.334d.	20.233d.	18.083d.
Total Output in Million Gallons	3,029 millions.	2,905 millions.	2,863 millions.	2,961 millions.

\*The footnotes to paragraph 9 of the Board's printed annual report for 1929-30 fully explain the basis upon which the Sinking Funds above shown have been dealt with.



The substantial decrease, in the *Uncontrollable* Expenditure Items for the discharge of the Board's *Statutory* obligations for 1932-33, as compared with the previous year, will be noted.

For the first time in 1930-31 (since the commencement, and as a result of the present Australian Economic Crisis), and again in 1931-32 and 1932-33 the Board has been required to meet the cost of exchange on the remittance of "overseas" interest. This unexpected charge largely increases the annual cost of the water supply service—without any corresponding benefit to the ratepayers.

8. The following comparative statement shows the details of the Cost of Water in the mains, in pence per 1,000 gallons, for each of the years indicated:—

Annual Charges (Water Supply only).	Year 1927-28.	Year 1931-32.	Year 1932-33.
<b>Expenditure—Uncontrollable—</b>	pence.	pence.	pence.
Interest on Capital Debt ... ..	6·190	11·495	10·057
Exchange on Overseas Interest ... ..	.....	2·173	1·841
*Sinking Fund Instalment for Renewal of Works ... ..	·990	.....	.....
Sinking Fund Instalment for Extinction of Debt ... ..	.....	·679	·717
	7·180	14·347	12·615
<b>Expenditure—Controllable—</b>			
Working Expenses ... ..	4·818	3·539	3·394
Management Expenses ... ..	2·402	2·347	2·074
	14·400	20·233	18·083
Average Cost per 1,000 Gallons (in pence) ... ..	14·400	20·233	18·083
Total Output in Million Gallons... ..	2,894 mil. gals.	2,863 mil. gals.	2,961 mil. gals.

\*See explanatory footnote to statement shown in paragraph 7 of this Report.

#### WATER SERVICE—FINANCE.

9. *Water Service Operations.*—The financial results for the period *subsequent* to the adjustment of the Capital Debt as at the 30th June, 1928, and of the subsequent additions thereto were, strictly on the basis of *Actual Revenue Collected* each year, as under:—

Item.	Three Years 1928-31.	Year 1931-32.	Year 1932-33.	Totals.
	£	£	£	£
<b>Expenditure (Uncontrollable)—</b>				
Interest on Capital Expenditure from Loan Funds	421,747	137,132	124,103	682,982
Exchange on Remittance of Overseas Interest ...	15,578	25,916	22,719	64,213
Instalment to Sinking Fund for Extinction of Capital Debt ... ..	22,201	8,105	8,843	39,149
	459,526	171,153	155,665	786,344
<b>Expenditure (Controllable)—</b>				
Management Expenses ... ..	90,694	28,003	25,596	144,293
Working Expenses ... ..	169,879	42,211	41,882	253,972
Totals ... ..	£ 720,099	241,367	223,143	1,184,609
Revenue Collected ... ..	668,910	204,832	206,584	1,080,326
Deficiency for period ... ..	51,189	...	...	} 104,283
Deficiency for year ... ..	...	36,535	16,559	
Totals ... ..	£ 720,099	241,367	223,143	1,184,609

The Water Supply Revenue collected, as from 1st July, 1929, included credits from the Sewerage Service for the actual cost of water supplied during each following year to such service for flushing purposes—the amount for 1932-33 being £9,342.

The Water Supply Revenue Charges outstanding at the 30th June, 1928 and 1933, were £19,580 and £62,676 respectively. This large increase in outstandings was due to the difficulties experienced in the collection of revenue, as the result of the Australian Economic Crisis—see paragraph 13 of this Report.

As a concurrent effect of that crisis, the Board was also called upon to provide in 1932-33 no less than £22,719 for exchange on remittance of the portion of the interest on the Water Supply Capital Debt, £124,103, payable overseas.

10. The following Comparative Statement shows the Water Supply Revenue Items and the relative percentages of each of the items (making up the Total Water Supply Revenue Collections) to such Total, for the years indicated:—

Water Supply Revenue Item.	Year 1927-28.		Year 1932-33.	
	Total Collected.*	Percentage of Item to Total.	Total Collected.*	Percentage of Item to Total.
Water Rates ... ..	£ 140,072	65·56	£ 133,846	64·79
Meters in Excess ... ..	67,567	31·62	56,071	27·14
Meters only ... ..	2,028	·95	3,120	1·51
Sewerage Service ... ..	.....	.....	9,342	4·52
Meter Hire ... ..	1,203	·56	2,274	1·10
Special Fees ... ..	674	·32	396	·19
Rents ... ..	827	·39	946	·46
Other Charges... ..	1,283	·60	589	·29
Totals ... ..	£ 213,654	100·00	206,584	100·00

\* Exclusive of services rendered.

The falling-off in revenue from water rates in 1932-33 as compared with 1927-28 (notwithstanding the additional revenue from improvements on properties already ratable in respect of old mains and from properties rated in respect of new mains) is accounted for by the reductions of valuations made since 1st July, 1927, by the Valuer General and the reductions due to the provision of the Rating (Exemption) Act of 1931, which operated from the 1st July, 1932.

11. The following comparative statement shows the relative percentages of each of the items (making up the Total Water Supply Annual Expenditure) to such Total Expenditure for the years indicated:—

Annual Charges. (Water Supply only.)	Year 1927-28.		Year 1932-33.	
	Expenditure.	Percentage of Expenditure to Total Annual Expenditure.	Expenditure.	Percentage of Expenditure to Total Annual Expenditure.
<i>Expenditure—Uncontrollable—</i>	£	£	£	£
*Interest on Capital Debt... ..	76,957	42·99	124,103	55·62
Exchange and Overseas Interest ... ..	.....	.....	22,719	10·18
Sinking Fund Instalment for Renewal of Works	12,302	6·87	†	.....
Sinking Fund Instalment for Extinction of Debt	.....	.....	8,843	3·96
Total of "Statutory" Charges ... ..	£ 89,259	49·86	155,665	69·76
<i>Expenditure—Controllable—</i>				
*Working Expenses ... ..	59,902	33·46	41,882	18·77
†Management Expenses ... ..	29,867	16·68	25,596	11·47
Totals ... ..	£ 179,028	100·00	223,143	100·00

\* For explanation of (a) increase in Interest for 1932-33 as compared with 1927-28, and (b) decrease in Working Expenses as similarly compared—see the footnote to paragraph 9 of the Board's printed annual report for 1929-30.

† For percentage of Management Expenses to cost of services rendered by the Board and its Staff—See paragraph 24 of this Report.

‡ In abeyance pending passing of legislation in respect of same.

12. *Water Service Deficiency for 1932-33.*—The Water Service operations for the year under review showed a deficiency of £16,559 as compared with the deficiency of £36,535 for the preceding year. The difference £19,976 is explained as under:—

Increased Revenue for 1932-33 as compared with 1931-32	£ 1,752
Decreased Expenditure for 1932-33 as compared with 1931-32.	
Management Expenses	2,407
Working Expenses	329
Interest	13,029
Exchange on Remittance of Overseas Interest	3,197
	<u>20,714</u>
Deduct Additional Expenditure for 1932-33 as compared with 1931-32 for	
Extinction of Capital Debt	738
Difference as shewn above	<u>£ 19,976</u>

13. The following Comparative Statements shew the percentages of the respective outstanding Water Supply Revenue Charges to the Total Water Supply Revenue Receivable for the years indicated.

For 1928-29.

Water Supply Revenue Item.	Revenue Receivable*.		Actual Collections.*	Outstanding at 30th June, 1929.*	Percentage of Outstandings to Total Receivable.
	Net Arrears from previous years.	Struck for 1928-29.			
	£	£	£	£	%
Water Rates ... ..	13,855	155,377	150,920	18,312	10.82
Meters in Excess ... ..	5,365	65,626	65,386	5,605	7.90
Meters only ... ..	279	2,602	2,677	204	7.08
Sewerage Service ... ..	.....	.....	.....	.....	.....
Meter Hire ... ..	58	1,344	1,306	96	6.85
Special Fees ... ..	23	591	580	34	5.54
Rents ... ..	.....	835	835	.....	.....
Other Charges ... ..	.....	1,203	1,201	2	.17
Totals ... ..	£ 19,580	227,578	222,905	24,253	9.81

\* Exclusive of charges for services rendered.

For 1932-33.

Water Supply Revenue Item.	Revenue Receivable*.		Actual Collections.*	Outstanding at 30th June 1933.*	Percentage of Outstandings to Total Receivable.
	Net Arrears from previous years.	Struck for 1932-33.			
	£	£	£	£	%
Water Rates ... ..	53,360	135,882	133,846	55,396	29.27
Meters in Excess ... ..	5,625	56,491	56,071	6,045	9.73
Meters only ... ..	210	3,322	3,120	412	11.66
Sewerage Service ... ..	.....	9,342	9,342	.....	.....
Meter Hire ... ..	332	2,417	2,274	475	17.28
Special Fees ... ..	28	696	396	328	45.30
Rents ... ..	12	952	946	18	1.87
Other Charges ... ..	2	590	589	3	.51
Totals ... ..	£ 59,569	209,692	206,584	62,677	23.28

\* Exclusive of charges for services rendered.

The Water Supply Revenue Charges outstanding at the 30th June, 1929 and 1933 were £24,253 and £62,677 respectively. This large increase in outstandings at close of 1932-33 was due to the difficulties experienced in the collection of revenue, as the result of the Australian Economic Crisis.

14. *Water Service Revenue.*—The following comparison of the Water Service Revenue collected, in each of the years indicated, illustrates very clearly the rapid growth of the Hunter Water District under the Board's control:—

Item.	Year 1922-23.	Year 1928-29.	Year 1929-30.	Year 1930-31.	Year 1931-32.	Year 1932-33.
	£	£	£	£	£	£
Water Rates ... ..	64,776	150,920	149,303	156,103	143,311	133,846
Meter Charges ... ..	40,254	68,063	57,289	56,120	47,435	59,192
Sewerage Service ... ..	.....	.....	8,554	10,411	10,398	9,342
Special Fees ... ..	1,253	1,024	686	545	346	396
Meter Hire ... ..	2,175	1,306	1,260	1,690	1,743	2,274
Rents ... ..	543	835	967	1,221	1,074	946
Other Items ... ..	1,074	756	1,050	806	525	588
Totals ... ..	£ 110,075	222,904	219,109	226,896	204,832	206,584

*Note.*—Water rate during 1922-23 was 10d. in £ on A.A. Values. It was increased from 1st July, 1927, (to finance the Chichester Amplification Works) to 1s. 1d. in the £ on A.A. Values.  
The Sewerage Service was charged, as from 1st July, 1929, with actual cost of water supplied to it for flushing purposes.

## SEWERAGE SERVICE—OPERATIONS.

15. *Extensions and Branch Drains.*—During the year new sewers having a total length of 1 mile 812 yards were constructed, as compared with 1 mile 1,694 yards the previous year. The length of sewers under the Board's control at the 30th June, 1933, was 203 miles 222·5 yards.

During the year nine branches were laid from the Board's sewers on private properties to the boundary lines of adjoining properties and, similarly fourteen branches were laid from sewers in the streets to the building lines of properties to be drained. Eight junctions for house connections were inserted in the sewers, and 752 flushing cisterns and valves for water-closets and urinals were tested.

The extension of the branch drains, as indicated, appreciably reduces the cost of house connections to the ratepayers, and keeps the maintenance of the branch drains, as well as the main sewers, uniformly under the Board's control. Considerable difficulty might otherwise arise in the event of an owner having to enter upon adjoining land to effect repairs to a branch drain connecting his property to the Board's sewers, or to remove chokages.

16. *Properties Rated and House Connections.*—Full details are given in the attached report of the Officer-in-Charge of Sewerage Connections (Notices and Accounts Section) in respect of the properties ratable in respect of sewerage connected and not yet connected to the Board's sewers, and of the extent of the assistance given by the Board, under the provisions of the Deferred Payment System, to owners of properties to connect same to the sewers.

Under the provisions of the Board's Amending Act of 1906, as amended by Act of 1924, the Board is authorised to drain a property to the Board's sewer at the expense of the owner or occupier of such property, and where the cost does not exceed £30 to accept payment by quarterly instalments (not less than 10s. each), extending, where required, over a period of seven and one-half years. Where the cost of drainage exceeded £30, the applicant is required to deposit, in advance, the excess over £30.

As a rule, 4-inch drain pipes are used for drainage work, and the draining and sanitary plumbing work carried out under the supervision of the Board's Inspectors have proved very satisfactory. At the inception of the sewerage system, special attention was given to the material available for the construction of house drains and the stoneware fittings usually attached thereto. Special designs of efficient and economical types were prepared, and the different potteries took up the manufacture of same. Diagrams, illustrating the types of approved fittings and their use in the house drains, were prepared for sale and exhibition at the Board's offices. The general use of the approved type of fittings has given very satisfactory results.

## SEWERAGE SERVICE—FINANCE.

17. *Sewerage Service Operations.*—The financial results for the period subsequent to the adjustment of the Capital Debt as at the 30th June, 1928, and of the subsequent additions thereto were, strictly on the basis of the *Actual Revenue Collected* each year, as under:—

Item.	Three years 1928-31.	Year 1931-32.	Year 1932-33.	Totals.
<i>Expenditure (Uncontrollable)—</i>	£	£	£	£
Interest on Capital Expenditure from Loan Funds ...	103,364	33,057	29,939	166,360
Exchange on Remittance of Overseas Interest... ..	9,756	246	5,481	15,483
Instalment to Sinking Fund for Extinction of Capital Debt ... ..	11,115	5,867	4,855	21,837
	124,235	39,170	40,275	203,680
<i>Expenditure (Controllable)—</i>				
Management Expenses ... ..	34,077	11,190	9,594	54,861
Working Expenses ... ..	66,140	24,358	22,078	112,576
	224,452	74,718	71,947	371,117
Surplus for year ... ..	...	3,158	2,761	} 38,363
Surplus for period ... ..	32,444	...	...	
Totals ... ..	256,896	77,876	74,708	409,480
Revenue Collected ... ..	251,658	77,876	74,708	404,242
Deficiency for period ... ..	5,238	...	...	5,238
Totals ... ..	£ 256,896	77,876	74,708	409,480

The Sewerage Working Expenses, as from 1st July, 1929, included debits for the actual cost of water supplied during each following year to such expenses for flushing purposes—the amount for 1932-33 being £9,342.

The Sewerage Revenue Charges outstanding at the 30th June, 1928, and 1933, were £5,858 and £26,640 respectively. This large increase in outstandings was due to the difficulties experienced in the collection of revenue, as the result of the Australian Economic Crisis—see paragraph 18 of this Report.

As a concurrent effect of that crisis, the Board was also called upon to provide in 1932-33 no less than £5,481 for exchange on remittance of the portion of the interest on the Sewerage Capital Debt £29,939, payable overseas.

18. *Newcastle District Sewerage Service Revenue.*—The following statement shews the revenue struck, collected and outstanding in respect of this service for the years indicated—the effect of the economic depression on the collection of this revenue will be noted.

Year.	Net Arrears from previous years.	Revenue Struck.	Revenue Collected.	Revenue Outstanding
	£	£	£	£
1922-23 ...	2,851	50,411	49,551	3,711
1927-28 ...	4,484	81,035	79,637	5,882
1928-29 ...	5,858	85,533	84,006	7,385
1929-30 ...	7,301	88,572	85,535	10,338
1930-31 ...	10,301	91,195	82,117	19,379
1931-32 ...	19,302	86,684	77,876	28,110
1932-33 ...	27,414	73,935	74,709	26,640

19. The following comparative statement shows relative percentages of each of the items (making up the Sewerage Annual Expenditure) to such Total Expenditure for the years indicated :—

Particulars.	Year 1927-28.		Year 1932-33.	
	Expenditure.	Percentage of Expenditure to Total Annual Expenditure.	Expenditure.	Percentage of Expenditure to Total Annual Expenditure.
	£		£	
<b>Expenditure (Uncontrollable)—</b>				
Interest on Capital Debt ...	33,777	51.98	29,939	41.61
Exchange on Overseas Interest ...	...	...	5,481	7.62
Sinking Fund Instalment for Renewal of Works ...	6,990	10.76	*	...
Sinking Fund Instalment for Extinction of Debt ...	...	...	4,855	6.75
Total of "Statutory" Charges ...	£ 40,767	62.74	40,275	55.98
<b>Expenditure (Controllable)—</b>				
Working Expenses ...	14,735	22.68	12,736	17.70
Charge for water used for flushing ...	†	...	9,342	12.98
Management Expenses ...	†9,471	14.58	9,594	13.34
Totals ...	£ 64,973	100.	71,947	100.

\* In abeyance pending legislation in respect of same.

† For percentage of Management Expenses to Cost of Services rendered by the Board and its Staff—see paragraph 23 of this Report.

‡ Charge for water used for flushing made for the first time in 1929-30.

20. *Newcastle District Sewerage Surplus for 1932-33.*—The Sewerage Service operations for the year under review shewed a surplus of £2,761 as compared with a surplus of £3,158 for the preceding year.

The difference, £397, is explained as under :—

Decreased Revenue for 1932-33 as compared with 1931-32 ...	£ 3,168
Additional expenditure for 1932-33 as compared with 1931-32 :—	
Exchange on Remittance of Overseas Interest ...	5,235
	8,403
Decreased Expenditure for 1932-33 as compared with 1931-32 :—	
Interest on Capital Expenditure ...	£ 3,118
Working Expenses ...	2,280
Management Expenses ...	1,596
Sinking Fund for Extinction of Debt ...	1,012
	8,006
Difference as shown above ...	397

21. *Cottage Creek Stormwater Drainage Service.*—The largest portion of the works covered by the Cottage Creek Stormwater Drainage Amplification Scheme was transferred from the Constructing Authority to the Board on the 27th May, 1930.

As the result of special representations made by the Board the Assistant Treasurer agreed to allow the Interest on the Capital Expenditure for the year 1930-31 amounting to £12,163 and the Interest £12,027 and Exchange on remittance of overseas interest £3,567 for the year 1931-32 to be capitalized. The Minister also consented to provide from the Consolidated Revenue Fund the actual interest and exchange for the year 1932-33 amounting to £13,285 and the estimated interest and exchange for the year 1933-34 amounting to £12,266.

The Board desires to place on record its sincere appreciation of the generous consideration extended to it by the Assistant Treasurer, which has enabled it to delay the levying, for the first time, of the Cottage Creek stormwater drainage rate and thereby give substantial financial relief to the owners and occupiers of the properties within that Drainage Area.

The following Statement shews the financial Result of the Operation of this S.W.D. Service for the year 1932-33.

Annual Charges.							
Expenditure ( <i>Uncontrollable</i> )—							£
Interest on Capital Debt	...	...	...	...	...	...	11,262
Exchange on Overseas Interest	...	...	...	...	...	...	2,023
Sinking Fund Instalment for Renewal of Works	...	...	...	...	...	...	*
Sinking Fund Instalment for Extinction of Debt	...	...	...	...	...	...	2,302
Expenditure ( <i>Controllable</i> )—							
Working Expenses	...	...	...	...	...	...	524
Management Expenses	...	...	...	...	...	...	...
Total							£ 16,111
Revenue	...	...	...	...	...	...	...
Treasury Recoupment of Interest and Exchange	...	...	...	...	...	...	13,285
Deficiency at 30th June, 1933	...	...	...	...	...	...	2,826
Total							£ 16,111

\* In abeyance pending legislation in respect of same.

#### COMBINED SERVICES—FINANCIAL.

22. *Combined Services' Operations.*—The results for the five financial years, *subsequent* to the adjustment of the Capital Debt as at 30th June, 1928, and the additions thereto within that period, were (on the *Revenue Struck* basis) as under :—

Items.	Water Supply.	Sewerage.	Stormwater Drainage.
Revenue—	£	£	£
Collections ... ..	1,080,326	404,242	...
Outstanding at 30th June, 1933 ... ..	62,720	26,640	...
Total Revenue Struck (a) ... ..	1,143,046	430,882	...
Recoupment of Interest and Exchange by Treasury ... ..	...	...	13,285
Deficiency at 30th June, 1933 (b) ... ..	41,616	...	2,826
Totals ... ..	£ 1,184,662	430,882	16,111
Expenditure			
Uncontrollable ... ..	786,344	203,680	15,587
Controllable ... ..	398,265	167,436	524
Repayment to Public Works Fund 1928-29 (Unissuable) ... ..	53	1	...
Totals ... ..	£ 1,184,662	371,117	16,111
Surplus at 30th June, 1933 (c) ... ..	...	59,765	...
Totals ... ..	£ 1,184,662	430,882	16,111

*Notes.*—

- (a) Includes outstandings at 30th June, 1928, viz. Water Supply £19,580 and Sewerage £5,858.  
 (b) On a strictly *cash* basis (*i.e.* on actual revenue collections) the Water Supply Deficiency for the five years ending 30th June, 1933, would be £104,283.  
 (c) The Sewerage Surplus for the same period would be reduced to £33,125.  
 The nett deficiency at 30th June, 1933, for the three (combined) services for the same period on the strictly *cash* basis, amounted to £73,984.  
 (d) See paragraph 21 of this report *re* the Newcastle District Stormwater Drainage Service Operations for 1932-33.

## Summary.

		£
Newcastle District Sewerage Service Surplus for 1928-1933 ... ..	...	59,765
Water Service Deficiency for 1928-1933 ... ..	41,616	
Stormwater Drainage Service Deficiency for 1932-1933 ... ..	2,826	44,442
Accumulated Surplus on the Combined Water, Sewerage and Stormwater Drainage Services 1928-1933 ... ..	...	15,323

23. *Combined Services' Percentages.*—The percentage comparison of each item of annual expenditure for the year ending 30th June, 1933, to the corresponding annual revenue collection, is as under :—

	Water Supply.	Sewerage.	Stormwater Drainage.	Total.	Percentage of each Item to Total.
	£	£	£	£	
Interest ... ..	124,103	29,939	11,262	165,304	56.11
Exchange on Remittance of Interest Overseas...	22,719	5,481	2,023	30,223	10.26
Management Expenses ... ..	25,596	9,594	...	35,190	11.95
Working Expenses...	41,882	22,078	524	64,484	21.89
Instalments to Sinking Fund ... ..	8,843	4,855	2,302	16,000	5.43
	223,143	71,947	16,111	311,201	105.64
Surplus ... ..	...	2,761	...	...	...
Deficiency ... ..	16,559	...	2,826	16,624	5.64
	206,584	74,708	13,285	294,577	100.
Years Revenue Collection ... ..	206,584	74,708	...	281,292	95.49
Treasury Recoupment of Interest and Exchange ... ..	...	...	13,285	13,285	4.51
	£ 206,584	74,708	13,285	294,577	100.

24. *Management Expenses.*—The percentage of the Management Expenses Item £35,190, to the annual revenue collected £281,292, is correctly shown as 12.51 per cent., but it must be borne in mind that the item £35,190 represents the expenditure on a number of other important services rendered by the Board and its staff, besides the mere collection of the Board's revenue for the year.

The management expenses of the Board for the year ending 30th June, 1933, chargeable to Consolidated Revenue Fund Votes, was £35,190 and to Loan Votes £4,000, making a total of £39,190.

The total management expenses £39,190, covered the following work by the Board and its staff during the year under review, viz.:—

	£
(a) The levying and collection of the year's revenue in respect of the water supply, sewerage, and stormwater drainage services, amounting to ... ..	281,292
(b) The operation and maintenance of the water supply, sewerage and stormwater drainage services for the year, at cost of ... ..	64,484
(c) The supervision of the laying-on of water and the design and supervision of the drainage of properties to sewers under the deferred payment system, at cost of £1,380 and the collection of instalments and other cash receipts, £2,320 ... ..	4,700
(d) The design and the construction of the works carried out by the Board for the year chargeable to Loan Votes ... ..	19,999
(e) The preliminary investigations and surveys and the preparation of plans and detailed estimates of cost in connection with the design of schemes for the extension of the Water Supply, Sewerage and Stormwater Drainage Services where the work was not commenced during the year ... ..	595
Total ... ..	£ 371,070

During the preceding year, £20,213 was expended from Loan Votes on works designed and supervised, whilst under construction, by the Board's staff as against £19,999 for the year (1932-33) under review.

As from 1st July, 1930, it became practicable for the Chief Engineer to commence the detailed investigations, etc., in connection with the initial units of this Board's *Further Water Supply Amplification* scheme, as detailed in paragraph 25 hereof. The Stockton Water Reserve (Sandbeds) Scheme and the first section of the proposed new 48-inch Chichester pipeline received such attention during 1931-32 and 1932-33.

The percentage of management expenses £39,190, to the total, £371,070, was, therefore, 10.56 per cent., as against 11.55 per cent., for the preceding year.

That percentage represents a very reasonable overhead charge on the Board's operations, and one which will compare very favourably with any institution in Australia discharging similar functions under similar conditions.

### HUNTER DISTRICT WATER SUPPLY (FURTHER) AMPLIFICATION SCHEME.

25. The action taken by the Board in regard to the further amplification of the Hunter District Water Supply works was detailed in paragraph 34 of this Board's Report for 1927 and 1928 and a copy of the Engineering Experts Committee's Description of its Scheme dated 14th June, 1928, was also included in such report.

The Committee's Report gave full details of the actual consumption of water for the eleven years ending 30th June, 1926; the estimated maximum week's consumption for each year from 1st July, 1927, to 30th June, 1944; of the amplification works required to meet requirements up to date, and the sections of the units which should be constructed in each year from 1928 to 1941.

The following statement shows the Estimated Yearly Capital Expenditure:—

Year.	Unit of Scheme.	Estimated Capital Expenditure for each Unit or Section of Unit.	Total Estimated Capital Expenditure for the Year.
		£	£
1928	Tarro Boosting Plant ... ..	28,000	28,000
1929	Wirragulla Boosting Plant ... ..	18,000	
	Sandbeds Plant—Initial Expenditure ... ..	70,000	88,000
1930	New 48 in. Cement-lined Pipeline from Dam to Tarro (42½ miles); first section 21½ miles in length, including new outlet at Dam—Initial expenditure ... ..	121,824	
	Sandbeds Plant—Further expenditure, completing to deliver 14 million gallons per week ... ..	70,425	192,249
1931	New 48 in. Pipeline—Further expenditure on first section ... ..	233,648	233,648
1932	New 48 in. Pipeline—Further expenditure, completing first section ... ..	223,648	
	Additional Units in Boosting Plants at Tarro and Wirragulla—Initial expenditure ... ..	10,062	233,710
1933	New 48 in. Pipeline from Dam to Tarro (second section from mid-point towards Tarro, finishing at 32 miles)—Initial expenditure ... ..	154,420	154,420
1934	New 48 in. Pipeline from Dam to Tarro (completion of second section at 32 miles from Dam)—Further expenditure... ..	154,420	
	Further additional units for Boosting Plants—Further expenditure ... ..	9,764	164,184
1935	New 48 in. Pipeline from Dam to Tarro (third section from 32 miles to 37 miles)—Initial expenditure ... ..	47,536	
	Additional Water Storage—Initial expenditure ... ..	100,000	147,536
1936	New 48 in. Pipeline (third section)—Further expenditure ... ..	47,537	
	Additional Water Storage—Further expenditure ... ..	100,000	147,537
1937	New 48 in. Pipeline (third section)—Further expenditure to complete to 37 miles from Dam ... ..	47,537	
	Further additional units for Boosting Plant—Further expenditure ... ..	6,501	
	Additional Water Storage—Further expenditure ... ..	100,000	154,038
1938	New 48 in. Pipeline from Dam to Tarro (fourth section from 37 miles to Tarro)—Initial expenditure ... ..	84,765	
	Additional Water Storage—Further expenditure ... ..	100,000	184,765
1939	New 48 in. Pipeline (fourth section)—Further expenditure to complete pipeline to Tarro ... ..	84,765	
	Additional Water Storage—Further expenditure ... ..	100,000	184,765
1940	.....	...	...
1941	Further additional units for Boosting Plants—Further expenditure ... ..	4,850	4,850
	Total Estimated Capital Expenditure ... ..	£ 1,917,702	1,917,702

The action taken by the Board in regard to the provisions of the initial units of the scheme is fully explained in the Chief Engineer's report herewith.

### WATER SUPPLY FOR LOCHINVAR, BRANXTON, GRETA AND NORTH ROTHBURY AREAS.

26. The action taken in connection with this scheme since 1922, was fully detailed in paragraph 36 of the Board's Report for 1928-29.

At the close of the year under review, the Board's recommendations (in regard to the financial assistance required to enable the works to be constructed and the service to be given by the levying of a reasonable water rate) were still engaging the attention of the Minister for Public Works. The financial stringency caused delay in arriving at a decision.

### NEWCASTLE DISTRICT SEWERAGE AMPLIFICATION.

27. The position in respect of the amplification, improvement and extension of the existing Newcastle District Sewerage Works as at the 30th June, 1932, was fully explained in paragraph 14 of this Board's Report for 1931-32.

The "costing" statements supplied to the Board by the constructing Authority furnished full details in respect of the Capital Expenditure on the completed and partly completed works covered by the Modified (Screening) Scheme and on the other non-construction units of such Scheme up to the 21st June, 1933.



A summary of such statements and a comparison of the actual, with the estimated, costs of such works and units up to 21st June, 1933, are as shown hereunder:—

Work.	Capital Expenditure.		Capitalised Interest and Exchange.	
	Estimated.	Actual.	Estimated.	Actual.
	£	£	£	£
Amplification .....	272,950	484,538	13,220	74,281
Carrington .....	49,873	60,978	2,622	3,092
Totals .....	£ 322,823	545,516	15,842	77,373

## SUMMARY.

Excess of Actual over Estimated Capital Expenditure...	...	...	...	£ 222,693
Excess of Actual over Estimated Capitalised Interest ...	...	...	...	61,531
Total Excess to 21st June, 1933	...	...	...	£ 284,224

The Constructing Authority's progress reports have drawn special attention to the engineering and other difficulties met with in the carrying out of these works, involving modifications of design and construction and additional capital expenditure.

The delays in the progress of construction due to financial causes and the use of these works for the relief of unemployment have also necessarily increased both the actual capital expenditure and the capitalised interest during construction.

The Board will make the necessary statutory representations to the Minister for Public Works when, after the works have been completed, the adjustment of the capital debt is receiving attention. Such representations will necessarily include a reference to the extent to which the Capital Expenditure from Loan Funds on these works reduced the expenditure, which would otherwise have been incurred for Relief of Unemployment in the Newcastle District.

The following statement shows the Funds from which the expenditures on the above works were respectively met up to 30th June, 1933:—

Items.	Loan Funds.	Unemployment Relief Funds.		Public Works Fund.	Totals.
		Interest @ 3% p.a.	Free of Interest.	Free of Interest.	
	£	£	£	£	£
Capital Expenditure ... ..	*525,225	10,000	17,987	2,000	555,212
Capitalized Interest and Exchange ... ..	*87,782	771	...	...	88,553
Totals ... ..	£ 613,007	10,771	17,987	2,000	643,765

\* Includes expenditure on Plant, Tools and Stores not yet allocated to Work-Units £10,014 and Capitalised Interest and Exchange thereon £7,000.

## STOCKTON SEWERAGE.

28. The position in respect of these works was explained in paragraph 15 of the Board's Annual Report for 1930-31.

The following shows details of the total estimated cost of the units of the scheme as submitted to the Public Works Committee in March, 1928:—

Unit.*	Capital Expenditure.	Capitalized Interest.	Total estimated cost.
	£	£	£
Reticulation and Pumping Stations .....	72,500	4,000	76,500
Rising Sewers .....	13,150	200	13,350
Treatment Works .....	25,100	(a)	25,100
Totals .....	£ 110,750	4,200	114,950

(a) Details distinguishing capital expenditure and capitalized interest not available.

\* The total estimated Capital Expenditure on the first two units, £89,850, included the sum of £7,670 for engineering and contingencies.

The construction of these works was authorised by the Stockton Sewerage Act (No. 47) 1932, at estimated cost of £115,000, exclusive of land resumptions. The Act provided that such cost should not be exceeded by more than ten per centum.

Capital expenditure to 21st June, 1933, by the Department of Public Works, as Constructing Authority, amounted to £16,848 and capitalized interest and exchange to the same date, £694. The whole of this expenditure was met from Loan Funds.

#### MAITLAND DISTRICT SEWERAGE.

29. The provision of sewerage facilities for the Maitland District has formed the subject of correspondence between the Minister and this Board since 1897.

The various stages of its progress have been dealt with in paragraph 16 of the Board's Annual Report for 1930-31 up to the stage where the Department of Public works was asked by this Board to arrange for the Engineering Experts Committee to submit a revised scheme on a reduced population basis, which might be found to be within the financial resources of the ratepayers concerned.

In January, 1932, the Department of Public Works furnished the Board with details and plan of the Maitland District (1931 Revised) Scheme to make provision for the requirements of a reduced ultimate population of 32,000 at an estimated cost of £369,206. The principal features of the scheme were as under:—

Estimated cost ... ..	£369,206
Present (1931) population ... ..	12,000
Ultimate population ... ..	32,000
Main and reticulation sewers ... ..	34 miles.
Rising sewer ... ..	7½ miles.
Effluent pipe ... ..	2¼ miles.
Pumping stations ... ..	7
Treatment works—capacity for ... ..	20,000 persons.

The Telarah-Mayfield, South Telarah, Rutherford and East Greta Areas, included in the 1928 Scheme, were omitted from the 1931 Revised Scheme and the total cost of the main and reticulation sewers in connection therewith, £54,365, was eliminated from the estimated total capital expenditure.

In May, 1932, the Board furnished full details of the 1931 Revised Scheme to the West and East Maitland Municipal Councils showing, *inter alia*, that the scheme would provide sewerage facilities for 2,958 improved properties and 152 vacant lands in West Maitland, Lorn and East Maitland. The total assessments of such properties were respectively assessed annual values, £163,652, and unimproved capital values, £678,747.

The Maitland District sewerage rate required to finance the construction, operation, maintenance and management of the works covered by such scheme would have been three shillings in the £ on the total assessed annual values, equivalent to a rate of 8½ pence in the £ on the unimproved capital values.

The rate was regarded both by this Board and the Councils concerned as prohibitive and further action was suspended.

#### CESSNOCK DISTRICT SEWERAGE.

30. The question of the provision of sewerage facilities for the Cessnock District has formed the subject of correspondence between the Minister and this Board since July, 1921. In paragraph 15 of this Board's printed report for 1926-27, the position was fully explained.

The Public Works Committee opened its inquiry into the scheme in February, 1928, and on 19th September, 1928, recommended that the scheme be carried out at an estimated cost of £153,000. The area included in the proposed scheme covers the greater part of the towns of Cessnock and Aberdare, with provision for an extension to Bellbird when settlement warrants. A gravitation scheme is not practicable. The main sewer along Black Creek will discharge into collecting wells, and the sewage will be pumped from these wells to the treatment works, the location of which will be about three-quarters of a mile down Black Creek.

The Cessnock Sewerage Act of 1931 authorised the construction of the works at estimated cost of £196,000, which should not, under any circumstances, be exceeded by more than 10 per cent.

Replying to the Board's inquiry of 1st April, 1931, *re* the difference between the original estimates of cost £153,000, and the amount authorised to be expended, the Director of Public Works informed the Board that the previous estimate of cost had been reviewed and the revised figures for the larger area under the modified scheme were capital expenditure £191,245; capitalised interest during construction, £10,600; total £201,845.

At the 30th June, 1933, the Department of Public Works advised that expenditure on account of construction up to that date amounted to £217,954 and capitalised interest and exchange to £31,515.

The Capital Expenditure to the 30th June, 1933, amounted to £217,954. Of that sum, £207,954 was met from Loan Funds and £10,000 from Unemployment Relief Funds bearing interest at 3 per cent. per annum.

Capitalized Interest and Exchange to the 30th June, 1933, amounted to £30,321 of that sum, £29,550 was met from Loan Funds and £771 from Unemployment Relief Funds bearing interest at 3 per cent. per annum.

The major portion of the works covered by the Cessnock Sewerage Scheme were transferred from the Constructing Authority to the Board on the 13th June, 1933.

At the close of the year under review, the adjustment of the Capital Debt in respect of the transferred works had not been finalized.

## NEWCASTLE DISTRICT STORMWATER DRAINAGE.

31. In paragraph 45 of the Board's Report for the year ending 30th June, 1922, a summary was shown of the representations made to the Minister in regard to the urgent necessity for the amplification, improvement and extension of the existing stormwater drainage works at Newcastle and suburbs.

The Minister referred the question to an Engineering Experts Committee (consisting of representatives of the Designing and Constructing Authority and this Board) for investigation and the preparation of a scheme.

During 1925-26 the preliminary surveys and investigations were further advanced. The Committee decided to deal by separate schemes with the drainage of Cottage Creek and Throsby Creek Catchment Areas respectively. The former area comprises approximately 1,834 acres and the latter 7,151 acres.

32. *Cottage Creek Stormwater Drainage Works.*—The design of the scheme for the improvement of the existing Stormwater Drainage Works of Newcastle and suburbs (Cottage Creek Catchment Area) having been completed, it was referred to the Public Works Committee for inquiry and report. That Committee presented its report on the 27th August, 1924.

The estimated cost of the works covered by the scheme, £206,000, was arrived at as under:—

								£
Engineering Units	...	...	...	...	...	...	...	196,000
Survey, Land, etc.	...	...	...	...	...	...	...	4,000
Interest during construction	...	...	...	...	...	...	...	6,000
								<hr/>
Total	...	...	...	...	...	...	...	£206,000

The Public Works Committee pointed out that during the inquiry consideration was given to the question of diverting the flow of Cottage Creek above Junction-street and the construction of a channel to provide for the diverted waters being discharged upon the ocean beach near Empire Park, it having been suggested that to avoid the possibility of the channel being choked up with sand, it might discharge on the rocky point at the north end of the beach. The effect of this would be to increase the total cost of the scheme by £37,000. The diversion, however, was not recommended officially, inasmuch as (apart from the extra cost) there was the possibility of sand being washed up in easterly and south-easterly weather into the mouth of the stormwater channel. Another suggested diversion (which the Committee recommended) is at the upper end of the Frederick-street branch, at the southern end of Merewether Beach, which, in addition to slightly reducing the amount to be carried in the main channel, would enable a long length of municipal drain in the eastern footpath of Frederick-street and existing crossings over that street and Mitchell-street to be used and which, with larger flow, would have to be discarded. In these circumstances the estimated cost of the Frederick-street branch, including the cost of diversion, may be reduced by £6,000, leaving the total estimated cost of the scheme at £200,000.

The Public Works Committee further pointed out that whilst the adoption of the whole scheme had been recommended, it had been urged that the first section from Wickham Basin to Parry-street be carried out as soon as possible at an estimated cost of £43,760, holding in abeyance the further extension upstream from Parry-street until the necessary reclamation had been completed by the Newcastle Council and private owners of low-lying land. The Cottage Creek Stormwater Channel Act, 1924, authorised the construction of the works, indicated the estimated cost as £200,000 and directed that such estimated cost shall not, under any circumstances, be exceeded by more than 10 per cent.

The first section of the scheme was commenced in 1925-26, and the expenditure as at 30th June, 1933, was as under:—

Items.	Loan Funds.	Unemployment Relief Fund. Half Grant and Half Loan @ 4% p.a.		Public Works Fund Free of Interest.	Totals.
		Loan @ 4% p.a.	Grant.		
£					
By Public Works Department—					
Capital Expenditure ... ..	210,573	4,966	4,967	12	220,518
Capitalised Interest and Exchange...	46,883	102	...	...	46,985
Total ... ..	£ 257,456	5,068	4,967	12	267,503
By Board—					
Capital Expenditure ... ..	4,593	...	...	...	4,593
Capitalised Interest and Exchange...	57	...	...	...	57
Total ... ..	£ 4,650	...	...	...	4,650
GRAND TOTAL ... ..	£ 262,106	5,068	4,967	12	272,153

Note.—Interest and exchange for the years 1930–31 and 1931–32, *i.e.*, subsequent to the transfer of the Cottage Creek S.W. Drainage Works, as under :—

Year.	Interest.	Exchange.	Total.
	£ s. d.	£ s. d.	£ s. d.
1930–31 ... ..	12,163 1 2	.....	12,163 1 2
1931–32 ... ..	12,027 11 2	3,566 13 11	15,594 5 1
Total ... ..	£ 24,190 12 4	3,566 13 11	27,757 6 3

were capitalized and added to the Board's Interest Bearing Capital Expenditure.

The major portion of the works covered by the Cottage Creek Stormwater Drainage Amplification Scheme were transferred from the Constructing Authority to the Board on the 27th May, 1930. As the result of the Board's representations, the Assistant Treasurer agreed to allow the Interest and Exchange on the Capital Debt to be capitalized during the years 1930–31 and 1931–32. He also authorised the Interest £11,262 and the Exchange £2,022 for the year 1932–33 being paid from Consolidated Revenue Fund.

The Board placed upon record its appreciation of the generous decisions of the Assistant Treasurer in this connection. His action enabled the Board to defer the levying, for the first time, of the Cottage Creek Stormwater Drainage Rate.

33. *Throsby Creek Stormwater Drainage Amplification Works.*—In paragraph 20 of this Board's report for 1928–29 the position was fully explained in regard to the preliminary investigations and designs of this scheme, the opening of its inquiry in regard thereto by the Public Works Committee and the evidence submitted to that Committee by the Board. The Committee completed its report on the 24th February, 1930, and recommended that the works covered by the scheme be carried out at estimated cost £645,000.

The Committee drew attention to the fact that the Board's recommendation, in respect of the scheme was most definite, *viz.*, that the whole of the works covered by the scheme as submitted should be carried out at an estimated cost of £645,000, upon the distinct understanding that the actual expenditure in respect of the main drains, estimated at £207,800, shall not be charged to the Board's stormwater drainage capital debt.

The Committee recommended that the Government should give consideration to the reasons advanced by the Board in regard to that important aspect of the scheme. The Throsby Creek Stormwater Drainage Act of 1931 authorised the construction of the works at the estimated cost £645,000, and directed that such estimated cost shall not, under any circumstances, be exceeded by more than 10 per cent.

The "costing" statements furnished to the Board in respect of expenditure on the Throsby Creek Stormwater Drainage Works up to the 24th June, 1933 are as indicated hereunder, and a comparison of the actual, with estimated, cost of such works and non-construction units is also shewn :—

Works.	Capital Expenditure.		Capitalised Interest and Exchange.	
	Estimated.	Actual.	Estimated.	Actual.
	£	£	£	£
<b>Works Units—</b>				
Main Channels ... ..	119,532	151,398		
Branch Channels ... ..	256,559	300,513		
<b>Non-Construction Units—</b>			32,434	68,328
Preliminary Survey and Investigation ... ..	7,000	10,439		
Design ... ..	3,500	4,134		
Land Resumptions ... ..	5,357	5,357		
	£ 391,948	471,841	32,434	68,328

## SUMMARY.

Excess of Actual over Estimated Capital Expenditure ... ..	£	79,893
Excess of Actual over Estimated—		
Capitalised Interest ... ..	£	28,812
Capitalised Exchange ... ..		7,082
		35,894
Total Excess at 30th June, 1933 ... ..		115,787

The Constructing Authority's progress reports have drawn special attention to the engineering and other difficulties met with in the carrying out of these works, involving modifications of design and construction and additional capital expenditure.

The delays in the progress of construction due to financial causes and the use of these works for the relief of unemployment have also necessarily increased both the actual capital expenditure and the capitalised interest during construction.

The Board will make the necessary statutory representations to the Minister for Public Works when, after the works have been completed, the adjustment of the capital debt is receiving attention. Such representations will necessarily include a reference to the extent to which the Capital Expenditure from Loan Funds on these works reduced the expenditure, which would *otherwise* have been incurred for Relief of Unemployment in the Newcastle District.

The following Statement shews the Funds from which the expenditure on these works were met up to the 30th June, 1933 :—

Items.	Loan Funds.	Unemployed Relief Fund.			Totals.	
		Interest Rate 3% p.a.	Half Grant, Half Loan at 4% p.a.			Free of Interest.
			Loan.	Grant.		
By Public Works Department—	£	£	£	£	£	£
Capital Expenditure ... ..	360,157	41,118	15,000	15,000	39,638	470,913
Capitalised Interest and Ex- change ... ..	71,943	2,045	306	...	...	74,294
Total ... ..	£ 432,100	43,163	15,306	15,000	39,638	545,207
By Board—						
Capital Expenditure ... ..	36,704	...	...	...	...	36,704
Capitalised Interest and Exchange ... ..	11,238	...	...	...	...	11,238
Total ... ..	£ 47,942	...	...	...	...	47,942
GRAND TOTALS	£ 480,042	43,163	15,306	15,000	39,638	593,149

The Board, in addition to submitting to the Public Works Committee the reasons which require that the actual cost of the main drains should be borne by the Government (as above referred to), also gave that Committee its reasons for recommending,—

- (a) That the Cottage Creek and Throsby Creek Stormwater Drainage Catchment Areas should be amalgamated for operation and rating purposes;
- (b) that the Newcastle District Stormwater Drainage Rate should be levied uniformly in the Cottage Creek Throsby Creek (Amalgamated) Stormwater Drainage Area; and
- (c) that all Stormwater Drainage Rates levied by the Board should be on the unimproved capital values of all properties within each Stormwater Drainage Area;
- (d) that the necessary amending legislation should be passed to enable the Board to levy stormwater drainage rates not exceeding 2½d., in the £ on the unimproved capital values of properties within each Stormwater Drainage Area;
- (e) that the Public Works Department should expedite the work of dredging the northern portion of the Wickham Basin (*i.e.*, between the Hannell-street and Cowper-street bridges) so that the Harbour Outlet would be made adequate for the discharge of the stormwaters which, under then existing conditions, caused more or less serious damage to properties by flooding under heavy rainfall conditions.

At the close of the year under review, all these matters were receiving consideration.

#### UNEMPLOYED RELIEF WORKS.

34. On the 11th May, 1928, the Assistant Colonial Treasurer (Hon. B. S. Stevens, M.L.A.) came specially to Newcastle to deal with the above matter as one of great urgency.

As representative of the Government, he discussed matters with the Board at a special sitting that evening, and expressed the intention of the Government to promptly provide work for the large number of men then unemployed in the Newcastle and Cessnock districts. He pointed out that the Government desired, if possible, to provide employment only on works which would later on become reproductive and would be prepared to make special effort to provide the necessary funds.

The results of that interview have been detailed in paragraph 21 of this Board's report for 1929-30, and the concession granted has received, and will receive, attention as required.

#### ADJUSTMENT OF CAPITAL DEBT.

35. In paragraphs 22 to 25 of the Board's Report for 1928-29 a full explanation was given in regard to the adjustment of the Board's Capital Debt to the 30th June, 1928, the provision to be made in respect of works which will require replacement in future and the Board's appreciation of the equitable treatment of these important issues by the Government.

## AMENDING LEGISLATION.

36. In paragraphs 21 and 22 of this Board's Report for 1926-27, reference was made to the decision of the State Treasurer in regard to recommendations of the Committee which, in November, 1907, completed its inquiry into this Board's Capital Debt up to the 30th June, 1907. The preceding paragraph of this report shows the further action taken to adjust this Board's Capital Debt up to the 30th June, 1928.

The Hunter District Water and Sewerage Amendment Act, No. 44 of 1928 (assented to on the 29th December, 1928) gave legal effect to these decisions and dealt with other financial obligations of this Board. Unfortunately, it was not found practicable to deal finally in that Act with the issues in connection with the future finance, design and construction of all works by this Board, as referred to in paragraphs 41 and 42 of this Board's Report, for 1926-27, or the establishment of a Renewals Reserve Fund to provide, by annual appropriations from revenue and accrued interest thereon, for the future renewal of assets requiring replacement.

At the close of the year under review, these important questions were receiving the consideration of the Minister for Public Works.

## GREATER NEWCASTLE.

37. On the 6th December, 1918, a Royal Commission was appointed by the Government to inquire into the question of the constitution of a Greater Newcastle. The Board considered the proposed transfer of the water supply, sewerage and stormwater services of this Department to the proposed Greater Newcastle Council. Mr. R. Wells (at that date an official member of this Board), being a member of the Royal Commission, took no part in the discussions, but the remaining members of this Board were unanimously opposed to the proposed transfer, and the Secretary was authorised to submit their views. The official evidence so tendered is given in detail in the printed report of the Royal Commission, dated 21st March, 1919.

In the Board's Annual Report for the year ending 30th June, 1920, the Board's objections were fully reviewed, and the Board feel confident that the Government will give careful consideration to their representations when dealing with the question.

## PERSONNEL OF BOARD.

38. Alderman Griffiths' term of office, as Vice-President, having expired on the 31st December, 1932, Alderman Christie was elected to the position.

On the 31st December, 1932, the terms of office of the President (Mr. J. Keith Ross) and four Elected Members (Aldermen Christie, Griffiths, Jefferson and Cram) expired. Mr. Ross was re-appointed President (for a further period of four years) and Aldermen Christie, Griffiths and Jefferson were re-elected. Alderman H. Brien was elected as a representative of the Third Constituency, vice Alderman Cram.

The Board placed on record its sincere appreciation of the valuable services rendered to the Department by Alderman J. M. L. Cram, J.P., as one of the Elected Members representing the Third Constituency on the Board from 1st July, 1918, to 31st December, 1932.

## BOARD MEETINGS.

39. Fifty meetings of the Board were held during the financial year ending 30th June, 1933, at which the attendances were as shown hereunder:—

Constituency.	Member.	No. of Meetings Attended.
President ... ..	J. Keith Ross, Esq., M.A., B.Sc., Assoc.M.Inst.C.E.	47
First—City of Newcastle ... ..	Ald. R. H. Christie* ... ..	50
Second—Stockton, Carrington, Wickham and Waratah	{ Ald. A. Griffiths, J.P.† ... ..	47
	{ Ald. E. J. Parker, J.P. ... ..	49
Third—Merewether, Hamilton, Adamstown, New Lambton and Lambton.	{ Ald. J. M. L. Cram, J.P.‡ ... ..	25
	{ Ald. H. Brien, J.P.§ ... ..	25
	{ Ald. W. H. Jefferson ... ..	50
Fourth—Wallsend, Lake Macquarie and Tarro ... ..	Cr. W. Beath ... ..	48
Fifth—West Maitland, East Maitland, Morpeth, Bol- warra, Raymond Terrace and Port Stephens.	Ald. R. L. Pender, J.P. ... ..	50
	J. H. Cousins, Esq., J.P. ... ..	47

\* Vice-President up to 31st December, 1932.

† Term of office expired 31st December, 1932.

‡ Vice-President from 1st January, 1933.

§ Elected 1st January, 1933.

## ENCLOSURES.

40. The following enclosures are submitted with this report—

- (a) The usual annual reports of the Chief Engineer, Assistant Secretary and Accountant, Officer-in-Charge of the Revenue Section of Accounts Branch, and Officer-in-Charge of Sewerage Connections (Notices and Accounts Section)—With the annexures referred to in each report.
- (b) A plan showing the approximate locations of the trunk mains and reservoirs within the Newcastle Maitland and Cessnock Divisions of the Board's Water District.

ALFRED E. FRY,  
Secretary.

J. KEITH ROSS, M.A.B.Sc., Assoc.M.Inst.C.E.  
President.

## Chief Engineer's Report.

Newcastle,  
13th November, 1933.

Sir,

I have the honour to submit, for the information of the Board, my report for the year ended 30th June, 1933.

### GENERAL REMARKS.

Weather conditions were again favourable during the past financial year. Although only a total of 29·44 inches fell in Newcastle this year as against 33·08 inches last year, the rainfall was remarkably evenly distributed.

It is noticeable that the rainfall on the Chichester Catchment Area was considerably higher than at Newcastle—being 44·28 inches at the Dam.

The water consumption was low, particularly during the first part of year, due, to some extent, no doubt, to the even distribution of the rainfall, but in a greater degree to the sustained stagnation of industrial activity during the greater part of the year. A marked increase in water consumption was, however, noted during the latter part, resulting in the total consumption being slightly in excess of the previous year.

Expenditure on operation and maintenance, which has been kept within the greatly reduced amount provided for under the revenue estimates, was £42,282, being £308 under the Estimate of £42,590. This amount was the lowest for the last twelve years.

Only comparatively small shortages of water of a purely local nature were experienced during periods of maximum consumption.

Every effort has been made to obtain the most effective service from the Board's mains to meet greater demands or varying conditions by means of the introduction of small boosting stations, pressure reducing valves, reflux valves, elevated tanks, short lengths of subsidiary mains, also the cleaning of mains. Such methods, however, must, with increasing consumption, eventually reach the limit of their usefulness. Provision must, therefore, be made for amplification, otherwise shortage of water must necessarily result.

The condition of the water has been kept under careful observation by the Board's Chemist, who has made regular periodical examinations of the stored water and water as delivered, also investigations in cases where complaints have been received. The supply generally has been satisfactory both as regards quality and quantity.

The cleaning of the reservoirs has again received attention.

Planting of the reserves under the Board's control has been continued, and the grounds as a result are considerably improved in appearance.

The Chichester Gravitation Main was well maintained. As a result of this attention the main generally was in an improved condition at the end of the financial year.

Although a considerable amount of work was carried out during the year in replacing defective staves on the wood-stave section of the pipe-line, much of this work took place during the latter part of the winter of 1932. It was found that the replacement of fewer staves was required during the winter of 1933. This was probably due, to a great extent, to the careful overhaul of the main in the 1932 winter, and also to the beneficial effect of the treatment of the staves with anti-fungus and protective coatings during the last few years.

Lifting and straightening and recoating of the steel section was also proceeded with.

An alteration in the screening system at the Chichester Dam has been devised and is in process of being carried into effect at the end of the financial year. By this system the water will be screened in the valve chamber on the downstream side of the Dam; the screens, which will be easily accessible, will to a great extent be automatically cleaned by flushing periodically as required.

The Board's orange orchards on the Chichester Catchment have received attention and have been treated with a lime-sulphur spray and the dead timber cut out. The trees are healthier in appearance, but the crop this year is light.

Investigations have been continued with a view to making provision for future extensions, notably in regard to the supply of water from the sand-beds area and the duplication of the Chichester Main.

The sewerage scheme for Cessnock was completed by the Public Works Department and handed over to the Board during the year. The Pumping Station and Treatment Works are now in operation and many connections to properties have already been made.

During the year a few Loan Works were carried out, the principal of which was the National Park Street Stormwater drain and the Federal Park Stormwater drain.

The sewerage of the Maryville-Smedmore Area was also commenced and at the end of the financial year was well in hand. This work, which includes the construction of two pumping stations, is being carried out as relief work.

A boosting station was established at Kurri Kurri at the beginning of the summer of 1932 and was found of assistance in maintaining the supply to the higher areas in that district.

The Board had at the end of the year approved of a scheme of water supply improvements in Cessnock Division to maintain the supply to localities where shortages were experienced on very hot days, also to maintain increased water demand due to houses being connected to the sewers in Cessnock and Aberdare. Construction had not been commenced.

## BUILDING CONSTRUCTION.

No fresh buildings of any importance were erected during this year. The Board's existing properties were, however, well maintained and a number of the buildings and cottages were painted. These included the Ranger's and Caretaker's cottages and Official Quarters at Chichester Dam, Foreman's cottage at Dungog, the Valve Attendants' cottages at Woerden-road and Seaham, the Board's cottages at Waratah, Buttai and Cessnock, also certain portions of the exterior of Head Office building.

## WATER SUPPLY.

The quantity of water supplied was higher than the previous year's supply, but fell short of the estimate of consumption prepared some years ago for the year 1932-33, particularly as regards peak consumptions, the consumption being 2,961,547,300 gallons as against last year's consumption of 2,863,463,200 gallons.

The pumps boosting the water to Buttai at Tarro Boosting Station were operated for 117 days between 5th November, 1932, and 30th June, 1933. The Waratah pumps, however, were not required.

Further cleaning of the mains in the Board's Newcastle and Maitland Districts was carried out. In the Newcastle District, 5.35 miles of water main, varying from 3-inch to 7-inch, were cleaned in Newcastle, Merewether, Wickham, Waratah and Minmi; in the Maitland and Cessnock Districts, 8.28 miles of water main were cleaned, including 4-inch, 6-inch and the 20-inch main between Stoney Pinch and Buttai Reservoir. The results obtained have been generally satisfactory.

The following reservoirs were cleaned out during the year:—

## Newcastle Division—

Waratah, Nos. 2, 3, 4 and 5.  
Bull-street, Mayfield Tanks.  
Newcastle, Nos. 1 and 2.  
Obelisk.  
Newcastle High Level Tank.  
Hill-street, Merewether High Level Tank.  
Merewether-street, Merewether High Level Tank.  
Brisbane Water road, Adamstown Tank.

## Maitland and Cessnock Divisions—

Buttai, Nos. 1 and 2.  
Tenambit.  
Rutherford.  
Pelaw Main.  
Cessnock, Nos. 1 and 2.  
Pelton.  
Neath Reservoir and Suction Tank.

An aeration system at Obelisk Reservoir was installed to improve the quality of the water in the area supplied from that reservoir.

The liming plant at Wallsend was altered to hold a larger quantity and reduce maintenance.

*Increased Distribution.*

The only work of any moment in connection with increased distribution during the current financial year was the installation of the Kurri Boosting Station.

The nett addition to the length of mains was only 1,230½ yards—being less than last year.

*Main and Reticulation Pipes.*

The suction, gravitation and reticulation water mains were maintained in effective working condition.

During the year, 579 yards of 3-inch pipe, 495 yards of 4-inch and 206½ yards of 6-inch, making a total of 1,280½ yards of water main, were laid.

Water mains totalling 50 yards were removed and re-laid or abandoned.

The nett addition to length of water mains laid was 1,230½ yards.

The length of water mains now under the control of the Board is 863 miles 453½ yards.

Fifteen inch and 12-inch trunk water main leading from Newcastle reservoirs to the City area were fitted with control valves on hydrants.

Alterations in Newcastle-street, East Maitland (forming part of the State Highway to the North) due to road reconstruction, had just been commenced at the end of the year.

*Consumption of Water.*

A total of approximately 2,961,547,300 gallons of Chichester water was supplied; the supply to Waratah amounted to 1,847,400,000 gallons; 1,757,600 gallons were drawn off by direct service connection from Chichester Main between the Dam and Nelson's Plains; 49,589,700 gallons being drawn off at Nelson's Plains, Morpeth-road, Miller's Forest road, and Woodberry Hill, and 1,062,800,000 gallons to Buttai and Newcastle. The total water supplied during the year, therefore, amounted to 2,961,547,300 gallons as against 2,863,463,200 gallons for the preceding year, showing an increase of 98,084,100 gallons, equal to 3.4 per cent. Of the total quantity, the Newcastle Division took 2,332,676,550 gallons as against 2,273,586,530 gallons for the preceding year, and the Maitland and Cessnock Divisions took 589,775,930 gallons as against 537,807,720 gallons for the preceding year; also 39,094,820 gallons were delivered into the Storage Reservoir, Walka, during the year.



The water consumption in the Newcastle Division shows an increase of 2.59 per cent., and in the Maitland and Cessnock Divisions an increase of 9.66 per cent. compared with the previous year's consumption in these areas.

The maximum week's consumption of water was for the week ending the 4th March, 1933, and it is estimated to amount to 75,104,220 gallons, as against 78,806,942 gallons for the previous year being a decrease of 4.6 per cent. on last year's maximum week's consumption.

The number of properties, exclusive of vacant lands, liable for water rates amounted to 44,428 at the close of the official year, representing an approximate population of 222,140 persons contiguous to the water mains. The number of properties actually connected to the water mains was 42,968 estimated to contain 214,840 inhabitants.

Permits were issued during the year for connecting 330 houses to Board's water mains.

The average daily supply of water per inhabitant of the 42,968 connected properties was 37.76 gallons, as against 36.57 gallons for the preceding year. The average daily consumption in the Newcastle Division (comprising the City of Newcastle, Suburbs, and Local Townships) containing 30,077 connected properties was 42.49 gallons per inhabitant as against 41.56 gallons for the preceding year, and in the Maitland and Cessnock Divisions (comprising East and West Maitland, Morpeth and Kurri Kurri, and Cessnock Mining Townships) containing 12,891 connected properties, the average was 25.06 gallons per inhabitant as compared with 22.80 gallons per inhabitant for the preceding year.

The quantity of water supplied by meter to 542 large consumers (who used 50,000 gallons and over) such as railways, steel works, collieries, shipping, breweries, and factories of various kinds, was 918,465,554 gallons in the Newcastle Division and 84,165,400 in the Maitland and Cessnock Divisions, altogether making 1,002,630,954 gallons and equal to 33.85 per cent. of the total water supplied. The remaining 66.15 per cent. was used for domestic purposes, street watering, small gardens, stock, etc., and averaged 25.7 gallons per head per diem in the Newcastle Division, and 21.4 gallons per head in the Maitland and Cessnock Divisions; 39,094,820 gallons being delivered into the Storage Reservoir, Walka.

#### *Prevention of Waste of Water.*

Attention is again called to the necessity for preventing waste and illegal use of water, as the effective prevention of misuse would in a great measure prevent the dissatisfaction that arises as a result of the consequent unequal distribution of supply during hot weather.

#### *CHICHESTER DAM.*

The scheme of beautifying the grounds surrounding the Dam and Storage Area has been continued. Ornamental trees that had died have been replaced where necessary. The plantations generally have made good progress and a marked improvement in the general appearance of the area is noted.

There is always a possibility during the warmer months of grass fires sweeping the area. Precautions are taken in the way of burning fire breaks but the grass in this district is so rank that unless the adjoining paddocks were grazed down fire breaks might be of little avail should a grass fire occur during a heavy wind.

The lowest level of the Dam was 510.2 on 27th March, 1933.

The total measured outflow from the Dam during the year amounted to 21,357 million gallons, 2,910 million being recorded by meter as being utilised in the Board's water supply area and 18,447 million passed the gauging station below the Dam. The variation in the level of the Dam was from 513.9 at the commencement to 513.7 at the end of the year.

#### *Wood Pipeline.*

A considerable amount of repairs was carried out, mainly consisting of replacements of defective staves.

During the 1932 winter, 2,878 lin. ft. were replaced between mileage 5 $\frac{13}{16}$  and mileage 9 $\frac{3}{8}$ . This is the balance of the replacements carried out during the latter part of the previous financial year.

During the 1933 winter, 4,317 lin. ft. were replaced, requiring five shut-downs. A good deal of work was done in plating the butts of the staves, as the lifting of the stave ends is found to be a fruitful source of leakage.

Protective coatings were applied to the whole length of the wood stave pipeline. From mileage 0 to 4 $\frac{1}{2}$ , two complete coats of creosote were applied. The length from mileage 4 $\frac{1}{2}$  miles to mileage 9 $\frac{3}{8}$  was coated with sodium fluoride solution, followed by a coat of lanoline creosote solution. It is somewhat early to state definitely the results of this coating work. It would appear, however, as far as can be seen, to have a beneficial effect and should prolong the life of the staves.

Fluarised karri staves were used in replacement work during the winter of 1933.

#### *Steel Section.*

Further portions of the steel section of the pipeline were recoated during the year. Aluminium was applied by means of a power-operated spray-gun over a section previously coated with tar from Dungog to Woerden Road. Lanoline was applied between Sandgate and Waratah.

Recoating was also carried out with lanoline between Tarro and Stoney Pinch, also from Hexham Swamps to Sandgate.

Chipping and patching of the pitted portions of the pipeline between Glenoak and Woerden Road received attention.

Lifting and straightening was carried out during the year in the vicinity of the flood openings between Dungog and Wiragulla, Woodberry Hill and Tarro, and generally from mileage 43 to mileage 43 $\frac{1}{4}$ , also between mileage 43 $\frac{3}{4}$  and mileage 43 $\frac{1}{2}$  across the Hexham Swamps, being still in progress at the end of the year.

The steel bridges carrying the pipeline over the railway at Wiragulla, also at Brown's Line and the bridges over Fishery and Ironbark Creeks were painted.

A valve house was placed over the operating gear at the Burmi Creek Valve Station, and the building used as a linesman's hut at Glenoak was transferred to Wiragulla.

The banks were made up where erosion had taken place on the formation across the Hexham Swamps. In certain cases, banks were also topped where extensive settlement had occurred.

In the vicinity of Ironbark and Fishery Creeks the channels formed by the wash of the tides were encroaching on the formation. As it was difficult to obtain material for filling, levee banks were made use of for diverting the flow away from the pipeline. This system of treatment appears to be effective.

Some trouble has been experienced on account of the honeycombing of banks by crabs. Several schemes for preventing this have been tried with partial success.

Extensive repairs have been carried out to the fencing and ramps giving access over the pipeline between Woodberry Hill and Brown's Line.

At the Hunter River Tunnel, valve standards, indicators and extension spindles have been fitted to the main 24-inch stop valves in the north and south valve houses, and pressure gauges re-arranged. This should facilitate the operation of the valves.

All timber bridges along the line have been sapped and treated where required.

The decking of access culverts has also been renewed in several cases.

Several of the planks in the hull of the Board's launch were found to require renewing. These were replaced, the engine overhauled, and the launch repainted. The hull of the old launch was decked to be used as a punt for general transport purposes.

The main was shut down on twelve occasions, three being due to defects in joints. Additional details regarding shut-downs are filed in my office for reference.

#### *Full Flow Tests.*

Full flow tests carried out during the year gave the following results corrected to equivalent for 300 feet head:—

August, 1932	...	...	...	...	10,109,300 galls. for 24 hours.
November, 1932	...	...	...	...	10,187,700     "     "
April, 1933	...	...	...	...	10,001,100     "     "

A total reduction of flow as at 300 feet head from December, 1924, to the end of June, 1933, was 2,468,900 gallons per day, equal to 19.7 per cent.

Full flow tests for the previous year were as follows:—

July, 1931	...	...	...	...	10,189,000 galls. for 24 hours.
September, 1931	...	...	...	...	10,283,200     "     "
November, 1931	...	...	...	...	10,381,040     "     "
April, 1932	...	...	...	...	10,237,700     "     "

#### PUMPING STATIONS.

*Walka Pumping Station.*—Necessity did not arise during the past year to work Walka Pumping Station. The Storage Reservoir was maintained fresh and as near top water level as possible by admitting Chichester water whenever available. By scouring and strict attention to the foreshores, it has been maintained free from pollution of any kind.

The 20-inch steel suction main from river intake to the pumping station was cleaned externally, and given three coats of cement wash in the tunnels and one coat of tar where it is exposed on the surface.

*Tarro Boosting Station.*—During the year the section of the plant installed for pumping water *via* Stoney Pinch to Buttai, Newcastle, and other service reservoirs was used extensively. The section of the plant for accelerating the flow of water to Waratah Reservoir was not used, thus relatively heavy charges for electrical energy were avoided.

All equipment, buildings and grounds have been maintained in good order.

The total number of hours during which the station was operated was 3,195 $\frac{1}{4}$ .

Number of days the station operated, 117.

The quantity of water pumped *via* Stoney Pinch was 425,800,000 gallons.

*Wiragulla Boosting Station.*—This plant was not operated during the year, except for a short trial run for maintenance purposes only.

*Neath Pumping Station.*—Pumping plant at Neath Pumping Station has been maintained in good order throughout the year, and pumping operations were carried on without interruption.

The two pumps driven by the crude oil engine pumped the greater part of the water to Neath, Cessnock, and Pelton Reservoirs, and, except for minor troubles, gave satisfactory and economical service.

The cylinder liner on No. 2 cylinder of the crude oil engine was drawn from position to enable the rubber packing ring to be renewed at the front end.

The two electrically-operated pumps were used only when necessary to supplement the output of the crude oil engine driven pumping plant, and when the latter plant was undergoing minor repairs and adjustments.

The steam plants have served as standby units during the year.

The grounds have been maintained in good order throughout the year.

The maximum week's pumping was for the week ending 17th December, 1932, and amounted to 5,860,000 gallons, being a decrease of 9.3 per cent. on the maximum week's consumption for the year ended 1932. The total water pumped at Neath for the year ended 30th June, 1933, was 173,720,000, as against 167,250,000 gallons for the year ended 30th June, 1932, being an increase of 3.8 per cent.

The total pumping was as follows :—

											gallons.
Steam pumps	...	...	...	...	...	...	...	...	...	...	3,770,000
Electric pumps	...	...	...	...	...	...	...	...	...	...	4,117,000
Crude oil pumps	...	...	...	...	...	...	...	...	...	...	165,833,000
											173,720,000

This was divided as follows :—

											gallons.
To Neath and Cessnock Reservoirs	...	...	...	...	...	...	...	...	...	...	140,653,000
To Pelton Reservoir	...	...	...	...	...	...	...	...	...	...	33,067,000
Total pumped	...	...	...	...	...	...	...	...	...	...	173,720,000

Total coal consumed	...	...	...	...	...	...	...	...	...	...	59 tons.
Total electric units consumed	...	...	...	...	...	...	...	...	...	...	9,108 units.
Total crude oil consumed	...	...	...	...	...	...	...	...	...	...	23,326 gallons.
Average power and fuel cost per 1,000 gallons lifted 100 feet	...	...	...	...	...	...	...	...	...	...	0.250d.

The following shows the water pumped or energy used at other plants :—

											Units.
Kurri Kurri Electrically-operated Boosting Station	...	...	...	...	...	...	...	...	...	...	1,329
Charlestown Electrically-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	8,115
Teralba Electrically-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	3,973
Wallsend Electrically-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	13,402
Tyrrell-street (Newcastle) Electrically-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	10,930
Mayfield Electrically-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	185
Heddon Greta Steam-driven Boosting Station	...	...	...	...	...	...	...	...	...	...	2 tons 17 cwt. coal.
											gallons.
Merewether Reservoir	...	...	...	...	...	...	...	...	...	...	2,091,746
Merewether Heights (Merewether-street)	...	...	...	...	...	...	...	...	...	...	14,027,833
Adamstown South	...	...	...	...	...	...	...	...	...	...	1,183,892
Tenambit	...	...	...	...	...	...	...	...	...	...	1,842,543
Newcastle Reservoir	...	...	...	...	...	...	...	...	...	...	7,495,859
Lambton	...	...	...	...	...	...	...	...	...	...	64,024,961

Additional details regarding the above plants are filed in my office for reference.

*Minmi Pumping Station.*—During the year, No. 1 steam pump was thoroughly reconditioned and patch put on No. 2 boiler at one of the hand-hole doors.

The plant gave satisfactory service.

			Year ending, 30th June, 1933.				Year ending, 30th June, 1932.				
Total water pumped	...	...	6,080,900 galls.	...	...	...	18,315,600 galls.				
Hours worked	...	...	609	...	...	...	1,603				
Coal consumed	...	...	63 tons	...	...	...	135 tons.				

Owing to an alteration in the system of supply to West Wallsend Reservoir, whereby the pressure from the trunk mains is used whenever possible to deliver direct by gravitation instead of always repumping, the amount of pumping at this station has been very much reduced. This will be observed by reference to the figures for last year, which are repeated above for purposes of comparison.

#### METER AND REPAIR SHOP.

During the year, 1,991 meters were examined, repaired and tested as against 1,622 the previous year, and 420 new meters were examined before issuing as against 304 the previous year.

Many small repair works were carried out during the year.

#### SEWERAGE.

*Sewer Extensions.*—One mile 812 yards of new sewer were constructed during the current year, as compared with 1 mile 1,694 yards the previous year.

Sewers abolished during the year totalled 111 feet.

The length of sewers now under the Board's control is 203 miles 222.5 yards.

During the year 91 connections to sewer were made, draining 91 properties, having 125 water closets.

Four properties were connected by the Board under the Compulsory Drainage System.

Since the inception of the present system, 21,617 properties have been connected with the Board's sewer.

*Branches.*—Nine branches, totalling 208 feet, and providing for 11 properties, were laid from sewers in private properties to the boundary of adjoining properties.

Fourteen branches, totalling 497 feet, and providing for 15 properties, were laid from sewer in streets and lanes to building lines of properties.

Total, 23 branches—length, 705 feet, and providing for 26 properties.

Eight junctions for house connections were inserted in sewers, and 1 inlet cut in manhole by the Board during the year.

During the year 8 manholes were constructed, and 2 vent shafts and 1 lamphole abolished; 6 manholes were raised to level of surrounding ground, and 1 manhole was cut down to level of surrounding ground; also one 9-inch and one 12-inch overflows were constructed.

Also 752 flushing cisterns and flusherette valves for water closets and urinals and 837 path and bib-cocks were tested.

#### LOW LEVEL SEWAGE PUMPING STATIONS.

*No. 1 Sewage Pumping Station.*—The three pumping plants have been maintained in good order throughout the year. Pumping operations were carried on without interruption, minor repairs only being necessary.

The various valves interconnecting the sewage walls and the receiving chamber have been maintained in good condition.

The grounds have been maintained in good order.

*Nos. 2 to 5 Sewage Pumping Stations.*—These have all given satisfactory service and been maintained in good order.

TABLE OF RUNNING COSTS OF SEWAGE PUMPING STATIONS.

Pumping Station.	Total Cost for Power.	Millions of Gallons Lifted.	Mean Lift including Friction in feet.	Power Cost per 1,000 Gallons Lifted 100 feet.
	£ s. d.			Pence.
No. 1 .....	1,332 9 8	1,178·05	33	·822
No. 2 .....	174 13 10	103·2	44	·923
No. 3 .....	12 14 3	11·0	23	1·205
No. 4 .....	8 19 6	3·6	36	1·620
No. 5 .....	4 13 11	3·9	31	·926

*Mechanically Operated Vent Shafts.*—At Empire Park, Tighes Hill and Gibson-street. These have been maintained satisfactorily. A new motor was installed at Tighes Hill operating the sulphur plant.

*Zaara-street Sewage Ejector Station.*—This plant has been maintained in good order during the year, minor repairs only being necessary.

*Cessnock Sewage Pumping Station.*—Cessnock Sewage Pumping Station came into operation during the year.

The pumping station is located in Anzac-avenue, Cessnock, and consists of two concentric wells. The outer well is covered and divided vertically, forming two sewage storage wells; the inner well is used as a pump chamber and contains two 30-H.P. horizontal spindle pumping units.

A brick building for switchgear and a travelling crane is constructed on the top cover of the wells.

The plant has operated satisfactorily, but repairs were necessary to the bearings of No. 1 Pumping Unit.

#### STORMWATER DRAINAGE.

Some further construction of stormwater drainage was carried out by the Board.

A 3 ft. 6 in. diameter reinforced concrete drain commenced during the latter part of the previous financial year in Porcher-street, Hamilton, was completed and has since functioned satisfactorily.

A 24-inch concrete pipe drain to deal with the drainage in the vicinity of Federal Park, Merewether, was also carried out and results obtained were satisfactory.

The extensions to the Cottage Creek Stormwater System carried out by the Public Works Department and handed over during the year are being maintained by the Board.

#### RAINFALL.

The rainfall on the Chichester Catchment was recorded during the year at Upper Wangat, Upper Chichester and Chichester Dam. The rainfall for the year at Upper Chichester was 36·77 inches and at Upper Wangat 61·04 inches.

Fall registered at Chichester Dam was 44·28 inches compared with 31·06 inches the previous year at Newcastle 29·44 inches compared with 33·08 inches the previous year; and at West Maitland 24·75 inches compared with 27·29 inches last year.

During the past year no specially heavy rainfall occurred.

The maximum level reached in the Chichester Storage was 516·0 on 24th September, 1932.

#### CONSTRUCTION OF WORKS.

The Board's expenditure on construction works amounted to £18,645.

THE STAFF.

I desire to express my appreciation of the manner in which the various officers of my branch have carried out the duties devolving upon them.

I herewith submit a sketch map of the Board's Water Supply System.

Statements have also been prepared and are filed for future reference as under :—

- No. 1—Quantity of water delivered to the district reservoirs and the population supplied from 1892 to 1933.
- No. 2—Statement showing the net yearly increase in the length of water mains laid during each year from 1892 to 1933.
- No. 3—Particulars of water mains showing total length of each size of existing mains.
- No. 4—Statement showing net yearly increase in length of sewers.
- No. 5—Statement showing rainfall for thirty-five years ended 30th June, 1933.

J. M. C. CORLETTE,  
 B.E., M.Inst. C.E., M.I.E. Aust.,  
 Chief Engineer.

*(The following table is a reproduction of the content on this page, which is extremely faint and largely illegible. It appears to be a detailed report or ledger with multiple columns and rows of data.)*

Statement No. 1		Statement No. 2		Statement No. 3		Statement No. 4		Statement No. 5	
Year	Quantity	Year	Length	Size	Length	Year	Length	Year	Rainfall
1892	...	1892	...	12"	...	1892	...	1892	...
1893	...	1893	...	12"	...	1893	...	1893	...
1894	...	1894	...	12"	...	1894	...	1894	...
1895	...	1895	...	12"	...	1895	...	1895	...
1896	...	1896	...	12"	...	1896	...	1896	...
1897	...	1897	...	12"	...	1897	...	1897	...
1898	...	1898	...	12"	...	1898	...	1898	...
1899	...	1899	...	12"	...	1899	...	1899	...
1900	...	1900	...	12"	...	1900	...	1900	...
1901	...	1901	...	12"	...	1901	...	1901	...
1902	...	1902	...	12"	...	1902	...	1902	...
1903	...	1903	...	12"	...	1903	...	1903	...
1904	...	1904	...	12"	...	1904	...	1904	...
1905	...	1905	...	12"	...	1905	...	1905	...
1906	...	1906	...	12"	...	1906	...	1906	...
1907	...	1907	...	12"	...	1907	...	1907	...
1908	...	1908	...	12"	...	1908	...	1908	...
1909	...	1909	...	12"	...	1909	...	1909	...
1910	...	1910	...	12"	...	1910	...	1910	...
1911	...	1911	...	12"	...	1911	...	1911	...
1912	...	1912	...	12"	...	1912	...	1912	...
1913	...	1913	...	12"	...	1913	...	1913	...
1914	...	1914	...	12"	...	1914	...	1914	...
1915	...	1915	...	12"	...	1915	...	1915	...
1916	...	1916	...	12"	...	1916	...	1916	...
1917	...	1917	...	12"	...	1917	...	1917	...
1918	...	1918	...	12"	...	1918	...	1918	...
1919	...	1919	...	12"	...	1919	...	1919	...
1920	...	1920	...	12"	...	1920	...	1920	...
1921	...	1921	...	12"	...	1921	...	1921	...
1922	...	1922	...	12"	...	1922	...	1922	...
1923	...	1923	...	12"	...	1923	...	1923	...
1924	...	1924	...	12"	...	1924	...	1924	...
1925	...	1925	...	12"	...	1925	...	1925	...
1926	...	1926	...	12"	...	1926	...	1926	...
1927	...	1927	...	12"	...	1927	...	1927	...
1928	...	1928	...	12"	...	1928	...	1928	...
1929	...	1929	...	12"	...	1929	...	1929	...
1930	...	1930	...	12"	...	1930	...	1930	...
1931	...	1931	...	12"	...	1931	...	1931	...
1932	...	1932	...	12"	...	1932	...	1932	...
1933	...	1933	...	12"	...	1933	...	1933	...

## Accountant's Report.

Newcastle,  
12th November, 1933.

Sir,

I have the honor to submit my report for the year ended 30th June, 1933.

### CAPITAL EXPENDITURE.

1. The Board's printed Annual Report for the year ended 30th June, 1928, showed the Capital Expenditure in respect of Water Supply, Sewerage and Stormwater Drainage up to that date as hereunder:—

	£	s.	d.	£	s.	d.
Water Supply ... ..	4,396,114	10	6			
Sewerage... ..	726,754	2	11			
Stormwater Drainage ... ..	196,985	11	9			
				5,319,854	5	2

2. During the financial year 1928-29, the Board's Capital Indebtedness to the State at 30th June, 1928, was adjusted and fixed by the Hunter District Water and Sewerage (Amendment) Act No. 44, 1928, as under:—

	£	s.	d.
In respect of Water Supply... ..	2,514,483	0	0
In respect of Sewerage ... ..	661,888	0	0
In respect of Stormwater Drainage ... ..	184,540	0	0
Total Capital Debt at 30th June, 1928, as adjusted ... ..	£3,360,911	0	0

The additions to the Capital Debt during the four financial years from 1st July, 1928 to 30th June, 1933 are as under:—

#### Additions, 1928-29 to 1931-32—

	£	s.	d.	£	s.	d.
Interest-bearing Expenditure—						
Water Supply Works ... ..	338,532	18	1			
Sewerage Works ... ..	765,235	7	7			
Stormwater Drainage Works ... ..	533,981	2	3			
				1,637,749	7	11

#### Non-Interest-bearing Expenditure—

Water Supply Works ... ..	9,511	19	1			
Sewerage Works ... ..	19,987	5	9			
Stormwater Drainage Works ... ..	43,034	19	5			
				72,534	4	3

#### Additions, 1932-33—

##### Interest-bearing Expenditure—

Water Supply Works ... ..	7,695	6	8			
Sewerage Works ... ..	168,180	3	7			
Stormwater Drainage Works ... ..	108,778	8	0			
				284,653	18	3

##### Non-Interest-bearing Expenditure—

Water Supply Works ... ..						
Sewerage Works ... ..	3,058	16	1			
Stormwater Drainage Works ... ..	41,363	10	1			
				44,422	6	2

2,039,359 16 7

Total Capital Debt at 30th June, 1933, *vide* Statement No. 7 ... £5,400,270 16 7

### WATER SUPPLY OPERATIONS.

3. The result of the Water Supply Operations for the five financial years ended 30th June, 1933, was as under:—

Year.	Revenue Collected.		Expenditure.						Net Deficiency at 30th June each Year.			
			Interest on Capital Expenditure from Loan Funds.	Management Expenses.	Working Expenses.	Instalments to Sinking Fund for Extinction of Capital Debt.	Exchange on Remittances of Interest Overseas.					
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1928-29.....	222,904	18 1	134,366	17 3	30,253	2 4	61,620	19 8	6,824	0 0	10,160	1 2
1929-30.....	219,109	4 0	142,659	14 11	30,497	0 2	60,496	6 10	.....	.....	21,803	19 5
1930-31.....	226,895	11 1	144,720	6 6	29,943	11 2	47,762	8 8	8,116	14 6	19,225	9 0
1931-32.....	204,831	17 4	137,132	3 10	28,002	11 2	42,210	12 0	8,105	7 10	36,534	19 1
1932-33.....	206,583	12 2	124,102	13 4	25,596	7 6	41,882	9 7	8,842	14 4	16,559	5 1
Totals ...	1,080,325	2 8	682,981	15 10	144,292	12 4	253,972	16 9	39,148	18 2	104,283	13 9

The revenue collections shown for 1929-30 and subsequent years include a credit from the Sewerage Service for actual cost of water supplied to such service for flushing purposes. The amount credited to Revenue during 1929-30 was £8,554; 1930-31, £10,411 3s. 4d.; 1931-32, £10,398 4s. 5d.; and 1932-33, £9,341 15s. 1d.

The Revenue represents collections only, and does not include the outstanding rates and charges at the end of each financial year.

## SEWERAGE OPERATIONS.

4. The result of the Sewerage Operations for the five financial years ended 30th June, 1933, was as under:—

Year.	Revenue Collected.		Expenditure.						Result of Years Operations.					
			Interest on Capital Expenditure from Loan Funds.	Management Expenses.	Working Expenses.	Instalments to Sinking Fund for Extinction of Capital Debt.	Exchange on Remittances of Interest Overseas.	Surplus.	Deficiency.					
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.		
1928-29	84,006	4 0	33,658	10 7	10,591	18 5	16,388	12 11	2,460	0 0	.....	20,907	2 1	.....
1929-30	85,534	17 5	34,820	6 5	11,977	7 7	23,628	3 10	3,572	3 10	.....	11,536	15 9	.....
1930-31	82,117	2 3	34,885	16 0	11,506	15 6	26,123	4 7	5,083	5 6	9,753 0 9	.....	5,238	0 1
1931-32	77,875	19 5	33,057	9 4	11,189	13 10	24,357	11 5	5,866	12 2	24 9 9	3,158	2 11	.....
1932-33	74,708	9 5	29,939	2 5	9,593	14 3	22,077	15 3	4,855	3 9	5,480 13 5	2,762	0 4	.....
Totals...	404,242	12 6	166,361	4 9	54,859	9 7	112,575	8 0	21,837	5 3	15,483 3 11	38,364	1 1	5,238 0 1

The Working Expenses for the Financial Year 1929-30, and subsequent years were charged for water used for flushing purposes. The amount so charged was £8,554 for 1929-30, £10,411 3s. 4d. for 1930-31, £10,398 4s. 5d. for 1931-32, and £9,341 15s. 1d. for 1932-33.

This charge for water supplied for flushing purposes is based on the actual cost of the water in the mains.

The Revenue represents collections only and does not include the outstanding rates and charges at the close of each respective year.

5. Percentage of Revenue outstanding to Revenue collectable for the five years ended 30th June, 1933:—

Revenue actually collected from 1st July, 1928, to 30th June, 1933—	£	£
Water Supply ... ..	1,080,325	
Sewerage... ..	404,242	
	—————	1,484,567
Revenue Charges outstanding at 30th June, 1933—		
Water Supply ... ..	62,676	
Sewerage... ..	26,640	
Services rendered ... ..	44	
	—————	89,360
Total Collectable ... ..		£1,573,927
Percentage of Revenue collected to Revenue collectable ... ..		94.23
Percentage of Revenue outstanding to Revenue collectable ... ..		5.68

## STORMWATER DRAINAGE OPERATIONS.

6. The Cottage Creek Stormwater Drainage Channel Works were transferred to and vested in the Board on the 27th May, 1930, by proclamation in *Government Gazette*, No. 65, dated 30th May, 1933.

The Hon. the Assistant Colonial Treasurer, in response to representations made by the Board, granted the Board's request to defer, for the time being, the levying of the Cottage Creek Stormwater Drainage Rate (Ref. H.D.W. 33/3140).

As the Interest and Exchange could no longer be capitalised and the Board had no funds to which the Interest and Exchange could be legally charged, the Treasury Approval was given to charge the Interest and Exchange for 1932-33 as under:—

	£	s. d.
Interest ... ..	11,262	14 4
Exchange ... ..	2,022	10 10
Total ... ..	£13,285	5 2

to the Consolidated Revenue Fund.

The result of the Cottage Creek Stormwater Drainage operations for 1932-33, after showing a recoupment by the Treasury of Interest and Exchange amounting to £13,285 5s. 2d., is a deficiency of £2,826 0s. 1d. representing—

	£	s. d.
Instalment to Sinking Fund for extinction of Capital Debt ... ..	2,302	1 11
Working Expenses ... ..	523	18 2
Deficiency, 1932-33 ... ..	£2,826	0 1

as detailed on Statement No. 6, attached.

## SINKING FUND FOR RENEWAL OF WORKS.

7. Statements Nos. 3, 4, 5, 12, 13 and 14 which were printed and formed portion of the Accountant's Report for the year ending 30th June, 1923, shew the annual amount set aside by the Board from Revenue which, with accumulated interest, will be sufficient to provide for the renewal of Water Supply and Sewerage Works as such renewals become necessary in the future.

When the 1897 legislation was passed, it was contemplated that these annual sums would be invested to produce interest, so that such amounts, with the annual interest accretions, would be sufficient to provide for future renewals.

The instalments were not so invested. They were, however, together with accrued interest at the average rate, applied in reduction of the Board's Capital Debt at 30th June, 1928, subject to determination by legislation of the future basis for providing for replacement as required on renewable works as from 1st July, 1928.

Pending the passing of the legislation referred to, the instalments for 1928-29, 1929-30, 1930-31, 1931-32, and 1932-33, are in abeyance.

## REPAYMENT OF BOARD'S CAPITAL DEBT.

8. Section 8 of the Hunter District Water and Sewerage (Amendment) Act No. 44 of 1928 requires the Board to provide a minimum sinking fund of 5s. for every £100 of the Board's loan indebtedness to the State.

The contributions made by the Board for the three financial years ended 30th June, 1931, are as follows:—

Year.	In Respect of Capital Expenditure from—				Total for the Year.
	Water Supply Vote.		Sewerage and Storm-water Drainage Votes.		
	£	s. d.	£	s. d.	£ s. d.
1928-29.....	6,824	0 0	2,460	0 0	9,284 0 0
1929-30.....	7,260	1 6	3,572	3 10	10,832 5 4
1930-31.....	8,116	14 6	5,083	5 6	13,200 0 0
	22,200	16 0	11,115	9 4	33,316 5 4

The interest on the sinking fund instalment was credited to revenue, in conformity with the Treasury practice. It is considered that it would be preferable to allow the interest on the sinking fund contribution to accumulate at compound interest.

Contributions were made by the Board to the Treasury for the extinction of the Capital Debt, as under—

	£
1931-32 ... ..	13,972
1932-33 ... ..	12,000
Total ... ..	£25,972

The Board had not, however, paid in full the interest due to 30th June, 1933, and the Treasury applied the Sinking Fund Contribution towards meeting, in part, the balance of the interest due by the Board to the Treasury. (Ref. Treasury letter dated 13th July, 1932—P.O. 1932/9287—H.D.W. 32/1757.)

Provision has been made in the Board's Revenue and Expenditure Accounts for the Statutory Annual Charges in respect of Water Supply, £16,948 2s. 2d.; Sewerage, £10,721 15s. 11d.; and Stormwater Drainage, £2,302 1s. 11d.—Total, £29,972, *vide* Statement No. 7 attached.

## SPECIAL DEPOSITS ACCOUNT.

*Hunter District Water Supply and Sewerage Board Account.*

9. The Hunter District Water and Sewerage (Amendment) Act, 1928, having been assented to on the 29th December, 1928, all revenue of the Board remitted to the Treasury during the financial years 1928-29, 1929-30, 1930-31, 1931-32 and 1932-33 was credited to an account in *Special Deposits Account* at the Treasury designated "Hunter District Water Supply and Sewerage Board Account."

Expenditure in connection with the operation, maintenance and management of the services under the control of the Board has also been paid from this account.

10. Section 5 of the Hunter District Water and Sewerage (Amendment) Act No. 44 of 1928, requires the Board to levy and collect sufficient revenue for each separate service. Consequently the surplus on one service cannot legally be set off against the deficiency on any other service.

The Board made representations to the Treasury in this connection and it was agreed, subject to the approval of the Minister for Public Works, to amalgamate the water and sewerage financial estimates and to accept same, as so amalgamated, as a sufficient compliance with the Board's statutory obligations.



11. The nett surplus on the Revenue Account—Water Supply, Sewerage and Stormwater Drainage after taking into account outstanding Revenue and Expenditure at 30th June, 1933, is £15,322 12s. 10d. as under :—

	Water Supply Deficiency.		Sewerage Surplus.		Stormwater Drainage Deficiency.	
	£	s. d.	£	s. d.	£	s. d.
At 30th June, 1932, as detailed in paragraph 9 of Accountant's Report for that year	26,724	17 1	58,473	4 9	.....	
1932-33 ... ..	14,891	12 1	1,291	17 4	2,826	0 1
	£	41,616 9 2	59,765	2 1	2,826	0 1

*Summary.*

<i>Surplus—</i>		£	s. d.
Sewerage as above ... ..		59,765	2 1
<i>Deficiencies—</i>		£	s. d.
Water Supply as above ... ..	41,616	9 2	
Stormwater Drainage ... ..	2,826	0 1	
		44,442	9 3
Nett Surplus at 30th June, 1933, in respect of the combined Water Supply, Sewerage and Stormwater Drainage Services ...		15,322	12 10

12. The following is a reconciliation of the nett surplus at 30th June, 1933, of £15,322 12s. 10d. with the credit balance on the Special Deposits Account—Hunter District Water Supply and Sewerage Board Account at 30th June, 1933, as shown in the financial supplement of the *Government Gazette*—£23 15s. 2d.

	£	s. d.	£	s. d.
Credit Balance on Hunter District Water Supply and Sewerage Board Account at 30th June, 1933, as per Treasury Gazette...		23 15 2		
Water and Sewerage Rates and Charges outstanding at 30th June, 1933 ... ..	89,360	5 4		
Exchange prepaid during 1932-33 and subject to adjustment ...	4,386	8 0		
			93,770	8 6
Outstanding Accounts due at 30th June, 1933, but not paid at that date :—		£	s. d.	
Interest chargeable to Revenue ... ..	48,475	15 8		
Sinking Fund Instalment for extinction of Debt ... ..	29,972	0 0		
			78,447	15 8
Nett Surplus at 30th June, 1933, on the combined Water Supply, Sewerage, and Stormwater Drainage operations ... ..			£15,322	12 10

As explained in paragraph 7 of this report, provision has not been made for contributions to a Sinking Fund for the renewal of works pending the passing of legislation.

Exchange on remittances of overseas proportion of interest has been included as per details shown in paragraph 17 of this report.

13. The average rate of interest for the year 1932-33 charged to the Board in respect of Capital Expenditure from Loan Funds was 4.37804 per cent., and the rate charged for the year 1931-32 was 4.85673 per cent. The average rate of interest was increased from 3.489 per cent. in 1912-13 to a maximum of 5.17204 per cent. in 1929-30. The average rate for 1932-33 shows a reduction of .47869 per cent. as compared with 1931-32.

14. The Capital Expenditure from Loans Funds to 30th June, 1933, was :—

	£	s. d.
Water Supply (Statement No. 1) ... ..	2,860,711	4 9
Sewerage (Statement No. 2) ... ..	1,566,236	9 6
Stormwater Drainage (Statement No. 3) ... ..	742,532	10 9
	£5,169,480	5 0

in which is included the expenditure on works under construction and not revenue-producing (including Cottage Creek Stormwater Drainage Works), viz. :—

	Nil.
Water Supply ... ..	870,472 2 10
Sewerage ... ..	742,532 10 9
Stormwater Drainage ... ..	
	£1,613,004 13 7

The Capital Expenditure from Loan Funds on works transferred to and vested in the Board at 30th June, 1933, is therefore :—

	£	s.	d.
Water Supply ... ..	2,860,711	4	9
Sewerage ... ..	695,764	6	8
	<u>£3,556,475</u>	<u>11</u>	<u>5</u>

15. The nett return for the year ended 30th June, 1933, on Water Supply and Sewerage operations combined, after deducting Management and Working Expenses from Revenue actually collected, was as under :—

	£	s.	d.
Revenue and Receipts ... ..	281,292	1	7
Management and Working Expenses ... ..	99,150	6	7
	<u>£182,141</u>	<u>15</u>	<u>0</u>

The nett return on Capital Expenditure on Water Supply and Sewerage Works transferred to and vested in Board after paying Management and Working Expenses from Revenue for the year was £5 2s. 5d. as against £4 19s. 9d. for previous year.

16. *Unemployment Relief Work—Wickham Sewerage (Maryville-Smedmore Area).*—The Board on the 23rd August, 1932 (H.D.W. 32/7098) wrote the Director of Public Works asking him to submit this work for the Minister's approval as a work to be carried out by this Board under the provisions of the Prevention and Relief of Unemployment Act, 1930-31, and to make the necessary arrangements with the State Unemployment Relief Works Council in regard to the gazettal of same and the provision of funds.

The Secretary, Public Works Department, advised the Board on the 22nd November, 1932 (P.W.D. Misc. 32/5096; H.D.W. 32/4471), that £11,276 had been provided by the Unemployment Relief Council for carrying out the abovementioned work. These funds were made available to the Board on the basis of £5,638 as a grant and £5,638 as a loan at 4 per cent. per annum.

The total expenditure by the Board to 30th June, 1933, was £6,117 12s. 3d.

#### EXCHANGE ON REMITTANCES OF INTEREST OVERSEAS.

17. Exchange on Remittances of Overseas Proportion of Interest was debited to the Board by the Treasury for the first time during 1930-31.

The amounts paid by the Board during 1931-32 on account of 1930-31 and 1931-32 were £24,274 and £44,050 respectively. The exchange paid by the Board during 1932-33 was £42,500; the final adjustment by the Treasury revealed an overpayment of £5,104 3s. 8d. *vide* Statement No. 7.

Following representations made by the Board to the Treasury, the Treasury agreed to the capitalisation of portion of exchange on remittances of interest overseas, *i.e.*, in respect of major works under construction and therefore not revenue-producing. The exchange so capitalised to be in the same proportion to the total exchange as the Interest capitalised bears to the total Interest due by the Board—as under, Ref. Treasury letter dated 18th July, 1932 (P.O. 1932/7807, H.D.W. 32/4557) :—

Particulars.	Distribution of Exchange.					
	1930-31.		1931-32.		1932-33.	
Chargeable to Board's Votes—	£	s. d.	£	s. d.	£	s. d.
Revenue Funds ... ..	18,888	4 1	32,608	7 3	27,662	12 0
Loan Funds (Capitalised) ... ..	225	5 3	2,712	13 8	365	8 8
Chargeable to Public Works Department's Votes—						
Loan Funds (Capitalised) ... ..	5,160	10 8	8,728	19 1	9,367	15 8
	<u>£ 24,274</u>	<u>0 0</u>	<u>44,050</u>	<u>0 0</u>	<u>37,395</u>	<u>16 4</u>

18. *Stores.*—At the commencement of the financial year 1928-29 the Board was operating on advances totalling £35,000 for the purchase and issue of Stores (£34,000 was advanced from Loan Votes and £1,000 from Public Works Fund Votes): £10,000 was repaid during the year 1928-29 and 1930-31 to credit of Loan Votes, thereby reducing the advance to £25,000. This amount has proved sufficient for Board's requirements.

These advances totalling £25,000, were charged to the Board when the Board's Capital Indebtedness to the Treasury was being adjusted at 30th June, 1928, such amount is therefore held by the Treasury in trust for the Board.

The operations for the year ended 30th June, 1933, were as under :—

	£	s.	d.
Stock on hand at 30th June, 1932 ... ..	18,143	15	7
Stores purchased and returned during 1932-33 ... ..	13,322	12	7
Less—Value of Stores purchased but not paid for until 1933-34 ... ..	325	9	7
	12,997	3	0
Issues during the year ended 30th June, 1933 ... ..	31,140	18	7
	13,973	18	5
	17,167	0	2
Deduct value of Stock Returns 24th to 30th June, 1933, not credited by Treasury until July, 1933 ... ..	15	15	6
	17,151	4	8
Add value of Stock Issues 24th to 30th June, 1933, not debited by Treasury until July, 1933 ... ..	144	6	7
Leaving Stock on hand at 30th June, 1933, valued at ... ..	17,295	11	3
Cash balance at the Treasury at 30th June, 1933 ... ..	7,704	8	9
	£25,000	0	0

19. *Deferred Payments.*—Advances totalling £24,600 have been made to the Board for the purpose of connecting properties to the Board's sewer or the Board's watermains under a Deferred Payment System. Where the cost does not exceed £30 payment by quarterly instalments is accepted—5 per cent. interest being added to each instalment.

The amount owing to the Board at 30th June, 1933, for these connections is £6,633 19s. 4d. This amount is payable to the Board by instalments. Where instalments are overdue action is taken as far as possible for the recovery of same.

The difference between the amount owing to the Board representing instalments due and instalments not yet due, *viz.* £6,633 19s. 4d. and the total advances made by the Treasury, *viz.* £24,600 is £17,966 0s. 8d. and represents the cash balance at the Treasury at 30th June, 1933, on the Special Deposits Deferred Payment Account; the Board's books being in agreement with the Treasury at that date.

When the Board's Capital Indebtedness was adjusted at 30th June, 1928, the Board was charged with these advances in the settlement. The amount of £24,600 is therefore held by the Treasury in trust for the Board.

20. I attach hereto the following returns in respect of operation for the year ended 30th June, 1933 :—

Statement No. 1.—Capital Debt—Water Supply.

Statement No. 2.—Capital Debt—Sewerage.

Statement No. 3.—Capital Debt—Stormwater Drainage.

Statement No. 4.—Revenue and Expenditure Account in respect of Water Supply.

Statement No. 5.—Revenue and Expenditure Account in respect of Sewerage.

Statement No. 6.—Revenue and Expenditure Account in respect of Stormwater Drainage.

Statement No. 7.—Capital Account and Balance Sheet of the Board.

Statement No. 8.—Combined Revenue and Expenditure Account.

Statement No. 9.—Deferred Payment Account and Stores Purchases Advance Account at 30th June, 1933.

Statements Nos. 10 to No. 23 inclusive, shewing details of :—

- (a) Capital Expenditure on Water Supply, Sewerage and Stormwater Drainage Services.
- (b) Revenue struck, collected and outstanding on Water Supply and Sewerage ;
- (c) Expenditure on Management and Maintenance Services; and
- (d) Operations on the Special Deposits Account

have been prepared and are filed in this Branch for future reference.

M. E. COOKE,

Assistant Secretary and Accountant.

The Secretary.

## STATEMENT No. 1.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

Capital Debt—Water Supply—at 30th June, 1933.

(a) Capital Debt at 30th June, 1928, as fixed by Section 3 of Hunter District Water and Sewerage (Amendment) Act, No. 44 of 1928—	£ s. d.	£ s. d.	£ s. d.
Water Supply—Interest-bearing Expenditure .....	.....	.....	2,514,483 0 0
(b) Additions, 1st July, 1928, to 30th June, 1932—	£ s. d.		
By Public Works Department—Interest-bearing .....	Cr. 2,727 2 8		
„ Board—Interest-bearing .....	341,289 12 10		
„ Board—Non-Interest bearing .....	9,511 19 1		
			348,074 9 3
			2,862,557 9 3
(c) Expenditure by Board from 1st July, 1932, to 30th June, 1933—			
Transferred Works—			
General Loan Account—Interest-bearing Expenditure—			
Works common to whole Water District—			
Chichester Dam, Trunk Main, and Boosting Stations (Pipe Connections, Valves, &c.) .....	296 13 2		
Reservoir Construction generally .....	11 12 2		
Preliminary Investigation and Design, Duplication Chichester Trunk Gravitation Main .....	366 11 6		
Reticulation Water Supply generally—	£ s. d.		
Expenditure to 30th June, 1933 .....	1,751 11 1		
Less—Family Endowment Tax due at 30th June, 1932—paid during 1932-33 .....	29 12 1		
		1,721 19 0	
Meters on Hire and Metered Standpipes .....	774 4 7		
New Pumping Engines .....	190 19 7		
Preliminary Expenses in connection with Proposed Water Supply Extensions and Amplification Schemes .....	35 18 10		
Land Resumptions—Chichester Water Supply .....	43 2 9		
Surveys .....	88 0 2		
			3,529 1 9
Newcastle Division—			
Reservoirs, Cottages, Buildings and Depots .....	677 16 6		
Reticulation Mains .....	407 16 2		
Preliminary Surveys—Investigation and Design, Stockton—Raymond Terrace Sandbeds Area .....	406 13 1		
Land Resumption .....	207 15 6		
			1,700 1 3
Maitland Division—			
Service Reservoirs .....	41 16 10		
Reticulation Mains .....	1,632 6 0		
Land Resumptions .....	31 10 3		
			1,705 13 1
Cessnock Division—			
Reservoirs, Cottages, Buildings and Depots .....	51 0 0		
Pumping Stations .....	559 8 5		
Reticulation Mains .....	120 10 1		
			730 18 6
Total Expenditure by Board from Loan Funds .....			7,665 14 7
(d) Expenditure by Department of Public Works from 1st July, 1932, to 30th June, 1933 .....			Nil.
Total Capital Debt .....			£2,870,223 3 10

## Summary of Capital Debt.

	Interest-bearing Loan Funds.	Non-Interest-bearing Loan Funds.	Total.
	£ s. d.	£ s. d.	£ s. d.
Capital Expenditure to 30th June, 1932 ...	2,853,045 10 2	9,511 19 1	2,862,557 9 3
Additions, 1932-33 .....	7,665 14 7	.....	7,665 14 7
	£ 2,860,711 4 9	9,511 19 1	2,870,223 3 10

## Reconciliation with Public Accounts.

Capital Expenditure—	£ s. d.
Water Supply from Loan Funds, as shown above .....	2,860,711 4 9
Sewerage from Loan Funds, as per Statement No. 2 .....	1,570,703 7 4
Stormwater Drainage from Loan Funds, as per Statement No. 3 .....	744,752 13 5
	£5,176,167 5 6

Boards Offices,  
Newcastle, 30th September, 1933.M. E. COOKE,  
Assistant Secretary and Accountant.

## STATEMENT No. 2.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

## Capital Debt—Sewerage—at 30th June, 1933.

	£	s.	d.	£	s.	d.	£	s.	d.
(a) Capital Debt at 30th June, 1928, as fixed by Section 3 of Hunter District Water and Sewerage (Amendment) Act No. 44 of 1928—									
Transferred Works.....				643,283	4	3			
Works not Transferred .....				18,604	15	9			
							661,888	0	0
(b) Additions, 1st July, 1928, to 30th June, 1932—									
By Board—Transferred Works .....	50,925	3	6						
" Public Works Department—									
Works not Transferred .....	622,717	18	5						
" " Capitalised Interest .....	69,330	11	8						
" " Capitalised Exchange .....	7,992	11	2						
" " Public Works Fund .....	1,999	18	8						
" " Relief Votes—Interest-bearing at 3 per cent. ....	19,700	0	0						
" " " " Non-interest bearing.....	17,987	7	1						
				£	s.	d.			
" " " Capitalised Interest .....	1,132	10	11						
Deduct—Credit for Interest on Capital Expenditure now treated as Non-interest-bearing (H.D.W. 33/1467) .....	223	8	2						
				909	2	9			
							791,562	13	3
							1,453,450	13	3
(c) Expenditure by Board from 1st July, 1932, to 30th June, 1933—									
Transferred Works—									
General Loan Account—Interest-bearing Expenditure—									
Newcastle Division—									
Sewerage Reticulation, Ventilation, etc.—				£	s.	d.			
Expenditure to 30th June, 1933.....	1,602	10	8						
Family Endowment Tax due at 30th June, 1932, but not paid until 1932-33 .....	46	11	9						
							1,555	18	11
General Loan Account—Unemployment (Christmas Relief) 50 per cent. Grant—									
50 per cent. Interest-bearing at 4 per cent.—									
Newcastle Division—									
Maryville Sewerage—				£	s.	d.			
Interest-bearing Expenditure .....	3,058	16	1						
Capitalised Interest—Due but not paid until 1932-33...	61	3	6						
Non-Interest-bearing Expenditure .....	3,058	16	1						
							6,178	15	8
									7,734 14 7
(d) Expenditure by Department of Public Works from 1st July, 1932, to 30th June, 1933—									
Works not Transferred—									
General Loan Account—Interest-bearing Expenditure—									
Newcastle Division—									
Newcastle Sewerage Amplification .....	54,625	18	9						
Carrington Sewerage .....	29,954	19	4						
Cardiff Sewerage .....	4	15	2						
Wallsend and Jesmond Sewerage .....	0	7	10						
Sewerage Construction Generally (Plant) .....	Cr. 13,264	3	0						
Stockton Sewerage.....	16,010	5	11						
Maitland Division—									
Maitland Sewerage.....	6	2	6						
Kurri Kurri and Weston Sewerage .....	256	3	0						
Morpeth Sewerage .....	2	19	2						
Cessnock Division—									
Cessnock Sewerage .....	23,243	1	5						
Capitalised Interest .....	38,733	16	0						
Less Interest prepaid .....	3,987	13	5						
							34,746	2	7
Exchange on Remittance of Interest Overseas (Proportion)...	6,718	17	7						
Less Exchange prepaid .....	479	4	5						
							6,239	13	2
									151,826 5 10
Special Deposits Account—Interest-bearing Expenditure—									
Unemployment Relief Fund—									
Interest-bearing at 3 per cent.—									
Newcastle Sewerage Amplification .....	150	0	0						
Cessnock Sewerage .....	150	0	0						
Capitalised Interest .....	632	5	0						
Add Interest due but not paid .....	0	0	2						
							632	5	2
									932 5 2
									160,493 5 7
									£1,613,943 18 10
Total Capital Debt .....									

STATEMENT No. 2—continued.

HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD—continued.

Summary of Capital Debt.

	Interest-bearing.					Non-interest-bearing.		Total.
	General Loan Account.		Per cent.	Unemployment Relief Fund.		Unemployment Relief Vote.	Public Works Fund.	
	Construction.	Capitalised Interest and Exchange.		Construction.	Capitalised Interest.			
	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Capital Expenditure to 30th June, 1932	1,335,531 1 11	77,323 2 10	3	19,700 0 0	909 2 9	17,987 7 1	1,999 18 8	1,453,450 13 3
Additions, 1932-33...	112,396 9 0	40,985 15 9	4	3,058 16 1	61 3 6	3,058 16 1	.....	160,493 5 7
			3	300 0 0	632 5 2	.....	.....	.....
	£ 1,447,927 10 11	118,308 18 7	...	23,058 16 1	1,602 11 5	21,046 3 2	1,999 18 8	1,613,943 18 10

Reconciliation with Public Accounts.

	£	s.	d.	£	s.	d.
Capital Expenditure—						
Sewerage from Loan Funds, as shewn above	1,566,236	9	6			
Add—Exchange paid during 1932-33 on account of 1933-34	479	4	5			
Interest paid during 1932-33 on account of 1933-34	3,987	13	5			
				1,570,703	7	4
Water Supply from Loan Funds, as per Statement No. 1				2,860,711	4	9
Stormwater Drainage from Loan Funds, as per Statement No. 3				744,752	13	5
				£5,176,167	5	6

M. E. COOKE,

Assistant Secretary and Accountant.

Board's Offices, Newcastle, 30th September, 1933.

## STATEMENT No. 3.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD

Capital Debt—Stormwater Drainage—at 30th June, 1933.

a) Capital Debt at 30th June, 1928, as fixed by Section 3 of the Hunter District Water and Sewerage (Amendment) Act No. 44 of 1928—

	£	s.	d.	£	s.	d.	£	s.	d.
Transferred Works—									
Cottage Creek Stormwater Drains—Expenditure by Public Works Department .....				124,172	0	7			
Works not Transferred—									
Throsby Creek Stormwater Drains—									
Expenditure by Board .....	35,436	7	6						
Expenditure by Public Works Department.....	24,931	11	11						
				<u>60,367</u>	<u>19</u>	<u>5</u>			
							184,540	0	0

(b) Additions 1st July, 1928, to 30th June, 1932—

General Loan Account—Interest-bearing Expenditure—

Transferred Works—									
Cottage Creek Stormwater Drains—									
By Public Works Department—Construction .....	85,945	8	7						
" " " Capitalised Interest .....	31,300	19	2						
" " " Capitalised Exchange .....	1,262	2	5						
" Board—Construction .....	1,781	12	9						
" Capitalised Interest .....	12,027	11	2						
" Capitalised Exchange .....	2,304	11	6						
				<u>134,622</u>	<u>5</u>	<u>7</u>			
Works not Transferred—									
Throsby Creek Stormwater Drains—									
By Public Works Department—Construction .....	286,408	15	11						
" " " Capitalised Interest .....	46,828	6	8						
" " " Capitalised Exchange .....	4,631	14	6						
" Board—Construction .....	1,285	14	0						
" Capitalised Interest .....	8,203	15	7						
" Capitalised Exchange .....	633	7	5						
				<u>347,991</u>	<u>14</u>	<u>1</u>			
Cessnock Stormwater Drainage and Flood Prevention—									
By Public Works Department—Construction .....	344	1	8						
" " " Capitalised Interest .....	18	6	3						
" " " Capitalised Exchange .....	3	1	8						
							365	9	7

Special Deposits Account—Unemployment Relief Fund—Interest-bearing Expenditure by Public Works Department at 3 per cent. p.a.—

Works not Transferred—									
Wallsend Plattsburg Drainage—Construction.....	6,594	18	3						
" " " Capitalised Interest.....	129	12	2						
Greta Drainage—Construction .....	2,997	19	7						
" Capitalised Interest .....	58	0	6						
Lower Cardiff Drainage—Construction .....	8,405	17	7						
" Capitalised Interest .....	140	13	2						
Throsby Creek Stormwater Drainage—Construction .....	40,953	1	6						
" Capitalised Interest .....	771	7	7						
				<u>60,051</u>	<u>10</u>	<u>4</u>			

Special Deposits Account—Unemployment Relief Fund—Non Interest-bearing Expenditure by Public Works Department—

Works not Transferred—									
Throsby Creek Stormwater Drainage .....	37,996	17	7						
Wallsend Plattsburg Drainage .....	5,026	10	2						
				<u>43,023</u>	<u>7</u>	<u>9</u>			

Public Works Fund—Non Interest-bearing—

Transferred Works—									
Cottage Creek Stormwater Drainage .....							11	11	8
							<u>586,965</u>	<u>19</u>	<u>0</u>
							<u>770,605</u>	<u>19</u>	<u>0</u>

(c) Expenditure by the Board from 1st July, 1932, to 30th June, 1933—

General Loan Account—Interest-bearing Expenditure—

Transferred Works—									
Cottage Creek Stormwater Drainage .....				2,811	8	0			
Works not Transferred—									
Throsby Creek Stormwater Drainage .....				Cr.18	2	10			
" " Capitalised Interest .....				2,034	19	2			
" " Capitalised Exchange .....				365	8	8			
				<u>5,193</u>	<u>13</u>	<u>0</u>			

(d) Expenditure by the Public Works Department from 1st July, 1932, to 30th June, 1933—

General Loan Account—Interest-bearing Expenditure—

Transferred Works—									
Cottage Creek Stormwater Drainage .....	455	3	3						
" " Capitalised Interest .....	38	13	9						
" " Capitalised Exchange .....	6	19	0						
				<u>500</u>	<u>16</u>	<u>0</u>			
Works not Transferred—									
Throsby Creek Stormwater Drainage .....	48,816	18	4						
" " Capitalised Interest .....	17,364	4	3						
" " Capitalised Exchange .....	3,118	4	10						
Cessnock Stormwater Drainage and Flood Prevention .....									
" Capitalised Interest .....	16	6	5						
" Capitalised Exchange .....	2	18	8						
				<u>69,318</u>	<u>12</u>	<u>6</u>			

Carried forward ..... 69,819 8 6 775,799 12 0





## STATEMENT No. 4.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

REVENUE and Expenditure Account in respect of Water Supply, year ended 30th June, 1933.

Expenditure.		Revenue.	
£	s. d.	£	s. d.
Interest on Capital Expenditure at 4·37804 per cent. per annum—(See Note No. 1)		Water Rates Levied .....	135,882 8 9
On Works Transferred—		Special Fees.....	696 2 0
Payments made to Treasury during 1932-33 .....	127,590 10 8	Meter Charges.....	59,812 13 1
Less Payments on account of previous year's arrears .....	3,487 17 4	Meter Hire.....	2,416 18 3
		Drilling Fees .....	50 1 0
		Fees—Workmen's Licenses .....	106 5 0
		Meter Testing Fees.....	17 12 4
		Temporary Supplies.....	14 4 1
		Affixing and Removing Building Meters .....	19 0 0
Exchange on Remittances of Interest overseas—		Deferred Payments—	
Payments on account of 1932-33 .....	26,672 11 6	Interest and Supervision .....	21 14 4
Less exchange pre-paid.....	4,386 8 0	Reconnecting Fees .....	16 10 0
	22,286 3 6	Rents .....	951 12 0
Payment made during 1932-33 on account of 1930-31 and 1931-32 ...	432 9 0	Sundry Items .....	295 12 7
		Exchange on Cheques .....	48 6 9
		Services Rendered (Current Year) .....	41 12 1
			200,390 12 3
	22,718 12 6	Less Charges Cancelled—	
Instalments to Sinking Fund—		Water Rates .....	1,259 16 5
For Extinction of Capital Debt due but not paid at 30th June, 1933 ...	8,842 14 4	Special Fees.....	2 12 6
For Renewals (see Note No. 2).		Meter Charges.....	80 1 6
Management Expenses—		Meter Hire.....	5 6 11
President's Salary and Board Fees...	1,142 11 4	Services Rendered (Previous Year)...	133 4 10
Salaries of Staff .....	17,351 15 10		1,481 2 2
Contributions to Superannuation Fund.....	1,579 6 4		198,909 10 1
Family Endowment Tax .....	535 13 9	Credit from Sewerage Services for Water supplied for Flushing Purposes at actual cost.....	9,341 15 1
Monetary value of Leave paid to Retired Officers .....	31 17 11		208,251 5 2
Travelling Expenses, including Forage and Bicycle Allowances.....	591 16 0	Deficiency for Year .....	14,891 12 1
Stationery, Registers, Printing, Advertisements, Postage Stamps, Telephones, Typewriters, Fire Insurance Premiums, Lighting, Lift, Office Furniture and Fittings, Overtime and Tea Money Allowances, Renovations and Repairs, Exchange on Cheques, Legal Expenses, Audit Fees, Office Cleaning, &c.....	3,172 4 5		
Valuer-General's Charges for Assessments .....	1,152 4 6		
Local Government Rates .....	28 7 0		
Election Costs, Municipal Members of Board .....	10 10 5		
	25,596 7 6		
Working Expenses—			
Salaries of Staff .....	6,297 1 8		
Travelling Expenses, including Forage and Bicycle Allowances.....	1,086 12 5		
Family Endowment Tax .....	427 1 9		
Wages of Permanent and Temporary Employees and Pensions.....	12,267 11 10		
Coals .....	85 3 1		
Electric Power .....	2,303 12 4		
Oils, Lubricants, and Stores.....	780 10 6		
Minor Renewals and Repairs .....	16,990 9 3		
Telephones, Fire and Workmen's Compensation Insurance Premiums, Advertisements.....	822 7 10		
Lifting, Lowering and Alterations to Mains, Affixing Meters on Hire, Restoration of Street Surfaces, Freight and Cartage, and Sundry Items.....	812 3 11		
Local Government Rates .....	9 15 0		
	41,882 9 7		
	£223,142 17 3		£223,142 17 3

NOTE 1.—Interest is calculated for the full year on total of Capital Expenditure at end of preceding year and on half the expenditure for the current year.

NOTE 2.—In abeyance pending legislation in respect of same.

M. E. COOKE,

Assistant Secretary and Accountant

Board's Offices, Newcastle, 30th September, 1933.

## STATEMENT No. 5.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

REVENUE and Expenditure Account in respect of Sewerage, year ended 30th June, 1933.

<i>Expenditure.</i>		£	s.	d.	£	s.	d.	<i>Revenue.</i>							
Interest on Capital Expenditure at 4·37804 per cent. per annum— (See Foot note No. 1.)								Sewerage Rates Levied .....	73,263	3	8				
On Works Transferred—								Drainage Plan Fees (House Connections) .....	261	5	0				
Payments made to Treasury during	£	s.	d.					Estimate of Cost Fees (House Connections) .....	62	5	0				
1932-33.....	38,409	9	4					Testing Fees (Sanitary Fittings) .....	19	8	2				
Less Payments on Account of 1931-32	8,470	6	11					Deferred Payments—							
Add Interest due 1931-32 but not paid until 1932-33					29,939	2	5	Supervision and Interest Charges.....	229	8	5				
								Sale of Sewerage By-laws .....	0	3	6				
Exchange on remittances of interest overseas—								Sale of Sewerage Diagrams .....	2	4	6				
Payments on account of 1932-33 .....	5,376	8	6					Profit on Sales, etc. ....	21	13	2				
Payment made during 1932-33 on account of 1930-31 and 1931-32.....	104	4	11		5,480	13	5	Clearing Chokages in House Drains .....	75	3	6				
									73,934	14	11				
Instalments to Sinking Fund—								Less Charges cancelled—							
For Extinction of Capital Debt .....					4,855	3	9	Sewerage Rates .....	696	1	0				
(Not paid at 30th June, 1933.)								Drainage Plan Fees .....	0	7	6				
For Renewals (See Footnote No. 2)									696	8	6				
Management Expenses—											73,238	6	5		
President's Salary and Board Fees ...	445	8	8												
Salaries of Staff .....	6,361	16	6												
Contributions to Superannuation Fund	615	14	1												
Monetary Value of Leave due to Retired Officers.....	160	10	4												
Family Endowment Tax .....	208	16	9												
Stationery, Registers, Printing, Advertising, Postage Stamps, Telephones, Typewriters, Fire Insurance, Workers' Compensation Premiums, Lighting, Lift, Office Furniture and Fittings, Overtime and Tea Money Allowances, Renovations and Repairs, Exchange on Cheques, Legal Expenses, Audit Fees, Office Cleaning, etc. ....	1,128	16	7												
Valuer-General's Charges for Assessments .....	449	4	0												
Election Costs Municipal Members of Board.....	4	2	1												
Travelling Expenses, including Forage and Bicycle Allowances .....	219	5	3		9,593	14	3								
Working Expenses—															
Salaries of Staff .....	5,020	1	9												
Wages of Permanent and Temporary Employees .....	3,827	12	10												
Pensions under Superannuation Act, 1916.....	13	0	0												
Family Endowment Tax.....	166	10	0												
Power for Electric Motors .....	1,666	0	2												
Oils, Lubricants, and Stores for Pumping Stations .....	96	8	11												
Minor Renewals and Repairs at Sewerage Pumping Stations, Vents and Sewers .....	1,304	15	5												
Fire Insurance, Workers' Compensation Insurance, Telephones, Cartage and Freight, etc. ....	275	8	3												
Travelling Expenses, including Forage and Bicycle Allowances .....	566	2	10		12,736	0	2								
Charge made by the Water Supply Service for Water used for Flushing Purposes at Actual Cost during 1932-33 .....					9,341	15	1								
					71,946	9	1								
Surplus on Operations for Year .....					1,291	17	4								
					£73,238	6	5								
													£73,238	6	5

NOTE 1.—Interest is calculated by the Treasury for the full year on total of Capital Expenditure at end of preceding year and on half the expenditure for current year.

NOTE 2.—In abeyance, pending legislation in respect of same.

Board's Offices, Newcastle, 30th September, 1933.

M. E. COOKE,  
Assistant Secretary and Accountant.

## STATEMENT No. 6.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

CAPITAL ACCOUNT as at 30th June 1933.

## STATEMENT No. 6.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

Revenue and Expenditure Account in respect of Stormwater Drainage—year ended 30th June, 1933.  
Cottage Creek Stormwater Drainage Area.

<i>Expenditure.</i>		<i>Revenue.</i>	
	£ s. d.		£ s. d.
Interest on Capital Expenditure at 4·37804 per cent. per annum (see Footnote No. 1)—		Stormwater Drainage Rates (not struck) .....	.....
On Works transferred .....	11,262 14 4	Recoupment by Treasury of Interest and Exchange on Capital Expenditure on Cottage Creek Stormwater Drainage Works—	
Exchange on Remittances of Interest Overseas .....	2,022 10 10	Interest .....	11,262 14 4
Instalments to Sinking Fund for extinction of Capital Debt due but not paid at 30th June, 1933 .....	2,302 1 11	Exchange .....	2,022 10 10
For Renewals (see Note 2).			13,285 5 2
Management Expenses .....	.....	Deficiency for year .....	2,826 0 1
Working Expenses—	£ s. d.		
Repairs and Maintenance, Stormwater Drains .....	209 12 1		
Repairs and Maintenance of Bridges over Stormwater Drains .....	314 6 1		
	523 18 2		
	£ 16,111 5 3		£ 16,111 5 3

NOTE 1.—Interest is calculated by the Treasury for the full year on total of Capital Expenditure at end of preceding year and on half the expenditure for current year.

NOTE 2.—In abeyance pending legislation in respect of same.

Board's Offices, Newcastle, 30th September, 1933.

M. E. COOKE,  
Assistant Secretary and Accountant.

## STATEMENT No. 7.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

CAPITAL ACCOUNT as at 30th June, 1933.

Expenditure.	To 30th June, 1932.		Additions during year ended 30th June, 1933.		Total Expenditure to 30th June, 1933.		Receipts.	To 30th June, 1932.		Additions during year ended 30th June, 1933.		Total	
	£	s. d.	£	s. d.	£	s. d.		£	s. d.	£	s. d.	£	s. d.
Water Supply Works—													
Chichester Dam .....	1,568,193	0 3	339 15 11		1,568,532	16 2							
Other than Chichester Dam...	1,927,877	6 0	7,325 18 8		1,935,203	4 8							
Water Supply Works .....	3,496,070	6 3	7,665 14 7		3,503,736	0 10							
Sewerage Works.....	1,469,604	7 5	160,493 5 7		1,630,097	13 0							
Stormwater Drainage Works ...	770,605	19 0	138,849 5 3		909,455	4 3							
Fixed Assets .....	5,736,280	12 8	307,008 5 5		6,043,288	18 1							
Deferred Payment Advance.....	24,600	0 0			24,600	0 0							
Stores Purchases Advance .....	25,000	0 0			25,000	0 0							
Total Expenditure.....	5,785,880	12 8	307,008 5 5		6,092,888	18 1							
							Capital provided by Treasury—						
							Interest bearing—						
							General Loan Account—						
							Water Supply .....	2,838,265	18 1	7,695 6 8		2,845,961	4 9
							Water Supply Stores					14,750	0 0
							Purchase Advances.....	14,750	0 0			14,750	0 0
							Sewerage .....	1,397,264	4 7	164,189 2 9		1,561,453	7 4
							Sewerage Stores Pur-					9,250	0 0
							chases Advance .....	9,250	0 0			9,250	0 0
							Stormwater Drainage ...	658,473	2 2	86,279 11 3		744,752	13 5
							Loan Liability .....	4,918,003	4 10	258,164 0 8		5,176,167	5 6
							Special Deposits Account—						
							Unemployment Relief						
							Fund—						
							Sewerage—Carrying In-						
							terest at 3 per cent.	20,609 3 0		932 4 9		21,541 7 9	
							rate .....			3,058 16 1		3,058 16 1	
							Sewerage—Carrying In-						
							terest at 4 per cent.						
							rate .....						
							Stormwater Drainage—						
							Carrying interest at 3	60,048 0 1		2,103 13 11		62,151 14 0	
							per cent. rate .....			20,395 2 10		20,395 2 10	
							Carrying interest at 4						
							per cent. rate .....						
								80,657 3 1		26,480 17 7		107,147 0 8	
							Non-interest Bearing Capital—						
							Relief Work—						
							Water Supply—						
							General Loan Account—						
							Relief for Unemployed	9,511 19 1				9,511 19 1	
							Sewerage—						
							Public Works Fund .....	1,999 18 8				1,999 18 8	
							Unemployed Relief Votes	17,987 7 1		3,058 16 1		21,046 3 2	
							Stormwater Drainage—						
							Public Works Fund .....	11 11 8				11 11 8	
							Unemployed Relief Votes	43,023 7 9		41,363 10 1		84,386 17 10	
								72,534 4 3		44,422 6 2		116,956 10 5	
							Total Capital .....	5,071,194 12 2		329,076 4 5		5,400,270 16 7	
							Surplus of Fixed Assets over						
							Loan Liability to the Treasury						
							consequent upon adjustment						
							of Capital Debt in 1928—						
							£ s. d.						
							Water Supply 648,262 17 0					673,666 11 2	
							Sewerage ... 25,403 14 2					673,666 11 2	
								673,666 11 2				673,666 11 2	
								5,744,861 3 4		329,076 4 5		6,073,937 7 9	
							Balance carried to General						
							Balance Sheet—						
							Deferred Payment Advance			24,600 0 0			
							Stores Purchases Advance ...			1,000 0 0			
										25,600 0 0			
							Interest overpaid on works						
							under construction—						
							Overpaid, 1932-33 .....	6,005 16 6					
							Less Interest due but not						
							paid during 1932-33...	75 2 6		5,930 14 0			
										19,669 6 0			
							Exchange on Remittances of						
							Interest Overseas—						
							Overpaid, 1932-33 .....	722 16 11					
							Less Exchange due but not						
							paid during 1932-33 .....	5 1 3		717 15 8		18,951 10 0	
												18,951 10 0	
							£ 6,092,888 18 1					£ 6,092,888 18 1	

\*Vide Public Accounts, page 172.

## STATEMENT No. 7—continued.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD—continued.

## GENERAL BALANCE-SHEET as at 30th June, 1933.

Liabilities.			Assets.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Sundry Creditors—					
State Treasurer—Interest payable from					
Revenue	48,475 15 8				
Unemployed Relief Funds	61 3 6				
		48,536 19 2			
Sinking Fund Contributions		29,972 0 0			
			78,508 19 2		
Sundry Deposits and Trust Moneys—					
Preliminary Deposits		2 0 0			
Summons Fees Advance		0 16 0			
Rates pre-paid		5 1 7			
Fixed Deposits		25 0 0			
Special Deposits Account—Sundry Deposits Account		220 0 0			
Security Deposit on Contract		146 3 0			
			399 0 7		
Sinking Fund Reserve for extinction of Capital Debt—					
Water Supply, 30th June, 1932	30,306 3 10				
Water Supply, Additions, 1932-33	8,842 14 4				
		39,148 18 2			
Sewerage at 30th June, 1932	16,982 1 6				
Sewerage Additions, 1932-33	4,855 3 9				
		21,837 5 3			
Stormwater Drainage at 30th June, 1932	Nil.				
Stormwater Additions, 1932-33	2,302 1 11				
		2,302 1 11			
			63,288 5 4		
Reserve Account—					
Deferred Payment Advance	24,600 0 0				
Stores Purchases Advance	1,000 0 0				
		25,600 0 0			
Revenue and Expenditure Account—					
Accumulated Surplus to 30th June, 1932	31,748 7 8				
Nett Deficiency for the year ended 30th June, 1933—					
Deficiencies—					
Water Supply	14,891 12 1				
Stormwater Drainage	2,826 0 1				
	17,717 12 2				
Surplus—					
Sewerage	1,291 17 4				
		16,425 14 10	15,822 12 10		
			183,118 17 11		
				£	183,118 17 11

Board's Offices, Newcastle, 30th September, 1933.

M. E. COOKE,

Assistant Secretary and Accountant.

I certify that the books and accounts of the Hunter District Water Supply and Sewerage Board have been examined and audited in accordance with the provisions of the Audit Act, 1902.

Subject to the observations contained in my report to the Colonial Treasurer, wherein attention is drawn to the absence of provision for renewals, this balance-sheet correctly sets out the financial position of the Board as at 30th June, 1933, according to the best of my information and the explanations given to me, and as disclosed by such books and accounts.

JOHN SPENCE,  
Auditor-General.

## STATEMENT No. 8.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

COMBINED REVENUE AND EXPENDITURE ACCOUNT, for the year ended 30th June, 1933.

Expenditure.	Water Supply.	Sewerage.	Stormwater Drainage.	Total.	Revenue and Receipts.	Water Supply.	Sewerage.	Stormwater Drainage.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
Interest on Capital Expenditure at 4·37804 per cent. per annum .....	124,102 13 4	29,939 2 5	11,262 14 4	165,304 10 1	Rates, etc. ....	198,909 10 1	73,238 6 5	.....	272,147 16 6
Exchange on Remittance of Interest overseas .....	22,718 12 6	5,480 13 5	2,022 10 10	30,221 16 9	Amount credited to Water Supply Services for water supplied for flushing purposes at actual cost .....	9,341 15 1	.....	.....	9,341 15 1
Sinking Fund for extinction of Capital Debt .....	8,842 14 4	4,855 3 9	2,302 1 11	16,000 0 0	Recoupment by Treasury of Interest and Exchange on Capital Expenditure on Cottage Creek S.W. Drainage Works—				
Contributions to Renewals Fund .....	.....	.....	.....	.....	Interest .....				
Management Expenses .....	25,596 7 6	9,593 14 3	.....	35,190 1 9	Exchange ...				
Working Expenses .....	41,882 9 7	12,736 0 2	523 18 2	55,142 7 11	.....				
Amounts charged to Sewerage Services and credited to Water Services for Water Supplied for flushing purposes at actual cost .....	.....	9,341 15 1	.....	9,341 15 1	Deficiency or Surplus for the year .....	*14,891 12 1	†1,291 17 4	*2,826 0 1	*16,425 14 10
					Def. W.S. ...	*14,891 12 1			
					Def. S.Dge. ...	*2,826 0 1			
						17,717 12 2			
					Sur. Sew. ....	†1,291 17 4			
						£*16,425 14 10			
	223,142 17 3	71,946 9 1	16,111 5 3	311,200 11 7		223,142 17 3	71,946 9 1	16,111 5 3	311,200 11 7

Board's Offices, Newcastle, 30th September, 1933.

M. E. COOKE,  
Assistant Secretary and Accountant.ALFRED E. FRY,  
Secretary.

## STATEMENT No. 9.

## HUNTER DISTRICT WATER SUPPLY AND SEWERAGE BOARD.

DEFERRED PAYMENT ACCOUNT as at 30th June, 1933.

	£	s.	d.		£	s.	d.
To Capital Account being amounts provided by Treasury from Public Works Fund between 1907 and 1928 .....	24,000	0	0	By Sundry Debtors—Works done under Deferred Payment System .....	6,633	19	4
Capital Account being £500 from Consolidated Revenue in 1896-97 and £100 in 1902-3 .....	600	0	0	Cash at Board's Credit with State Treasury in Special Deposits Account .....	17,966	0	8
	£24,600	0	0		£24,600	0	0

STORES PURCHASES ADVANCE ACCOUNT as at 30th June, 1933.

	£	s.	d.		£	s.	d.
To Capital Account—				By Stock on Hand.....	17,492	9	9
Water Supply—Stores Purchases Advance ...	19,750	0	0	Stores issued but not credited at Treasury until 1933-34 .....	144	6	7
Sewerage—Stores Purchases Advance .....	9,250	0	0		17,636	16	4
	29,000	0	0	Stores returned but not charged at Treasury until 1933-34 .....	15	15	6
Amounts provided by Treasury from Public Works Fund during years 1907-28 ...	1,000	0	0		17,621	0	10
	30,000	0	0	Balance: Cash at Board's credit with State Treasurer in Special Deposits Account—			
Less part Repayment of Advance .....	5,000	0	0	Store Advance Account .....	7,704	8	9
	25,000	0	0		£25,325	9	7
Stores not paid for.....	325	9	7		£25,325	9	7
	£25,325	9	7				

Board's Offices, Newcastle, 30th September, 1933.

M. E. COOKE,  
Assistant Secretary and Accountant.ALFRED E. FRY,  
Secretary.

## Report of Officer-in-Charge, Revenue Section, Accounts Branch.

Sir,

I have the honor to submit my report for the year ended 30th June, 1933.

### WATER SUPPLY.

2. The particulars of the arrears at commencement of the year, the revenue struck and collected during the year and outstanding at 30th June, 1933, are shown hereunder:—

Head of Revenue.	Net Arrears from previous Year.*	Amount Struck for year ending 30th June, 1933.	Total Receivable.	Net Collections.	Amount Outstanding at 30th June, 1933.
Water Supply—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Water Rates .....	53,359 12 7	135,882 8 9	189,242 1 4	133,845 15 10	55,396 5 6
Special Fees—					
Livestock .....	8 0 0	13 0 10	21 0 10	13 4 7	7 16 3
Gardens and S.W.S. ....	19 1 6	298 14 11	317 16 5	301 3 0	16 13 5
Builders' Supply .....	1 5 9	384 6 3	385 12 0	81 9 6	304 2 6
Meters—					
Meters only .....	210 7 10	3,321 14 1	3,532 1 11	3,120 0 8	412 1 3
Meters in Excess .....	5,624 14 1	56,490 19 0	62,115 13 1	56,071 9 1	6,044 4 0
Meter Hire—					
Rent of Meters .....	332 6 11	2,416 18 3	2,749 5 2	2,273 15 10	475 9 4
Other Charges—					
Drilling Fees .....	0 18 0	50 1 0	50 19 0	50 13 0	0 6 0
Reconnecting Fees .....	.....	16 10 0	16 10 0	16 10 0	.....
License Fees .....	.....	106 5 0	106 5 0	106 5 0	.....
Meter Testing Fees .....	0 15 0	17 12 4	18 7 4	17 3 10	1 3 6
Temporary Supplies .....	.....	14 4 1	14 4 1	14 4 1	.....
Affixing and Removing Building Meters .....	.....	19 0 0	19 0 0	18 0 0	1 0 0
Rents .....	12 4 0	951 12 0	963 16 0	946 9 0	17 7 0
Exchange on Cheques .....	.....	48 6 9	48 6 9	48 6 9	.....
Sundry Revenue Items .....	.....	295 12 7	295 12 7	295 12 7	.....
Deferred Payments—					
Supervision and Interest .....	.....	21 14 4	21 14 4	21 14 4	.....
£	59,569 5 8	200,349 0 2	259,918 5 10	197,241 17 1	62,676 8 9

\* After deducting charges since cancelled.

3. The following figures show the total revenue struck, collected and outstanding in respect of Water Supply from 1st July, 1923 to 30th June, 1933—a period of ten years. The increase in the outstandings at close of year is largely attributable to the industrial depression in the district.

Financial Year.	Net Arrears from Previous Years. *	Amount Struck for Financial Year.	Total Receivable.	Collections for the Year. (Net).	Outstanding at Close of Year.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1923-24 .....	17,574 8 8	138,919 16 4	156,494 5 0	142,889 0 9	13,605 4 3
1924-25 .....	13,273 0 0	153,371 6 3	166,644 6 3	152,550 9 3	14,093 17 0
1925-26 .....	13,926 2 1	160,665 6 9	174,591 8 10	163,702 9 7	10,888 19 3
1926-27 .....	10,639 2 0	173,482 4 5	184,121 6 5	170,147 2 0	13,974 4 5
1927-28 .....	13,865 17 11	220,076 8 8	233,942 6 7	213,654 0 0	20,288 6 7
1928-29 .....	19,580 10 3	227,577 11 4	247,158 1 7	222,904 18 1	24,253 3 6
1929-30 .....	23,853 19 8	224,055 2 10	247,909 2 6	210,555 4 0	37,353 18 6
1930-31 .....	37,150 10 8	224,784 8 4	261,934 19 0	216,484 7 9	45,450 11 3
1931-32 .....	45,152 2 1	210,198 13 10	255,350 15 11	194,433 12 11	60,917 3 0
1932-33 .....	59,569 5 8	200,349 0 2	259,918 5 10	197,241 17 1	62,676 8 9

\* After deducting charges since cancelled.

4. The particulars of ratable properties connected and not connected to the Board's watermain at 30th June, 1933, are as under:—

Locality.	Premises.		Lands.		Total Ratable Properties at 30th June, 1933.
	Connected.	Not Connected.	Connected.	Not Connected.	
Newcastle Division .....	30,077	1,131	367	6,524	38,099
Maitland Division .....	6,983	183	350	1,587	9,103
Cessnock Division .....	5,908	146	100	2,101	8,255
Totals .....	42,968	1,460	817	10,212	55,457

5. The following figures show the ratable properties connected and not connected to the Board's watermain for each year from the 1st July, 1923, to the 30th June, 1933, a period of ten years :—

Financial Year.	Premises.		Lands.		Total Ratable Properties.			Government Railways and Tramways.	Totals.
	Connected.	Not Connected.	Connected.	Not Connected.	Newcastle Division.	Maitland Division.	Cessnock Division.		
1923-24 .....	29,568	2,213	538	6,772	26,530	3,968	8,578	18	39,094
1924-25 .....	31,405	2,199	857	6,576	27,705	4,139	9,193	...	41,037
1925-26 .....	33,997	1,650	963	6,869	29,245	4,289	9,945	...	43,479
1926-27 .....	36,600	1,644	595	7,770	31,559	4,534	10,516	...	46,609
1927-28 .....	39,262	2,004	771	9,006	34,092	5,391	11,560	...	51,043
1928-29 .....	40,658	2,299	643	10,497	36,509	9,120	8,468	...	54,097
1929-30 .....	41,674	2,497	642	10,472	37,620	9,201	8,464	...	55,285
1930-31 .....	42,631	1,719	704	10,650	38,041	9,190	8,473	...	55,704
1931-32 .....	42,778	1,549	815	10,649	38,107	9,228	8,456	...	55,791
1932-33 .....	42,968	1,460	817	10,212	38,099	9,103	8,255	...	55,457

6. During the year, 24 properties were connected to the Board's watermains under the provisions of the Deferred Payment System, making a total of 3,416 properties since the inception of the system in 1894.

7. At the 30th June, 1933, there were 196 privately-owned meters and 16,109 meters hired from the Board on water services, making a total of 16,305 meters, and showing an increase of 323 meters over the figures for the preceding year.

During the year 472 meters were hired out by the Board to consumers, as against 495 for the previous year.

8. The following figures show, in respect of the year ended 30th June, 1933, the water supply to large consumers for trade purposes (who used 240,000 gallons and over), the water supplied to schools and gaols, and for public and charitable purposes :—

Classification.	Newcastle Division.	Maitland Division.	Cessnock Division.	Totals.
Trade purposes—				
Collieries .....	7,676,500	9,339,700	27,824,700	44,840,900
Manufactories .....	628,178,200	3,703,000	3,787,000	635,668,200
Miscellaneous .....	31,557,100	.....	1,732,200	33,289,300
Schools and gaols .....	14,658,700	2,275,300	1,511,100	18,445,100
Railway and tramway properties .....	189,457,800	40,917,900	9,596,600	239,972,300
Public and charitable purposes .....	36,784,800	10,164,900	9,957,300	56,907,000
Totals .....	908,313,100	66,400,800	54,408,900	1,029,122,800

9. During the year water was supplied by the Board free of charge through meters, for the purposes shown, and for comparison figures for the two preceding years are also shown :—

No. of Properties or Services supplied.	Purposes.	Consumption for year 1930-31.	Consumption for year 1931-32.				Consumption for year 1932-33.			Totals.
			Newcastle Division.	Maitland Division.	Cessnock Division.	Totals.	Newcastle Division.	Maitland Division.	Cessnock Division.	
	<i>Public (Local Government) Purposes.</i>									
7	Tram-line watering .....	503,000	385,500	.....	.....	385,500	.....	.....	.....	.....
37	Street watering .....	8,012,900	4,660,400	43,000	3,600	4,707,000	3,680,700	85,000	39,500	3,805,200
10	Footpath cleansing and gutter flushing .....	653,200	547,500	34,000	302,200	883,700	344,900	41,300	1,000	387,200
149	Public parks and reserves .....	5,394,300	6,568,381	1,562,000	290,300	8,420,681	3,860,500	1,590,600	287,000	5,738,100
7	Dressing sheds at public bathing places .....	742,200	716,200	.....	.....	716,200	866,400	.....	.....	866,400
50	Troughs and other public purposes .....	6,795,450	4,531,170	75,000	479,200	5,085,370	6,138,200	62,000	436,500	6,636,700
260	Totals (gallons) .....	22,101,050	17,409,151	1,714,000	1,075,300	20,198,451	14,890,700	1,778,900	764,000	17,433,600
	<i>Public (Charitable and Miscellaneous Purposes).</i>									
10	Public Hospitals .....	28,726,200	16,877,500	6,979,500	8,627,900	32,484,900	17,254,100	6,810,000	9,117,100	33,181,200
13	Charitable Institutions .....	3,426,200	2,329,200	1,209,200	.....	3,538,400	3,536,400	1,426,000	.....	4,962,400
...	Churches and Sunday Schools .....	689,810	543,550	67,990	66,300	677,840	.....	.....	.....	.....
33	Schools of Arts and Mechanics Institutes .....	211,000	228,400	41,300	16,200	285,900	309,500	32,500	34,700	376,700
7	Volunteer stations and depots .....	132,400	53,300	45,100	.....	98,400	46,400	42,800	.....	89,200
18	Morgues and general cemeteries .....	409,900	292,900	71,400	30,000	394,300	318,000	74,700	41,500	434,200
4	Other free supplies .....	729,500	676,100	.....	.....	676,100	429,700	.....	.....	429,700
85	Totals (gallons) .....	34,325,010	21,000,950	8,414,490	8,740,400	38,155,840	21,894,100	8,386,000	9,193,300	39,473,400
	Grand Total .....	56,426,060	38,410,101	10,128,490	9,815,700	58,354,291	36,784,800	10,164,900	9,957,300	56,907,000

10. The total quantity of water supplied free during the year ended 30th June, 1933, for the purposes shown above was 56,907,000 gallons, as against 58,354,291 gallons for the preceding year, and showing a decrease of 1,447,291 gallons. The value of water so supplied free would have been at the price charged to the ordinary consumers (viz., 2s. per 1,000 gallons), £5,690 14s.

Water was also supplied during the year free of charge without meter, for other public purposes, such as gutter and sump cleaning, urinals, drinking fountains, and stock troughs.

11. During the year 180 properties were, in consequence of new buildings or additions to existing improvements, reassessed, and twenty-seven properties became ratable and were assessed by the Board for



the first time. The following summary indicates the location of such properties, the number of properties reassessed and assessed for the first time, the total net annual values of the lands and improvements thereon, and the approximate capital value of improvements only:—

Locality.	Properties Reassessed during 1932-33 on Account of Erection of New Buildings or Additions to Existing Improvements.							Properties Assessed and Rated for the first time during 1932-33.	
	No. of Properties Re-assessed.	Net Annual Value prior to Reassessment.	Values after Reassessment.					No. of Properties Assessed.	Total Assessed Value.
			Assessed Annual Value.	Approximate Unimproved Capital Value of Land.	Approximate Capital Value of Improvements.				
					New Houses or other Improvements only.	Original Improvements and Additions where so Improved.	Total Improved Capital Value.		
Newcastle Division .....	145	£ 1,995	£ 9,034	£ 40,984	£ 60,878	£ 19,263	£ 121,125	9	£ 81
Maitland Division .....	16	149	686	2,475	7,809	...	10,284	10	124
Cessnock Division .....	19	186	732	3,084	4,958	...	8,042	8	70
	180	2,330	10,452	46,543	73,645	19,263	139,451	27	275

## SEWERAGE.

12. The particulars of the revenue struck, collected, and outstanding for the year ended 30th June 1933, are shown hereunder:—

Head of Revenue.	Net Arrears from previous Years.*	Amount struck for year ended 30th June, 1933.	Total Receivable.	Collections.	Less Refunds.	Net Collections.	Amount Outstanding at 30th June, 1933.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Sewerage Rates .....	27,392 8 3	73,263 3 8	100,655 11 11	74,594 8 6	547 17 10	74,046 10 8	26,609 1 3
Drainage Plans .....	2 17 6	261 5 0	264 2 6	251 7 6	0 10 0	250 17 6	13 5 0
Estimate Fees .....	...	62 5 0	62 5 0	63 0 0	0 15 0	62 5 0	...
Testing Sanitary Fittings .....	...	19 8 2	19 8 2	19 8 2	...	19 8 2	...
Sale, Sewerage By-laws.. ..	...	0 3 6	0 3 6	0 3 6	...	0 3 6	...
Sale, Drainage Diagrams. ....	...	2 4 6	2 4 6	2 4 6	...	2 4 6	...
Profits on Sales, etc.....	...	21 13 2	21 13 2	21 13 2	...	21 13 2	...
Clearing Chokages .....	18 6 6	75 3 6	93 10 0	77 2 6	1 4 0	75 18 6	17 11 6
Def. Payment Sup. and Int. ....	...	229 8 5	229 8 5	229 8 5	...	229 8 5	...
	£ 27,413 12 3	73,934 14 11	101,348 7 2	75,258 16 3	550 6 10	74,708 9 5	26,639 17 9

\* After deducting charges since cancelled.

13. The following figures show the total annual revenue struck, collected and outstanding in respect of sewerage from 1st July, 1923, to 30th June, 1933—a period of ten years. The increase in the outstandings at close of year, is largely attributable to the industrial depression in the district:—

Financial Year.	Net Arrears from Previous Years.*	Amount Struck for Financial Year.	Total Receivable.	Collections for the Year.	Outstanding at close of Year.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1923-24 .....	3,673 1 7	56,509 3 4	60,182 4 11	56,210 9 11	3,971 15 0
1924-25 .....	3,823 18 11	64,054 15 8	67,878 14 7	63,706 14 0	4,172 0 7
1925-26 .....	3,901 10 3	70,828 15 9	74,730 6 0	68,411 19 5	6,318 6 7
1926-27 .....	4,562 9 9	75,159 14 6	79,722 4 3	75,174 16 11	4,547 7 4
1927-28 .....	4,483 15 0	81,034 15 7	85,518 10 7	79,636 10 11	5,881 19 8
1928-29 .....	5,858 6 9	85,533 9 3	91,391 16 0	84,006 0 0	7,385 16 0
1929-30 .....	7,301 7 5	88,572 3 5	95,873 10 10	85,534 17 5	10,338 13 5
1930-31 .....	10,300 15 3	91,195 13 9	101,496 9 0	82,117 2 3	19,379 6 9
1931-32 .....	19,302 2 8	86,683 17 6	105,986 0 2	77,875 19 5	28,110 0 9
1932-33 .....	27,413 12 3	73,934 14 11	101,348 7 2	74,708 9 5	26,639 17 9

\* After deducting charges since cancelled.

14. At 30th June, 1933, the following drainable properties were rated in respect of sewerage connected and not connected to the Board's sewers, as shown:—

Locality.	Municipality or Shire.	Drainable Properties.		No. of Properties Rated in respect of Sewerage at 30th June, 1933.
		Connected to Board's Sewers.	Not connected to Board's Sewers.	
Newcastle .....	M Newcastle .....	3,290	252	3,542
Merewether .....	M Merewether .....	1,926	266	2,192
Wickham .....	M Wickham .....	2,597	127	2,724
Hamilton .....	M Hamilton .....	4,666	390	5,056
Adamstown .....	M Adamstown .....	1,119	85	1,204
Waratah .....	M Waratah .....	4,612	579	5,191
New Lambton.....	M New Lambton .....	1,450	217	1,667
Lambton .....	M Lambton .....	883	158	1,041
Mayfield West .....	S Tarro .....	238	170	408
Merewether West ...	S Lake Macquarie .....	187	43	230
<b>Totals.....</b>		<b>20,968</b>	<b>2,287</b>	<b>23,255</b>

*Water Supply and Sewerage.*

15. During the year 23,767 demand notices were served for overdue rates.

16. The following statement shows the outstanding rates and charges at 30th June, 1933, and, for purpose of comparison, the corresponding figures for the two preceding years are also shown:—

	Year 1930-31.		Year 1931-32.		Year 1932-33.	
	£	s. d.	£	s. d.	£	s. d.
<i>Water Supply—</i>						
Water rates .....	39,902	13 8	54,619	9 0	55,396	5 6
Meter charges .....	5,202	0 3	5,915	3 5	6,456	5 3
Special fees .....	20	6 0	30	19 9	24	9 8
Meter hire charges .....	244	2 10	337	13 10	475	9 4
Other charges .....	81	8 6	13	17 0	323	19 0
<b>Totals .....</b>	<b>45,450</b>	<b>11 3</b>	<b>60,917</b>	<b>3 0</b>	<b>62,676</b>	<b>8 9</b>
<i>Sewerage—</i>						
Sewerage rates .....	19,364	5 0	28,088	9 3	26,609	1 3
Other charges .....	15	1 9	21	11 6	30	16 6
<b>Totals .....</b>	<b>19,379</b>	<b>6 9</b>	<b>28,110</b>	<b>0 9</b>	<b>26,639</b>	<b>17 9</b>

17. During the year ended 30th June, 1933, 180 buildings were erected within the area supplied with water by the Board, costing £92,908, and 27 properties were reached by the extension of water-mains.

*Rates and Charges in Force.*

18. I attach extracts from the Water Supply and Sewerage Financial By-laws in force for the year. The water rate, meter charges and sewerage rates are shown.

*Statistics.*

19. The following detailed returns in respect of the operations for the year ended 30th June, 1933, have been prepared and filed for reference, viz.:—

*Water Supply—*

- No. 1—Details of revenue struck.
- No. 2—Properties rated, connected and not connected.
- No. 3—Comparison of water rates struck for the years 1922-23 and 1931 to 1933, respectively.
- No. 4—Comparison of properties rated for the years 1922-23 and 1931 to 1933, respectively.
- No. 5—Water supplied to large consumers for trade purposes.
- No. 6—Details of meters affixed, dispensed with, and remaining on services.
- No. 7—Details of water supplied for public (Local Government) purposes, and for public (Charitable and Miscellaneous) purposes, respectively.
- No. 8—Details of assessments of new ratable properties, and capital value of improvements, etc.

*Sewerage—*

- No. 9—Details of revenue struck.

The Secretary.

M. E. COOKE,  
Assistant Secretary and Accountant.  
30th September, 1933.

## Rates and Charges in force for the Year ended 30th June, 1933.

### WATER SUPPLY.

*Extract from Financial By-laws gazetted 4th December, 1931, and 16th December, 1932.*

#### WATER RATES AND METER CHARGES.

\* \* \* \* \*

#### WATER RATES.

2. The following shall be the water rate to be paid in respect of each property ratable in respect of water supply, whether such property is supplied with water from a water main of the Board or not, or whether such property is supplied by measure or not :—

#### (Ratable Premises.)

- (i) Where the ratable premises are of the assessed annual value of fourteen pounds sterling or under, fifteen shillings per annum.
- (ii) Where the ratable premises are above the assessed annual value of fourteen pounds sterling, a water rate of one shilling and one penny for each pound sterling of the assessed annual value.

#### (Vacant Lands.)

- (iii) Where the ratable vacant land is of the assessed annual value of six pounds sterling or under, five shillings per annum.
- (iv) Where the ratable vacant land is above the assessed annual value of six pounds sterling, a water rate of ten pence for each pound sterling of the assessed annual value.

#### WATER SUPPLIED BY MEASURE.

3. Unless otherwise determined by special agreement between the Board and the consumer, the charge for water supplied by measure for use on any property (whether ratable in respect of water supply or not) during the financial year commencing on the first day of July, 1932, shall be in accordance with the following scale :—

Quantity of Water.			Price per thousand gallons.	Quantity of Water.			Price per thousand gallons.
In Excess of—	Up to—			In Excess of—	Up to—		
			s. d.				s. d.
1 Million Gallons	1 million gallons	...	2 0	7 million gallons	8 million gallons	...	1 8½
2 "	2 "	...	1 11½	8 "	9 "	...	1 8
3 "	3 "	...	1 11	9 "	10 "	...	1 7½
4 "	4 "	...	1 10½	10 "	11 "	...	1 7
5 "	5 "	...	1 10	11 "	12 "	...	1 6½
6 "	6 "	...	1 9½	12 "	13 "	...	1 6
6 "	7 "	...	1 9	13 "	.....	...	1 6

\* \* \* \* \*

#### SEWERAGE.

*Extract from Financial By-laws gazetted 4th December, 1931, and 16th December, 1932.*

\* \* \* \* \*

#### SEWERAGE RATES.

2. The following shall be the sewerage rate to be paid in respect of each property ratable in respect of sewerage, whether such property is drained to any sewer of the Board or not :—

#### (Ratable Premises.)

- (i) Where the ratable premises are of the assessed annual value of fifteen pounds sterling or under, fifteen shillings per annum.
- (ii) Where the ratable premises are above the assessed annual value of fifteen pounds sterling, a sewerage rate of one shilling for each pound sterling of the assessed annual value.

#### (Vacant Lands.)

- (iii) Where the ratable vacant land is of the assessed annual value of six pounds sterling or under, five shillings per annum.
- (iv) Where the ratable vacant land is above the assessed annual value of six pounds sterling, a sewerage rate of ten pence for each pound sterling of the assessed annual value.

\* \* \* \* \*

## Report of the Officer in-Charge of Sewerage Connections (Notices and Accounts Section) for the year ended 30th June, 1933.

Newcastle, 30th November, 1933.

Sir,

I have the honour to submit a report of the Sewerage Connections (Notices and Accounts Section) for the year ended 30th June, 1933.

2. At 30th June, 1933, the sewerage works transferred to the Board and the sewerage works constructed by the Board, provided for the drainage of properties within the Newcastle Division in the areas given in detail in Board's annual report for the year ended 30th June, 1923.

A list of the sewerage works within the Newcastle Sewerage Area carried out by the Department of Public Works as the constructing authority, showing contract numbers and dates of transfer, was published in report for the year ended 30th June, 1923.

3. The drainable properties rated by the Board in respect of sewerage at 30th June, 1933, connected and not connected to the Board's sewers at that date, were as under:—

Municipality.	Total Drainable and Ratable.		No. of Properties where Drainage facilities are provided.				Total not Connected to Board's Sewers.	
			Total No. Connected to Board's Sewers.	Deduct No. Demolished or Rated with others since date of Connection to Sewer.	Add No. of Properties where Drainage facilities are elsewhere provided.	Total No. of Properties where Drainage facilities are provided.		
	Premises.	Lands.					Premises.	Lands.
Newcastle Division—								
Newcastle .....	3,321	221	3,680	541	151	3,290	31	221
Merewether .....	1,935	257	1,997	76	5	1,926	9	257
Wickham .....	2,624	100	2,634	65	28	2,597	27	100
Hamilton .....	4,701	355	4,725	112	53	4,666	35	355
Adamstown .....	1,131	73	1,149	33	3	1,119	12	73
Waratah .....	4,636	555	4,624	33	21	4,612	24	555
New Lambton .....	1,471	196	1,471	24	3	1,450	21	196
Lambton .....	903	138	907	27	3	883	20	138
Tarro (Shire) .....	242	166	243	7	2	238	4	166
Lake Macquarie (Shire) ..	189	41	187	...	...	187	2	41
Total, Newcastle Division .....	21,153	2,102	21,617	918	269	20,968	185	2,102

*Cessnock Division.*—The Treatment Works at Cessnock were completed by the Department of Public Works and transferred to the Board by Gazette Notice No. 98, dated 30th June, 1933. The proclamation did not, however, include the Reticulation Sewers, and the outer boundaries were not proclaimed at 30th June, 1933.

Permission was, however, granted to connect the properties to the Board's sewers provided an undertaking was given by the owner of the property to pay sewerage rates from date of connection.

The number of properties connected in the Cessnock Division at 30th June, 1933, was 184.

4. The following statement shows the progress of Sewerage Connection work from inception to the 30th June, 1933:—

Period.	Total Drainable and Rated.		Total Connected to Board's Sewers.	Total not Connected to Board's sewers.	
	Premises.	Lands.		Premises.	Lands.
As at 30th June, 1930 .....	20,906	2,119	21,230	264	2,119
During 1930-31 .....	120	(less) 88	241	.....	.....
As at 30th June, 1931 .....	21,026	2,031	21,471	204	2,031
During 1931-32 .....	81	67	55	.....	.....
As at 30th June, 1932 .....	21,107	2,098	21,526	229	2,098
During 1932-33 .....	46	4	275*	.....	.....
As at 30th June, 1933 .....	21,153	2,102	21,801†	185	2,102

\* Includes 184 properties in Cessnock.

† This figure shows the total number of properties which have been connected to the sewer since inception of sewerage system, and does not allow for properties demolished since date of connection. (See Statement, paragraph 3, showing the number of properties at present connected to sewers.)

5. The number of properties connected to the Board's sewers up to the 30th June, 1933, in the Newcastle Division was 21,617; Cessnock Division, 184—total 21,801, and the drainage work was carried out as under :—

	From inception to 30th June, 1931.	Year ended 30th June, 1932.	Year ended 30th June, 1933.
Newcastle Division.—			
(a) By owners through the agency of licensed workmen.....	13,948	31	62
(b) By the Board on the application of the owner—			
(i) Where the full amount of the estimated cost was deposited before the work was commenced .....	1,456	3	5
(ii) Where the provisions of the deferred payment system were applied .....	5,616	15	20
(c) By the Board under the compulsory drainage system .....	451	6	4
Totals.....	21,471	55	91
Cessnock Division.—			
(a) By owners through the agency of licensed workmen .....	.....	.....	136
(b) By the Board on the application of the owner—			
(i) Where the full amount of the estimated cost was deposited before the work was commenced .....	.....	.....	7
(ii) Where the provisions of the deferred payment system were applied .....	.....	.....	41
(c) By the Board under the compulsory drainage system .....	.....	.....	.....
Totals.....	.....	.....	184
GRAND TOTALS .....	21,471	55	275

6. The number of properties connected to the Board's sewers during the past year was 275 as shown on previous page, as against 55 for the preceding year.

The properties not connected to the Board's sewer at 30th June, 1933, number 185, as shown in paragraph 3. This is principally accounted for as follows :—Sanitary conveniences not being considered necessary; action to connect to sewer being in progress; and extensions of time to connect, for substantial reasons, being granted.

7. Nine compulsory drainage contracts (specific properties, lump sum—itemised—form of contract) have been let from inception to 30th June, 1933, embracing 276 properties; 162 compulsory drainage contracts (individual properties, lump sum form of contract) have been let from inception to 30th June, 1933, embracing 185 properties, making a total of 461 properties connected to the sewer by the Board under the compulsory drainage system.

8. Statements explaining the action which the owner of a property is required to take upon receipt of a notice to connect a property to the Board's sewer; the provisions of the deferred payment system, under which the Board carry out the drainage work and accept repayment of cost by quarterly instalments, the designing of drainage work, as far as practicable, in accordance with the owner's wishes; the utilising, as far as possible, of existing sanitary fittings; and the prescribed fees for plans of drainage and estimates of cost for drainage work were attached to my report for the year ended 30th June, 1923.

The Secretary.

M. E. COOKE,  
Assistant Secretary and Accountant.

[plan.]

The number of properties reported as the Board's work up to the 30th June 1933 in the ...

Year ended 30th June	Number of properties reported	Number of properties completed	Number of properties under contract
1932	10	10	0
1931	10	10	0
1930	10	10	0
1929	10	10	0
1928	10	10	0
1927	10	10	0
1926	10	10	0
1925	10	10	0
1924	10	10	0
1923	10	10	0
1922	10	10	0
1921	10	10	0
1920	10	10	0
1919	10	10	0
1918	10	10	0
1917	10	10	0
1916	10	10	0
1915	10	10	0
1914	10	10	0
1913	10	10	0
1912	10	10	0
1911	10	10	0
1910	10	10	0
1909	10	10	0
1908	10	10	0
1907	10	10	0
1906	10	10	0
1905	10	10	0
1904	10	10	0
1903	10	10	0
1902	10	10	0
1901	10	10	0
1900	10	10	0
1899	10	10	0
1898	10	10	0
1897	10	10	0
1896	10	10	0
1895	10	10	0
1894	10	10	0
1893	10	10	0
1892	10	10	0
1891	10	10	0
1890	10	10	0
1889	10	10	0
1888	10	10	0
1887	10	10	0
1886	10	10	0
1885	10	10	0
1884	10	10	0
1883	10	10	0
1882	10	10	0
1881	10	10	0
1880	10	10	0
1879	10	10	0
1878	10	10	0
1877	10	10	0
1876	10	10	0
1875	10	10	0
1874	10	10	0
1873	10	10	0
1872	10	10	0
1871	10	10	0
1870	10	10	0
1869	10	10	0
1868	10	10	0
1867	10	10	0
1866	10	10	0
1865	10	10	0
1864	10	10	0
1863	10	10	0
1862	10	10	0
1861	10	10	0
1860	10	10	0
1859	10	10	0
1858	10	10	0
1857	10	10	0
1856	10	10	0
1855	10	10	0
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1851	10	10	0
1850	10	10	0
1849	10	10	0
1848	10	10	0
1847	10	10	0
1846	10	10	0
1845	10	10	0
1844	10	10	0
1843	10	10	0
1842	10	10	0
1841	10	10	0
1840	10	10	0
1839	10	10	0
1838	10	10	0
1837	10	10	0
1836	10	10	0
1835	10	10	0
1834	10	10	0
1833	10	10	0
1832	10	10	0
1831	10	10	0
1830	10	10	0
1829	10	10	0
1828	10	10	0
1827	10	10	0
1826	10	10	0
1825	10	10	0
1824	10	10	0
1823	10	10	0
1822	10	10	0
1821	10	10	0
1820	10	10	0
1819	10	10	0
1818	10	10	0
1817	10	10	0
1816	10	10	0
1815	10	10	0
1814	10	10	0
1813	10	10	0
1812	10	10	0
1811	10	10	0
1810	10	10	0
1809	10	10	0
1808	10	10	0
1807	10	10	0
1806	10	10	0
1805	10	10	0
1804	10	10	0
1803	10	10	0
1802	10	10	0
1801	10	10	0
1800	10	10	0

The number of properties reported as the Board's work up to the 30th June 1933 in the ...

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