# Report of Independent Auditors'

To: Members of the Boards of the New York
City Municipal Water Finance Authority
and the New York City Water Board

We have audited the accompanying combined balance sheets of the New York City Water and Sewer System (the "System") as of June 30, 1999 and 1998, and the related combined statements of revenues, expenses and changes in retained earnings, and cash flows for the years then ended. These combined financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the New York City Water and Sewer System as of June 30, 1999 and 1998, and the results of its operations and changes in retained earnings and its cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the combined financial statements taken as a whole. The supplementary information included in schedules I through IX is presented for purposes of additional analysis and is not a required part of the combined financial statements. Such information has been subjected to the auditing procedures applied in the audits of the combined financial statements and, in our opinion, is fairly presented in all material respects in relation to the combined financial statements taken as a whole.

The Year 2000 required supplementary information included in Note 14 is not a required part of the combined financial statements, but is supplementary information required by the Governmental Accounting Standards Board, and we did not audit and do not express an opinion on such information. Further, we were unable to apply to the Year 2000 supplementary information certain procedures prescribed by professional standards because of the nature of the subject matter underlying the disclosure requirements and because sufficiently specific criteria regarding the matters to be disclosed have not been established. In addition, we do not provide assurance that the System is or will become Year 2000 compliant, that the System's Year 2000 remediation efforts will be successful in whole or in part, or that parties with which the System does business are or will become Year 2000 compliant.

We did not audit the data presented in the introductory and statistical sections, as listed in the accompanying table of contents, which are not a required part of the combined financial statements and, therefore, express no opinion thereon.

KPMG LIP

October 26, 1999 345 Park Avenue New York, NY 10154

### **Combined Balance Sheets**

Assets,	June 30,	1999 and	1998	(in thousands)
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	1999	1998
Utility plant in service, less accumulated depreciation of		
\$3,986,940 in 1999 and \$3,669,170 in 1998 (notes 2, 5 and 7)	\$ 9,550,064	8,246,999
Construction work-in-progress	2,855,474	3,648,921
	12,405,538	11,895,920
CURRENT ASSETS:		
Unrestricted cash and cash equivalents (note 6)	35,854	6,572
Investments (note 6)	3,425	_
ACCOUNTS RECEIVABLE:		
Billed, less allowance for uncollectible water and sewer receivables of \$287,085 in 1999 and \$183,917 in 1998	286,055	291,028
Unbilled	105,000	90,000
Receivable from the City (note 8)	69,673	35,373
Other	12	35,088
Total current assets	500,019	458,061
RESTRICTED ASSETS (NOTES 6 AND 10):		
Cash and cash equivalents	509,507	770,671
Investments	499,594	403,178
Accrued interest receivable	1,775	3,917
Total restricted assets	1,010,876	1,177,766
Deferred bond and financing expenses	103,963	104,527
Total assets	\$ 14,020,396	13,636,274

**Combined Balance Sheets** 

Liabilities and	l Equity	<b>v</b> . Tu	ne 30.	1999 and	1998 (	(in thousands)
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	1999	1998
LONG-TERM LIABILITIES:		
Bonds and notes payable, less current portion (note 9)	\$ 8,623,232	8,151,872
Net discount on bonds and notes payable	(336,988)	(333,646)
Deferred bond refunding costs (note 2)	(237,149)	(239,052)
Total long-term liabilities	8,049,095	7,579,174
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	22,718	21,007
Revenues received in advance	80,262	87,578
Current portion of bonds and notes payable (note 9)	748,478	729,134
Payable to the City (note 8)	235,143	198,847
Refunds payable to customers	14,500	16,500
Total current liabilities	1,101,101	1,053,066
Total liabilities	9,150,196	8,632,240
EQUITY:		
Contributed capital, net of allocated depreciation (note 2)	4,696,778	4,817,668
Retained earnings	173,422	186,366
Total equity	4,870,200	5,004,034
Commitments and contingencies (note 11)	_	
Total liabilities and equity	\$ 14,020,396	13,636,274

Combined Statements of Revenues, Expenses and Changes in Retained Earnings

### Years ended June 30, 1999 and 1998 (in thousands)

	1999	1998
OPERATING REVENUES:		
Water supply & distribution	\$ 583,394	560,956
Sewer collection & treatment	857,204	819,662
Other operating revenues	85,903	102,540
Total operating revenues	1,526,501	1,483,158
OPERATING EXPENSES:		
Operation & maintenance (notes 3 & 7)	777,652	822,791
Provision for bad debts	103,960	149,748
Administration & general	10,879	11,217
Total operating expenses	892,491	983,756
Excess of operating revenues over operating expenses		
before depreciation & amortization	634,010	499,402
Depreciation and amortization	380,023	281,943
Operating income	253,987	217,459
NONOPERATING REVENUES (EXPENSES):		
Interest expense	(476,675)	(465,819)
Investment income	81,465	93,883
Net loss	(141,223)	(154,477)
Depreciation allocated to contributed capital (note 2)	128,279	110,138
Retained earnings at beginning of year	186,366	230,705
Retained earnings at end of year	\$ 173,422	186,366

**Combined Statements of Cash Flows** 

Years ended	June 30,	1999 and	1998	(in thousands	)
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		1999	1998
CASH FLOWS FROM OPERATING ACTIVITIES:			
Operating income	\$	253,987	217,459
ADJUSTMENTS TO RECONCILE OPERATING INCOME TO N			
CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	S:		
Depreciation and amortization		380,023	281,943
Provision for bad debts		103,960	149,748
CHANGES IN ASSETS AND LIABILITIES:			
(Increase) in accounts receivable		(113,987)	(144,043)
(Increase) in receivable from the City		(34,300)	(29,041)
(Increase) decrease in other assets		965	(35,033)
(Decrease) increase in payable to the City		36,296	(78,641)
(Decrease) in accounts payable and accrued expenses		(95)	(9,556)
(Decrease) increase in revenues received in advance		(7,316)	18,931
(Decrease) increase in refunds payable to customers		(2,000)	11,225
Total adjustments		363,546	165,533
Net cash provided by operating activities		617,533	382,992
CARLELOW/CEROLL CARVEAL AND RELATED BYNANCING			
CASH FLOWS FROM CAPITAL AND RELATED FINANCING A	CIIVIIIES	<b>)</b> ;	
Proceeds from issuing bonds, notes and other borrowings, net of issue costs		1,284,953	2,521,837
Repayments of bonds, notes and other borrowings		(831,343)	(1,961,328)
Interest paid on bonds, notes and other borrowings		(464,319)	(461,929)
Acquisition and construction of capital assets		(822,471)	(665,527)
Net cash used in capital and related financing activities		(833,180)	(566,947)

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#### **Combined Statements of Cash Flows**

#### (continued), Years ended June 30, 1999 and 1998 (in thousands)

	1999	1998
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sales and maturities of investments	\$ 1,007,812	6,107,849
Purchases of investments	(1,107,651)	(5,929,285)
Interest on investments	83,604	97,739
Net cash provided by (used in) investing activities	(16,235)	276,303
Net increase (decrease) in cash and cash equivalents	(231,882)	92,348
Cash and cash equivalents, beginning of year	777,243	684,895
Cash and cash equivalents, end of year	\$ 545,361	777,243

# RECONCILIATION OF CASH AND CASH EQUIVALENTS PER STATEMENT OF CASH FLOWS TO THE BALANCE SHEET:

		Assets		
	Unrestricted	Restricted	Total	
Cash and cash equivalents—beginning	\$ 6,572	770,671	777,243	
Net increase (decrease)	29,282	(261,164)	(231,882)	
Cash and cash equivalents—ending	\$ 35,854	509,507	545,361	

### The following are the noncash capital and related financing activities:

- Interest expense includes the accretion of capital appreciation bonds discount in the amount of \$10,547 in 1999 and \$10,958 in 1998.
- Capital expenditures in the amount of \$235,143 and \$135,620 had been incurred but not paid at June 30, 1999 and 1998 respectively.
- The System received capital assets of \$7,389 in 1999 and \$20,155 in 1998 which represent capital contributed by the City.

**Notes to Combined Financial Statements** 

### 1. Organization

The New York City Water and Sewer System (the "System") provides water supply and distribution, and sewage collection, treatment, and disposal for The City of New York (the "City"). The System, as presented in the accompanying combined financial statements, began operations on July 1, 1985 and is a joint operation consisting of two legally separate and independent entities, the New York City Municipal Water Finance Authority (the "Authority") and the New York City Water Board (the "Board"). The Authority is a public benefit corporation created in accordance with the New York City Municipal Water Finance Act (the "Act"), duly enacted into law as Chapter 513 of the laws of 1984 of the State of New York, as amended by Chapter 514 of the laws of 1984 of the State of New York. The Board was created by Chapter 515 of the laws of 1984 of the State of New York. The Act empowers the Authority to issue bonds or notes to finance the cost of capital improvements to the System and to refund any and all outstanding bonds and general obligation bonds of the City issued for water and sewer purposes. The Act empowers the Board to lease the System from the City and to fix and collect rates, fees, rents and other charges for the use of, or for services furnished, rendered, or made available by the System, to produce cash sufficient to pay debt service on the Authority's bonds and to place the System on a self-sustaining basis.

The physical operation and capital improvements of the System are performed by the City's Department of Environmental Protection subject to contractual agreements with the Authority and Board.

In accordance with Statement 14 of the Governmental Accounting Standards Board (GASB), the Board and the Authority are combined for general purpose external reporting purposes since the Board and the Authority are fiscally interdependent. The System, in turn, is included for reporting purposes as a discretely presented component unit in the City's financial statements.

# 2. Summary of Significant Accounting Policies

The accompanying combined financial statements of the System have been prepared on the accrual basis of accounting. Revenues are recognized when earned and expenses recognized when incurred. GASB Statement 20, "Accounting and Financial Reporting for Proprietary Funds and Other Government Entities that Use Proprietary Funds," provides proprietary activities with a choice of authoritative guidance issued after November 30, 1989. The System has elected to follow GASB pronouncements exclusively after that date. Other significant accounting policies are:

#### A. Investments and Cash Equivalents

Investments and cash equivalents consist principally of securities of the United States and its agencies, certificates of deposit, and repurchase agreements with maturity periods of one year or less, and are carried at amortized cost, which approximates fair value. For purposes of the combined statements of cash flows, the System generally considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

In fiscal year 1998 the System implemented GASB Statement No. 31, "Accounting and Financial Reporting for Certain Investments and for External Investment Pools." The statement requires that most investments be reported in the balance sheet at fair value, and that all investment income including changes in the fair value of investments be reported in the statement of operations. The adoption of the Statement did not have a material impact on the System's financial statements.

#### **B.** Restricted Assets

Proceeds from the issuance of debt and monies set aside for the operation and maintenance of the System are classified as restricted by applicable bond indentures.

#### C. Bond Discount and Bond Issuance Costs

Bond discount and bond issuance costs are amortized over the life of the related bond issue, using the effective yield method of amortization for bond discount and the straight-line method for bond issuance costs.



New York City Sludge Vessel

#### D. Utility Plant in Service

Utility plant in service acquired through purchase or internal construction is recorded at cost net of retirements. Contributed utility plant in service is recorded at estimated historical cost based on appraisals or other methods when historical cost information is not available, net of depreciation. Depreciation is computed using the straight-line method based upon estimated useful lives as follows:

	Years
Buildings	40-50
Water supply & waste water treatment systems	15-50
Water distribution & sewage collection systems	15-75
Equipment	5-35

Depreciation on contributed utility plant in service is allocated to contributed capital after the determination of net income.

Maintenance and repairs of property are charged to maintenance expense. Replacements and betterments are recorded as utility plant in service.

#### E. Operating Revenues

Revenues are based on billing rates imposed by the Board based upon customers' water and sewer usage. The System records estimated unbilled revenue at its year end.

#### F. Deferred Revenues

Revenues received in advance of the period to which they relate are deferred and recorded as revenue when earned.

#### G. Deferred Bond Refunding Costs

Deferred bond refunding costs represent the accounting loss incurred in advance refundings of outstanding bonds. In accordance with the provisions of GASB Statement 23, "Accounting and Financial Reporting of Debt Reported by Proprietary Activities," gains or losses arising from debt refundings are deferred and amortized over the lesser of the remaining life of the old debt or the life of the new debt.

#### H. Contributed Capital

In accordance with the lease of the System from the City to the Board, the City transferred its water and sewer-related physical assets at historical cost, net of depreciation, and all work-in-progress, at cost, to the Board on July 1, 1985. Capital improvements financed by sources other than the proceeds of Authority revenue bonds (e.g., capital grants) are recorded as additions to contributed capital.

Changes in contributed capital for the fiscal years ended June 30, 1999 and 1998 are as follows:

(in thousands)	1999	1998
Contributed capital, beginning of year	\$ 4,817,668	4,907,561
Plant and equipment contributed	7,389	20,155
Depreciation allocated to contributed capital	(128,279)	(110,138)
Contributed capital, end of year	\$ 4,696,778	4,817,668

#### I. Reclassifications

Certain reclassifications to the 1998 figures have been made in order to conform to the 1999 combined financial statement presentation.

#### J. Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual amounts could differ from those estimates.

### 3. Financing Agreement

The Financing Agreement (the "Agreement") provides that the Authority will issue bonds to finance the cost of capital investment in the water and sewer system serving the City. It also sets forth the funding priority for the debt service costs of the Authority, operating costs of the water and sewer system, and the rental payment to the City.

### 4. Cumulative Retained Earnings

At June 30, 1999 and 1998, the Authority had a cumulative deficit of \$2,959 million and \$2,572 million, respectively, which amount is less than the \$3,133 million and \$2,758 million cumulative retained earnings of the Board at June 30, 1999 and 1998, respectively.

### 5. Utility Plant in Service

Utility plant in service at June 30, 1999 and 1998 is comprised as follows:

(in thousands)	1999	1998
Buildings	\$ 5,677	5,677
Water supply and waste water treatment systems	6,643,497	6,376,406
Water distribution and sewage collection systems	6,758,577	5,423,759
Equipment	129,253	110,327
	13,537,004	11,916,169
Less accumulated depreciation	3,986,940	3,669,170
	\$ 9,550,064	8,246,999

# 6. Investments, Cash Equivalents and Cash Deposits

The Water and Sewer General Revenue Bond Resolution (the "Resolution") authorizes the investment of bond proceeds. The guidelines issued by the Office of the New York State Comptroller and the Resolution establish the criteria for permissible investments of the System. In addition, the Water Board and the Water Authority have investment guidelines approved by their respective Boards of Directors. The System may invest in Federal government obligations or any subdivision or instrumentality thereof, obligations of the State of New York or any subdivision or instrumentality thereof provided that they are in the two highest rating categories of a rating agency, bankers' acceptances or certificates of deposit (CDs) issued by a New York State commercial bank with capital or surplus in excess of \$100 million, corporate securities or commercial paper rated highest by a rating agency when compared to similar-type securities, or repurchase agreements that are collateralized by obligations of the Federal government.

Investments and deposits held by the System at June 30, 1999 and 1998 comprised:

(in thousands)	1999	1998
Unrestricted cash, cash equivalents and investmen (plus accrued interest)	ts \$ 39,279	6,572
Restricted cash, cash equivalents and investmen	ts	
(plus accrued interest)	1,010,876	1,177,766
	\$1,050,155	1,184,338
This amount is comprised of:		
Carrying amount of deposits (includes CDs)	\$ 243,207	25,946
Investments (plus accrued interest)	806,948	1,158,392
	\$1,050,155	1,184,338

#### **Cash Deposits**

The System follows the New York City Banking Commission designations for the System's bank depositories. The Commission consists of the comptroller, the mayor, and the finance commissioner and uses independent bank rating agencies in part to assess the financial soundness of each bank, and the banking relationships are under constant operational and credit reviews. Each bank in which the System's cash is deposited is required to have its principal office in New York State and have capital stock, surplus, and undivided earnings aggregating at least \$100 million. The System had \$200 thousand on deposit at June 30, 1999 and 1998, which were covered by Federal depository insurance.

#### **Investments**

The System's investments are categorized to give an indication of the level of risk assumed by the System at year end. Category 1, the lowest risk, includes investments that are insured or registered, or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the System's name. Category 3, the highest risk, includes uninsured and unregistered investments for which the securities are held by the counterparty, or by its trust department or agent but not in the System's name.

Investments (inclusive of certain investments reported as cash equivalents) held by the System at June 30, 1999 and 1998 were all classified as Category 1 investments, and are comprised of:

(in thousands)	1999* Cost	1999* Fair Value	1998* Cost	1998* Fair Value
U.S. Treasury securities	\$ 49,397	49,398	402	402
Federal agency issues	647,923	649,514	1,040,658	1,043,694
Commercial paper	55,888	55,888	230	230
Repurchase agreements	_	<u> </u>	113,185	113,185
Mutual Funds	11,162	11,162	_	_
Guaranteed Investment Contract	40,803	40,803	_	_
	\$ 805,173	806,765	1,154,475	1,157,511

<sup>\*</sup>Includes \$302,154 at cost and \$302,154 at market (1999) and \$751,297 at cost and \$754,392 at market (1998) of investments reported as cash equivalents.

### 7. Lease Agreement

The Board is party to a long-term lease (the "Lease") with the City, which transfers all the water and sewer related real and personal property to the Board for the term of the lease. The lease term commenced on July 1, 1985 and continues until the later of the fortieth anniversary of the commencement of the lease or the date on which all bonds, notes or other obligations of the Authority are paid in full or provisions for such payment have been made pursuant to the applicable debt instrument. The lease provides for payments to the City to cover the following:

A. an amount sufficient to pay the cost of administration, maintenance, repair and operation of the leased property, which includes overhead costs incurred by the City attributable to the leased property, net of the amount of any Federal, State, or other operating grants received by the City;

B. an amount sufficient to reimburse the City for capital costs incurred by the City for the construction of capital improvements to the leased property which are not paid or reimbursed from any other source, to the extent requested by the City;

C. an amount sufficient to pay the cost of other services provided by the City;



D. an amount sufficient to pay the cost of legal services provided by the City;

E. an amount sufficient to reimburse the City for the costs of the services of any city officer and employee provided on a full-time or part-time basis to the Board; and

F. the amount of any reconciliation payments, as defined.

In addition to the payments described above, the Board pays rent to the City to the extent requested by the City in each fiscal year in an amount not to exceed the greater of (A) the principal and interest payable on general obligation bonds issued by the City for water and sewer purposes certified by the City to be paid within such fiscal year or (B) 15% of principal and interest payable on the bonds of the Authority to be paid within such fiscal year. After all amounts certified by the City have been paid and all other required payments have been made, any surplus funds received by the Board in the current fiscal year are to be placed into the Board's general account in the operating and maintenance reserve fund.

A summary of operation and maintenance expenses at June 30, 1999 and 1998 is as follows:

1999	1998
\$ 233,221	211,015
300,406	320,659
31,879	34,191
58,950	51,500
5,330	28,944
629,786	646,309
147,866	176,482
\$ 777,652	822,791
	\$ 233,221 300,406 31,879 58,950 5,330 <b>629,786</b> 147,866

# 8. Payable to and Receivable from the City

As of June 30, 1999 and 1998, all construction work-in-progress recorded by the System, which has not been reimbursed to the City, has been recorded as a payable to the City, net of the amount of any State or Federal capital grants received by the City.

As of June 30, 1999 and 1998, the System has a receivable from the City for overpayment of operations and maintenance expenses.

### 9. Bonds and Notes Payable

The Authority issues revenue bonds to finance a portion of the costs of the capital renovation and improvements program to the System, to fund certain reserves, to pay costs of issuance and to advance refund certain outstanding principal amounts of bonds.

Bonds, notes payable, and commercial paper comprise the following for the year ended June 30, 1999:

Balance at June 30, 1998	Issued	Retired	Balance at June 30, 1999
\$ 69,690	_	_	69,690
13,255	_	_	13,255
81,891	_	75,385	6,506
52,153	_	42,525	9,628
145,035	_	12,965	132,070
2,585	_	2,585	_
62,625	_	11,460	51,165
279,380	_	96,435	182,945
68,443	_	12,105	56,338
1,067,480	_	14,315	1,053,165
100,000			100,000
576,495	_	34,021	542,474
659,025	_	3,745	655,280
200,000	_	_	200,000
83,500		_	83,500
83,500	_	_	83,500
213,150	_	200	212,950
	\$ 69,690  13,255  81,891  52,153  145,035  2,585  62,625  279,380  68,443  1,067,480  100,000  576,495  659,025  200,000  83,500	June 30, 1998       Issued         \$ 69,690       —         13,255       —         81,891       —         52,153       —         145,035       —         62,625       —         279,380       —         68,443       —         1,067,480       —         576,495       —         659,025       —         200,000       —         83,500       —         83,500       —	June 30, 1998       Issued       Retired         \$ 69,690       —       —         13,255       —       —         81,891       —       75,385         52,153       —       42,525         145,035       —       12,965         2,585       —       2,585         62,625       —       11,460         279,380       —       96,435         68,443       —       12,105         1,067,480       —       14,315         100,000       —       —         576,495       —       34,021         659,025       —       3,745         200,000       —       —         83,500       —       —         83,500       —       —

(in thousands)	Balance at June 30, 1998	Issued	Retired	Balance at June 30, 1999
1994 Fiscal Series G - 5.50% to 5.678% Adjustable, Auction and Leveraged Reverse Rate Bonds maturing in varying installments through 2024	205,000	_	_	205,000
1995 Fiscal Series A - Adjustable Rate Term Bonds Maturing in varying installments through 2025	216,700	_	_	216,700
1995 Fiscal Series 1 - 5.25% to 6.875% Serial and Term Bonds maturing in varying installments through 2016	59,981	_	3,925	56,056
1996 Fiscal Series 1 - 4.3% to 6.00% Serial Bonds maturing in varying installments through 2017	105,735	_	3,945	101,790
1996 Fiscal Series 2 - 2.95% to 5.20% Serial Bonds maturing in varying installments through 2017	26,955	_	1,080	25,875
1996 Fiscal Series 3 - 3.60% to 5.85% Serial Bonds maturing in varying installments through 2015	41,605	_	1,400	40,205
1996 Fiscal Series A - 4.1% to 6.00% Serial Bonds maturing in varying installments through 2009	253,660	_	14,920	238,740
1996 Fiscal Series B - 5.75% to 6.25% Serial Bonds maturing in varying installments through 2026	520,100	_	_	520,100
1996 Fiscal Series C - 4.2% to 5.75% Serial Bonds maturing in varying installments through 2012	78,180		280	77,900
1997 Fiscal Series A - 4.85% to 6.00% Serial Bonds maturing in varying installments through 2026	365,125	_	_	365,125
1997 Fiscal Series B - 5.50% to 5.75% Serial Bonds maturing in varying installments through 2029	700,000	_	_	700,000
1998 Fiscal Series 1 - 4.00% to 5.35% Serial Bonds maturing in varying installments through 2017	43,385	_	1,370	42,465
1998 Fiscal Series 2 - 4.00% to 6.00% Serial Bonds maturing in varying installments through 2019	111,368		2,948	108,420
1998 Fiscal Series 3 - 4.30% to 6.00% Serial Bonds maturing in varying installments through 2016	450,035	_	_	450,035
1998 Fiscal Series 4 - 3.60% to 5.20% Serial Bonds maturing in varying installments through 2018	15,749	_	570	15,179
1998 Fiscal Series 5 - 4.61% to 5.10% Serial Bonds maturing in varying installments through 2019	87,873	_	2,350	85,523

(in thousands)	Balance at June 30, 1998	Issued	Retired	Balance at June 30, 1999
1998 Fiscal Series 6 - 4.70% to 5.10% Serial Bonds maturing in varying installments through 2019	19,228	_	559	18,669
1998 Fiscal Series A - 4.25% to 5.125% Serial Bonds maturing in varying installments through 2022	283,850	_	_	283,850
1998 Fiscal Series B - 5.125% to 5.25% Serial Bonds maturing in varying installments through 2030	449,525		_	449,525
1998 Fiscal Series C - 4.00% to 5.125% Serial Bonds maturing in varying installments through 2021	88,310	_	235	88,075
1998 Fiscal Series D - 4.25% to 5.00% Serial Bonds maturing in varying installments through 2025	399,985	_	2,865	397,120
1999 Fiscal Series 1 - 4.00% to 5.25% Serial Bonds maturing in varying installments through 2020	_	121,435	2,852	118,583
1999 Fiscal Series 2 - 4.00% to 5.25% Serial Bonds maturing in varying installments through 2020	_	158,510	307	158,203
1999 Fiscal Series A - 4.75% to 5.00% Serial Bonds maturing in varying installments through 2031		301,470	_	301,470
1999 Fiscal Series B - 3.80% to 5.25% Serial and Capital Appreciation Bonds maturing in varying installments through 2020		245,865	_	245,865
1999 Fiscal Series C - 5.00% to 5.75% Serial Bonds maturing in varying installments through 2001	_	13,320	4,550	8,770
Commercial Paper Series 1 - Variable Rate, Short-term Rolling Maturity Backed by L.O.C.	200,000	_	_	200,000
Commercial Paper Series 3 - Variable Rate, Short-term Rolling Maturity Backed by L.O.C.	100,000	_	25,000	75,000
Commercial Paper Series 4 - Variable Rate, Short-term Rolling Maturity Backed by L.O.C.	100,000	25,000	_	125,000
Commercial Paper Series 5 - Variable Rate, Short-term Rolling Maturity Backed by L.O.C.	200,000	_	_	200,000
Total debt payable	8,881,006	865,601	374,897	9,371,710
Current portion of bonds and notes payable	729,134	7,979	(11,365)	748,478
Bonds and notes payable, less current portion \$	8,151,872	857,622	386,262	8,623,232

With respect to all series, the Board has agreed to maintain rates and charges to provide revenues at levels sufficient to pay principal and interest requirements as well as to meet certain debt service coverage and operating cost funding requirements. All series are specific obligations of the Authority payable solely from and secured by a pledge of and lien on the gross revenue of the System, as defined.

Certain bonds issued by the Authority involve the concurrent issuance of long-term variable rate securities that are matched with long-term floating rate securities. These obligations, taken together as a whole, yield a fixed rate of interest at all times. These securities have been issued to achieve a lower prevailing fixed rate of interest in relation to traditional fixed rate bonds.

Although the advance refundings resulted in accounting losses of \$17.1 million and \$141.1 million for the years ended June 30, 1999 and 1998, respectively, the Authority in effect reduced its aggregate debt service by approximately \$143.9 million and \$110.7 million respectively and obtained an economic gain of \$100.8 million and \$77.0 million respectively. During 1999 and 1998, the Authority issued \$259.2 million and \$1.959 billion of bonds respectively to advance refund \$213 million and \$1.106 billion of outstanding bonds respectively.

The Authority had defeased cumulatively \$4.087 billion and \$3.874 billion of outstanding bonds as of June 30, 1999 and 1998, respectively, by placing proceeds of refunding bonds issued in an irrevocable escrow account to provide for all future debt service payments. Proceeds were used to purchase U.S. Government Securities that were placed in the irrevocable escrow account. The investments and fixed earnings from the investments are sufficient to fully service the defeased debt until the debt is called or matured. Accordingly, the escrow account assets and liability for the defeased bonds are not included in the Authority's financial statements.

As of June 30, 1999 and 1998, \$2.435 billion and \$2.231 billion of the defeased bonds respectively had been retired from the assets of the escrow accounts.

Debt service requirements to maturity at June 30, 1999 are as follows:

#### Year ending June 30 (in thousands)

	Principal	Interest	Total
2000	\$ 748,478	459,289	1,207,767
2001	162,680	451,333	614,014
2002	164,938	442,924	607,862
2003	174,706	434,637	609,343
2004	184,466	425,976	610,442
Thereafter un	til 7,936,442	6,225,432	14,161,874
Total	\$9,371,710	8,439,591	17,811,302

### 10. Segment Information

The System is comprised of two entities, the Water Authority which issues bonds to finance the cost of capital improvements, and the Water Board which leases the System from the City and fixes and collects rates, fees and other charges for the use of the System. Segment information for these entities as of June 30, 1999 is as follows:

(in thousands)	New York City Water Board	New York City Municipal Water Finance Authority
Total Operating Revenues		45,828
Depreciation and Amortization	354,353	25,670
Income from Operations	242,817	11,170
Net Income (Loss)	245,991	(387,214)
Utility Plant in Service Additions	1,657,418	_
Utility Plant in Service Deletions	36,583	
Net Working Capital	404,945	(1,006,027)
Total Assets	\$13,021,79	5 6,095,878

### 11. Restricted Assets

Certain cash and investments, plus accrued interest, of the System are restricted as follows:

(in thousands)		1999	1998
THE BOARD			
Operation and maintenance reserve account	ce \$	116,243	111,143
Operation and maintenance reserve general account	ce	10	10
		116,253	111,153
THE AUTHORITY  Revenue fund		32,803	61,425
Debt service reserve fund		540,511	529,408
Construction fund		321,309	475,183
Arbitrage rebate fund		_	597
		894,623	1,066,613
	\$ 1	,010,876	1,177,766

The operation and maintenance reserve account is established as a depository to hold the operations and maintenance reserve fund as required by the General Bond Resolution. It is required to hold one-sixth of the operating expenses as set forth in the annual budget. It is funded through the cash receipts of the Board. The operation and maintenance reserve general account is established as a depository to hold all excess funds of the Board after all legally mandated transfers have been made. It is available to meet any deficiencies in the flow of funds including debt service and alternatively can be used as a financing source for capital expenditures.

The revenue fund is established as a depository to fund the debt service, Authority expense, debt service reserve and arbitrage funds. It is funded through cash transfers from the Water Board. The debt service reserve fund is established as a depository to hold the maximum annual debt service requirement for the next current or any future fiscal year. It is funded through revenue bond proceeds and/or the revenue fund. The debt service fund is established as a depository to pay all principal

and interest payments on the Authority's debt for the current fiscal year. It is funded through the revenue fund. The construction fund is established as a depository to pay all capital construction costs incurred by the City and reimbursed by the Authority. It is funded through the proceeds of bond and note sales. The arbitrage rebate fund is established to provide for arbitrage rebate payments to the U.S. Department of Treasury. It is funded through the revenue fund.

### 12. Commitments and Contingencies

#### Construction

The System has contractual commitments of approximately \$2.319 billion at June 30, 1999 for water and sewer projects.

### Contingencies

### Claims and Litigation

In accordance with the lease, the Board is required to reimburse the City for any judgment or settlement paid by the City arising out of a tort claim to the extent that the City's liability is related to capital improvements and the operation or maintenance of the System. However, in no event shall the payment made to the City, in any fiscal year, exceed an amount equal to 5% of the aggregate revenues shown on the last year-end audited financial statements of the System. In addition, the System is required to reimburse the City, to the extent requested by the City, for the payment of any judgment or settlement arising out of a contract claim with respect to the construction of capital improvements. In addition, the City has agreed, subject to certain conditions, to indemnify the Authority, the Board, and their staffs against any and all liability in connection with any act done or omitted in the exercise of their powers which is taken or omitted in good faith in pursuance of their purposes under the Act. Currently, the City is a defendant in a significant number of lawsuits pertaining to the System. The litigation includes, but is not limited to, actions commenced and claims asserted against the City arising out of alleged torts, alleged breaches of contract, condemnation proceedings and other alleged violations of law. As of June 30, 1999, the potential future liability attributable to the System for claims outstanding against the City was estimated to be \$31.0 million. This amount is included in the City's General Long-Term Obligations Account Group. The potential future liability is the City's best estimate based on available information. The estimate may be revised as further information is obtained and as pending cases are litigated.

#### Arbitrage Rebate

To maintain the exemption from Federal income tax of interest on bonds issued subsequent to January 1, 1986, the System will fund amounts required to be rebated to the Federal Government pursuant to Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"). The Code requires the payment to the United States Treasury of the excess of the amount earned on all non-purpose obligations over the amount that would have been earned if the gross proceeds of the issue were invested at a rate equal to the yield on the issue, together with any earnings attributable to such excess. Construction funds, debt service funds or any other funds or accounts funded with proceeds of such bonds, including earnings, or pledged to or expected to be used to pay interest on such bonds are subject to this requirement. Issues with respect to which all gross proceeds are expended for the governmental purpose of the issue within six months after the date of issue and debt service funds with annual gross earnings of less than \$100,000 are exempt from this requirement. Payment is to be made after the end of the fifth bond year and after every fifth bond year thereafter, and within 60 days after retirement of the bonds. At June 30, 1999 and 1998, the System has not accrued for any such liability. However, the System believes the amounts, if any, to be rebated will not significantly affect the accompanying combined financial statements.



Catskill System Reservoir

### 13. Subsequent Events

On October 6, 1999, the Water Authority issued Fiscal 2000 Series A Water and Sewer First Resolution Bonds in the aggregate principal amount of \$275.7 million to reimburse outstanding commercial paper notes, and to pay certain costs of issuance.

# 14. Required Supplementary Information—Year 2000 Computer Systems (Unaudited)

The Year 2000 presents potential operational problems for computerized data files and computer programs which may recognize the Year 2000 as the Year 1900, resulting in possible system failures or miscalculations.

The Year 2000 compliance issues affecting the Water and Sewer System are being addressed in three organizations. The Water Authority replaced its computer operating system with a new system that it believes to be Year 2000 compliant. The Department of Environmental Protection, which operates the System, has completed remediation work on its operations support and billing systems. New York City is responsible for the personnel management and financial systems used by the Department of Environmental Protection and is actively taking steps toward Year 2000 compliance.

The computer systems may not all be Year 2000 compliant in a timely manner, and there could be an adverse impact on the System's operations or revenues as a result. The System is in the process of developing contingency plans for all mission-critical and high priority systems, if such systems are not Year 2000 compliant by pre-determined dates. The System is also in the process of contracting its significant third party vendors, regarding the Year 2000 issue and the status of their compliance. Year 2000 compliance by third parties is not within the System's control, and therefore the System cannot assure the timing of such efforts or that there will not be any adverse effects on the System resulting from any failure of these third parties to achieve Year 2000 compliance.

**Combined Schedule of Cash Receipts and Disbursements** 

### **Schedule I**, Years ended June 30, 1999 and 1998 (in thousands)

	1999	1998
CASH RECEIPTS:		
Water supply & distribution & sewer collection & treatment	\$ 1,279,729	1,209,934
Other operating revenues	40,075	34,818
Revenues received in advance	54,386	60,753
Investment income	83,604	97,739
Subsidy income	45,828	67,722
Total cash receipts	1,503,622	1,470,966
CASH DISBURSEMENTS:		
Operation & maintenance	814,316	843,909
Administration & general	10,836	11,099
Interest payments	464,319	461,929
Prepaid construction	_	34,111
Amounts refunded to customers	14,454	16,430
Total cash disbursements	1,303,925	1,367,478
Excess of cash receipts over cash disbursements before financing uses	199,697	103,488
FINANCING SOURCES (USES):		
Proceeds from bond & note sales, net of issuance cost	1,284,953	2,384,189
Investments	162,150	82,016
Construction payments	(786,175)	(744,167)
Repayment of bonds & notes	(831,343)	(1,823,680)
Total financing uses	(170,415)	(101,642)
Excess of cash receipts over cash disbursement	29,282	1,846
	6,572	4,726
Unrestricted cash & cash equivalents at beginning of year	0,5/2	1,7 20

**Combining Balance Sheet** 

Sched	ule	II-A	Assets,	June 30,	1999	(in	thousands)
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Projects, june 30, 1	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
Utility plant in service, less		•		
accumulated depreciation				
of \$3,986,940	\$ 9,550,064	_	_	9,550,064
Construction work-in-progress	2,855,474	_	_	2,855,474
	12,405,538	_	_	12,405,538
CURRENT ASSETS:				
Unrestricted cash and cash equivalents	35,851	3	_	35,854
Investments	3,425	_	_	3,425
ACCOUNTS RECEIVABLE:				
Billed, less allowance for uncollectible				
water & sewer receivables of \$287,805	286,055	_		286,055
Unbilled	105,000	<u>—</u>	_	105,000
Receivable from the city	69,673	_	_	69,673
Other	_	12	_	12
Total current assets	500,004	15	_	500,019
RESTRICTED ASSETS:				
Cash & cash equivalents	116,111	393,396	_	509,507
Investments	_	499,594	_	499,594
Accrued interest receivable	142	1,633	_	1,775
Total restricted assets	116,253	894,623	_	1,010,876
Revenue requirement to be billed by				
& received from the Board	<u> </u>	5,097,277	(5,097,277)	
Deferred bond & financing expenses	_	103,963	_	103,963
Total Assets	\$ 13,021,795	6,095,878	(5,097,277)	14,020,396

**Combining Balance Sheet** 

Schedule II—Liabilities and Equity, June 30, 1999 (in the	า thousands)
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	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
LONG-TERM LIABILITIES:		-		
Bonds & notes payable, less				
current portion	\$ —	8,623,232		8,623,232
Net discount on bonds & notes payable	_	(336,988)	<u> </u>	(336,988)
Deferred bond refunding costs	_	(237,149)		(237,149)
Revenue requirements payable to the Authority	5,097,277	_	(5,097,277)	_
Total long-term liabilities	5,097,277	8,049,095	(5,097,277)	8,049,095
CURRENT LIABILITIES:  Accounts payable & accrued expenses	297	22,421		22,718
Revenues received in advance	80,262	_	_	80,262
Current portion of bonds & notes payable	_	748,478	_	748,478
Payable to the city	_	235,143	_	235,143
Refunds payable to customers	14,500	_	_	14,500
Total current liabilities	95,059	1,006,042	_	1,101,101
Total liabilities	5,192,336	9,055,137	(5,097,277)	9,150,196
EQUITY:				
Contributed capital, net of				
allocated depreciation	4,696,778		<u> </u>	4,696,778
Retained earnings (deficit)	3,132,681	(2,959,259)	_	173,422
Total equity	7,829,459	(2,959,259)	_	4,870,200
Commitments & contingencies				
Total liabilities & equity	\$ 13,021,795	6,095,878	(5,097,277)	14,020,396

**Combining Balance Sheet** 

### Schedule III — Assets, June 30, 1998 (in thousands)

	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
Utility plant in service, less				
accumulated depreciation				
of \$3,669,170	\$ 8,246,999		_	8,246,999
Construction work-in-progress	3,648,921	_	_	3,648,921
	11,895,920	_	_	11,895,920
CURRENT ASSETS:				
Unrestricted cash & cash equivalents	6,570	2		6,572
ACCOUNTS RECEIVABLE:				
Billed, less allowance for uncollectible				
water & sewer receivables of \$183,917	291,028	<del></del>		291,028
Unbilled	90,000	_	_	90,000
Receivable from the city	35,373	_	_	35,373
Other	34,111	977	_	35,088
Total current assets	457,082	979		458,061
RESTRICTED ASSETS:				
Cash & cash equivalents	110,967	659,704	_	770,671
Investments	_	403,178	_	403,178
Accrued interest receivable	186	3,731	_	3,917
Total restricted assets	111,153	1,066,613	_	1,177,766
Revenue requirement to be billed by				
& received from the Board	<u> </u>	4,783,865	(4,783,865)	
Deferred bond & financing expenses	_	104,527	_	104,527
Total Assets	\$ 12,464,155	5,955,984	(4,783,865)	13,636,274

**Combining Balance Sheet** 

Schedule III—Liabilities and Equit	t <b>tv</b> , June 30, 1998 (in thousands)
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	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
LONG-TERM LIABILITIES:				
Bonds & notes payable, less				
current portion	\$ —	8,151,872		8,151,872
Net discount on bonds & notes payable	_	(333,646)	_	(333,646)
Deferred bond refunding costs	_	(239,052)		(239,052)
Revenue requirements payable to the Authority	4,783,865	_	(4,783,865)	_
Total long-term liabilities	4,783,865	7,579,174	(4,783,865)	7,579,174
CURRENT LIABILITIES:				
Accounts payable & accrued expenses	133	20,874	_	21,007
Revenues received in advance	87,578	_	_	87,578
Current portion of bonds & notes payable	<del>-</del>	729,134		729,134
Payable to the city	_	198,847	_	198,847
Refunds payable to customers	16,500	_		16,500
Total current liabilities	104,211	948,855	_	1,053,066
Total liabilities	4,888,076	8,528,029	(4,783,865)	8,632,240
EQUITY:				
Contributed capital, net of				
allocated depreciation	4,817,668		<u> </u>	4,817,668
Retained earnings (deficit)	2,758,411	(2,572,045)		186,366
Total equity	7,576,079	(2,572,045)	_	5,004,034
Commitments & contingencies				
Total liabilities & equity	\$ 12,464,155	5,955,984	(4,783,865)	13,636,274

Combining Statement of Revenues, Expenses and Changes in Retained Earnings

Schedu	ıle I'	<b>V</b> , Year	ended	June 30,	1999	(in	thousands)
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	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
OPERATING REVENUES:		•		
Water supply and distribution	\$ 583,394	_	_	583,394
Sewer collection and treatment	857,204	_	_	857,204
Other operating revenues	40,075	45,828	45,828 —	
Total operating revenues	1,480,673	45,828	_	1,526,501
OPERATING EXPENSES:				
Operation and maintenance	777,652		_	777,652
Provision for bad debts	103,960		_	103,960
Administration and general	1,891	8,988	_	10,879
Total operating expenses	883,503	8,988	_	892,491
Excess of operating revenues over operating expenses before depreciation and amortization	597,170	36,840	_	634,010
Depreciation and amortization	354,353	25,670	_	380,023
Operating income	242,817	11,170	_	253,987
NONOPERATING REVENUE (EX	PENSE):			
Interest expense	_	(476,675)	_	(476,675)
Investment income	3,174	78,291	_	81,465
Net income (loss)	245,991	(387,214)	_	(141,223)
Depreciation allocated to contributed capital	128,279	_	_	128,279
Retained earnings (deficit) at				
beginning of year	2,758,411	(2,572,045)	_	186,366
Retained earnings (deficit) at end of year	\$ 3,132,681	(2,959,259)		173,422
Chu di year	\$ 3,132,681	(4,7,77,4,77)		1/3,422

Combining Statement of Revenues, Expenses and Changes in Retained Earnings

### **Schedule V**, Year ended June 30, 1998 (in thousands)

	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
OPERATING REVENUES:		•		
Water supply and distribution	\$ 560,956	_	_	560,956
Sewer collection and treatment	819,662	_	_	819,662
Other operating revenues	58,928	43,612 —		102,540
Total operating revenues	1,439,546	43,612	_	1,483,158
OPERATING EXPENSES:				
Operation and maintenance	822,791	_	_	822,791
Provision for bad debts	149,748	_		
Administration and general	2,716	8,501 —		11,217
Total operating expenses	975,255	8,501 —		983,756
Excess of operating revenues over operating expenses before				
depreciation and amortization	464,291	35,111	_	499,402
Depreciation and amortization	255,910	26,033	_	281,943
Operating income	208,381	9,078	_	217,459
NONOPERATING REVENUE (EX	PENSE):			
Interest expense		(465,819)	_	(465,819)
Investment income	3,514	90,369	_	93,883
Net income (loss)	211,895	(366,372)	(366,372) —	
Depreciation allocated to				
contributed capital	110,138	_	_	110,138
Retained earnings (deficit) at				
beginning of year	2,436,378	(2,205,673)	_	230,705
Retained earnings (deficit) at				
end of year	\$ 2,758,411	(2,572,045)	_	186,366

**Combining Statement of Cash Flows** 

Schedule V	l. Year ended	lune 30, 1999 (	(in thousands)

	New York City Water Board	New York City Municipal Water Finance Authority	Total
CASH FLOWS FROM OPERATING ACTIVITIES:			
Operating income	\$ 242,817	11,170	253,987
ADJUSTMENTS TO RECONCILE OPERATING INCOME TO NET CASH PROVIDED BY (USED IN) OPERATION			
Depreciation and amortization	354,353	25,670	380,023
Provision for bad debts	103,960	_	103,960
CHANGES IN ASSETS AND LIABILITIES:			
(Increase) in accounts receivable	(113,987)	<u>—</u>	(113,987)
(Increase) in receivable from the City	(34,300)	<u>—</u>	(34,300)
Decrease in other assets	_	965	965
Increase in payable to the City	_	36,296	36,296
Increase (Decrease) in accounts payable and accrued expenses	164	(259)	(95)
(Decrease) in revenues received in advance	(7,316)	_	(7,316)
(Decrease) in refunds payable to customers	(2,000)	<u>—</u>	(2,000)
Increase in payable to the Authority (receivable from the Board)	313,412	(313,412)	_
Total adjustments	614,286	(250,740)	363,546
Net cash provided by (used in) operating activities	857,103	(239,570)	617,533
CASH FLOWS FROM CAPITAL AND RELATED FINANC	ING ACTIVITIE	S:	
Proceeds from issuing bonds, notes and other borrowings, net of issuance costs	_	1,284,953	1,284,953
Repayments of bonds, notes and other borrowings	_	(831,343)	(831,343)
Interest paid on bonds, notes and other borrowings	_	(464,319)	(464,319)
Acquisition and construction of capital assets	(822,471)	_	(822,471)
Net cash provided by (used in) capital and related financing activities	(822,471)	(10,709)	(833,180)

**Combining Statement of Cash Flows** 

### **Schedule VI** (continued), Year ended June 30, 1999 (in thousands)

	w York City ater Board	New York City Municipal Water Finance Authority	Total
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	_	1,007,812	1,007,812
Purchases of investments	(3,425)	(1,104,226)	(1,107,651)
Interest on investments	3,218	80,386	83,604
Net cash provided by (used in) investing activities	(207)	(16,028)	(16,235)
Net (decrease) increase in cash and cash equivalents	34,425	(266,307)	(231,882)
Cash and cash equivalents, beginning of year	117,537	659,706	777,243
Cash and cash equivalents, end of year	\$ 151,962	393,399	545,361

# RECONCILIATION OF CASH AND CASH EQUIVALENTS PER STATEMENT OF CASH FLOWS TO THE BALANCE SHEET:

		Assets			
	τ	Inrestricted	Restricted	Total	
Cash and cash equivalents—beginning		6,572	770,671	777,243	
Net increase (decrease)		29,282	(261,164)	(231,882)	
Cash and cash equivalents—ending	\$	35,854	509,507	545,361	

#### The following are the noncash capital and related financing activities:

- Interest expense includes the accretion of capital appreciation bonds discount in the amount of \$10,547.
- Capital expenditures in the amount of \$235,143 had been incurred but not paid at June 30, 1999.
- The Water Board received capital assets of \$7,389 in 1999 which represent capital contributed by the City.

**Combining Statement of Cash Flows** 

Sched	ule	VII,	Year ended	June 30,	1998	(in thousands)
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	New York City Water Board	New York City Municipal Water Finance Authority	Total
CASH FLOWS FROM OPERATING ACTIVITIES:		•	
Operating income	\$ 208,381	9,078	217,459
ADJUSTMENTS TO RECONCILE OPERATING INCOME TO NET CASH PROVIDED BY (USED I OPERATING ACTIVITIES:	IN)		
Depreciation and amortization	255,910	26,033	281,943
Provision for uncollectible accounts	149,748	_	149,748
CHANGES IN ASSETS AND LIABILITIES:			
(Increase) decrease in receivables	(148,521)	4,478	(144,043)
(Increase) in receivable from the City	(29,041)		(29,041)
(Increase) in other assets	(34,111)	(922)	(35,033)
(Decrease) in payable to the City	_	(78,641)	(78,641)
(Decrease) in accounts payable and accrued expenses	(195)	(9,361)	(9,556)
Increase in revenues received in advance	18,931		18,931
Increase in refunds payable to customers	11,225	_	11,225
Increase (decrease) in payable to the Authority			
(receivable from the Board)	229,347	(229,347)	
Total adjustments	453,293	(287,760)	165,533
Net cash provided by (used in) operating activities	661,674	(278,682)	382,992
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Proceeds from issuing bonds, notes and other borrowings, net of issuance cost	<u> </u>	2,521,837	2,521,837
Repayments of bonds, notes and other borrowings	_	(1,961,328)	(1,961,328)
Interest paid on bonds, notes and other borrowings	_	(461,929)	(461,929)
Acquisition and construction of capital assets	(665,527)	_	(665,527)
Net cash provided by (used in) capital and related financing activities	(665,527)	98,580	(566,947)
See accompanying in detendent auditors' verout			

**Combining Statement of Cash Flows** 

### Schedule VII (continued), Year ended June 30, 1998 (in thousands)

	w York City ater Board	New York City Municipal Water Finance Authority	Total
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	38,680	6,069,169	6,107,849
Purchases of investments	_	(5,929,285)	(5,929,285)
Interest on investments	5,173	92,566	97,739
Net cash provided by investing activities	43,853	232,450	276,303
Net increase in cash and cash equivalents	40,000	52,348	92,348
Cash and cash equivalents, beginning of year	77,537	607,358	684,895
Cash and cash equivalents, end of year	\$ 117,537	659,706	777,243

# RECONCILIATION OF CASH AND CASH EQUIVALENTS PER STATEMENT OF CASH FLOWS TO THE BALANCE SHEET:

	Assets		
	Unrestricted	Restricted	Total
Cash and cash equivalents—beginning	4,726	680,169	684,895
Net increase	1,846	90,502	92,348
Cash and cash equivalents—ending	\$ 6,572	770,671	777,243

### The following are the noncash capital and related financing activities:

- Interest expense includes the accretion of capital appreciation bonds discount in the amount of \$10,958.
- Capital expenditures in the amount of \$135,620 had been incurred but not paid at June 30, 1998.
- The Water Board received capital assets of \$20,155 in 1998 which represent capital contributed by the City.

**Combining Schedule of Cash Receipts and Disbursements** 

### **Schedule VIII**, Year ended June 30, 1999 (in thousands)

	New York City Water Board	New York City Municipal Water Finance Authority	Eliminations	Total
CASH RECEIPTS:				
Water supply & distribution				
& sewer collection & treatment	\$ 1,279,729		<u> </u>	1,279,729
Other operating revenues	40,075	_	<u> </u>	40,075
Revenues received in advance	54,386		<u> </u>	54,386
Investment income	3,218	80,386		83,604
Subsidy income		45,828		45,828
Total cash receipts	1,377,408	126,214	_	1,503,622
CASH DISBURSEMENTS:				
Operation & maintenance	814,316	_	_	814,316
Administration & general	1,727	9,109	_	10,836
Interest payments	_	464,319		464,319
Amounts refunded to customers	14,454	_	_	14,454
Total cash disbursements	830,497	473,428	_	1,303,925
Excess (deficit) of cash receipts over cash disbursements before				
financing sources (uses)	546,911	(347,214)	_	199,697
FINANCING SOURCES (USES):				
Proceeds from bond & note sales,				
net of issuance cost		1,284,953	<u> </u>	1,284,953
Transfers from the Board, net		509,060	(509,060)	_
Investments	(8,570)	170,720		162,150
Construction payments	_	(786,175)	_	(786,175)
Repayment of bonds & notes	_	(831,343)	_	(831,343)
Transfers to the Authority, net	(509,060)	_	509,060	_
Total financing sources (uses)	(517,630)	347,215	_	(170,415)
Excess of cash receipts				
over cash disbursement	29,281	1	<u> </u>	29,282
Unrestricted cash & cash equivalents at beginning of year	6,570	2	_	6,572
Unrestricted cash & cash equivalents	¢ 25 051	2		25 05 /
at end of year	\$ 35,851	3		35,854

**Combining Schedule of Cash Receipts and Disbursements** 

### **Schedule IX**, Year ended June 30, 1998 (in thousands)

	New York Cit Water Board		er	s Total
CASH RECEIPTS:			•	
Water supply and distribution and				
sewer collection and treatment	\$ 1,209,934	_	_	1,209,934
Other operating revenues	34,818		<del>_</del>	34,818
Revenues received in advance	60,753	_	_	60,753
Investment income	5,173	92,566	_	97,739
Subsidy income	24,110	43,612	<u> </u>	67,722
Total cash receipts	1,334,788	136,178	_	1,470,966
CASH DISBURSEMENTS:				
Operation and maintenance	843,909	_	_	843,909
Administration and general	2,909	8,190	_	11,099
Interest payments	_	461,929	_	461,929
Prepaid construction	34,111	_	_	34,111
Amounts refunded to customers	16,430	_	_	16,430
Total cash disbursements	897,359	470,119	_	1,367,478
Excess (deficit) of cash receipts over disbursements before financing				
sources (uses)	437,429	(333,941)	_	103,488
FINANCING SOURCES (USES):				
Proceeds from bond and note sales,				
net of issuance cost		2,384,189	<u> </u>	2,384,189
Transfers from the Board, net	<u> </u>	435,741	(435,741)	
Investments	178	81,838	<u> </u>	82,016
Construction payments		(744,167)	_	(744,167)
Repayment of bonds and notes	<u> </u>	(1,823,680)	_	(1,823,680)
Transfers to the Authority, net	(435,741)	<u> </u>	435,741	_
Total financing sources (uses)	(435,563)	333,921	_	(101,642)
Excess (deficit) of cash receipts over cash disbursements	1,866	(20)	_	1,846
Unrestricted cash and cash equivalents at beginning of year	4,704	22	_	4,726
Unrestricted cash and cash equivalents at end of year	6,570	2	_	6,572

# **Statistics**

New York City Water and Sewer System

### **Revenues Last Ten Fiscal Years**, Years Ended June 30, 1990-1999 (in thousands)

Year	Water Supply and Distribution	Sewer Collection and Treatment	Other Operating Revenues	Investment Income	Total
1990	\$ 402,028	382,067	20,319	35,912	840,326
1991	402,860	487,895	17,527	49,912	958,194
1992	455,554	583,696	42,816	53,711	1,135,777
1993	444,764	591,978	50,627	45,433	1,132,802
1994	468,957	676,924	58,542	32,955	1,237,378
1995	504,596	717,533	78,326	57,511	1,357,966
1996	532,171	765,808	72,251	67,646	1,437,876
1997	543,928	789,516	93,243	68,192	1,494,879
1998	560,956	819,662	102,540	93,883	1,577,041
1999	\$ 583,394	857,204	85,903	81,465	1,607,966

### **Expenses Last Ten Fiscal Years**, Years Ended June 30, 1990-1999 (in thousands)

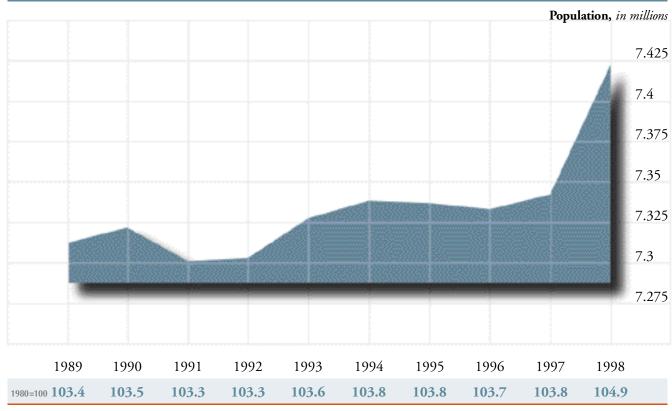
Year	Operation and Maintenance	Provision for Uncollectibles	Administration and General	Depreciation and Amortization	Interest Expense	Loss from Early Extinguishment of Debt	
1990	\$ 571,423	12,177	551	76,118	145,368	_	805,637
1991	596,540	59,869	1,625	94,036	199,756	_	951,826
1992	644,265	67,662	4,444	153,674	256,735	26,034	1,152,814
1993	709,360	(28,580)	9,811	166,080	281,226	109,423	1,247,320
1994	718,650	51,586	17,290	208,078	296,083		1,291,687
1995	738,561	95,989	15,047	293,052	328,364		1,471,013
1996	730,963	317,051	14,490	240,949	368,422	_	1,671,875
1997	775,318	189,775	13,374	287,546	407,997	_	1,674,010
1998	822,791	149,748	11,217	281,943	465,819	_	1,731,518
1999	\$ 777,652	103,960	10,879	380,023	476,675	_	1,749,189

### Revenue Bond Coverage Last Ten Fiscal Years, Years Ended June 30, 1990-1999 (in thousands)

Fiscal Year	Cash (1) Receipts	———Debt Principal	Service Requirements Interest	s (2)———————	First Resolution Debt Service Coverage	Debt Service Coverage
1990	\$ 750,281	26,620	137,039	163,659	4.58	_
1991	813,415	42,080	178,693	220,773	3.68	_
1992	1,007,377	45,730	249,171	294,901	3.41	_
1993	1,009,044	79,699	251,932	331,631	3.09	_
1994	1,137,886	77,018	234,297	311,315	3.66	_
1995	1,069,725	74,770	256,196	330,966	3.23	
1996	1,167,038	71,217	275,217	346,434	3.37	_
1997	1,216,503	73,866	339,498	413,364	3.13	2.96
1998	1,411,070	128,555	357,133	485,288	3.37	2.91
1999	\$ 1,460,602	136,767	345,397	482,164	3.42	3.03

Until 1998, cash receipts as defined in the Bond Resolution excludes interest received on debt service and revenue funds and subsidy payments.
 Debt service requirements include First Resolution debt service and a portion of Second Resolution debt service. Until 1997 all Second Resolution debt service was paid from carry forward amounts and subsidy payments from the New York State Environmental Facilities Corporation.

### Population of New York City, Last Ten Calendar Years



Sources: U.S. Department of Commerce, Bureau of the Census, Bureau of the Census and the City of New York, Department of City Planning.

# **Statistics**

New York City Water and Sewer System

### Water and Sewer Rate Increases, Last Ten Fiscal Years

Effective Date	Changes in Flat-Rate Water	Change in Metered Water	Metered Water Rate	Change in Sewer
Jan. 1, 1990	Increased 9%	Increased 9%	\$0.95 per ccf (1)	Increased to 112% of water charge
July 1, 1991	Increased 6.4%	Increased 6.4%	\$1.01 per ccf	Increased to 136% of water charge
July 1, 1992	No change	No change	\$1.01 per ccf	Increased to 159% of water charge
July 1, 1993	No change	No change	\$1.01 per ccf	No change
July 1, 1994	No change	No change	\$1.01 per ccf	No change
July 1, 1995	Increased 5%	Increased 5%	\$1.06 per ccf	No change
July 1, 1996	Increased 6.5%	Increased 6.5%	\$1.13 per ccf	No change
July 1, 1997	Increased 6.5%	Increased 6.5%	\$1.20 per ccf	No change
July 1, 1998	Increased 4%	Increased 4%	\$1.25 per ccf	No change
July 1, 1999	Increased 4%	Increased 4%	\$1.25 per ccf	No change

<sup>(1)</sup> ccf, one hundred cubic feet, approximately 748 gallons.

### **System Customer Classifications**

Type of Account	Percentage of Total Accounts	Percentage of Total Billings
One-Family Dwellings	37.5%	9.6%
Two-Family Dwellings	27.3	10.3
Walk-up Apartments (1)	15.9	19.0
Elevator Apartments (1)	2.7	25.7
Factories and Industrial	1.9	5.2
Stores	6.3	8.3
Office Buildings	0.9	5.6
Utility Properties	0.2	2.8
Lofts	0.9	2.6
Hospitals and Health Facilities	0.2	1.5
Hotels	0.2	2.3
Other	6.0	7.1
Total	100.0%	100.0%

 $<sup>(1) \</sup> Certain \ accounts \ and \ billings \ under \ this \ type \ of \ account \ relate \ to \ commercial \ establishments \ located \ in \ apartment \ buildings.$ 

Average Dai	ly Water (	Consumption	, Last Ten Fiscal Years
-------------	------------	-------------	-------------------------

Fiscal Year	Total (mgd) <sup>1</sup>	Upstate Counties (mgd)	City (mgd)	Per Capita* (gals/day)
1990	1,500	118	1,382	189
1991	1,546	124	1,422	195
1992	1,530	121	1,409	193
1993	1,457	115	1,342	183
1994	1,476	119	1,357	185
1995	1,426	121	1,305	178
1996	1,445	123	1,322	183
1997	1,334	121	1,213	164
1998	1,294	122	1,172	160
1999	1,392	129	1,213	163

<sup>\*</sup> Population source: U.S. Department of Commerce, Bureau of the Census. (1) mgd=millions of gallons per day.

### **Water System Tunnels and Aqueducts**

Tunnels and Aqueducts	Connections	Length (miles)	Diameter (feet)	Transmission Capacity (mgd)	In Service Date
Tunnels Upstate					
Shandaken	Schoharie to Ashokan	18.1	11.5 x 10.25 (1)	650	1924
West Delaware	Cannonsville to Rondout	44.0	11.33	500	1964
East Delaware	Pepacton to Rondout	25.0	11.33	700	1955
Neversink	Neversink to Rondout	6.0	10	500	1954
Aqueducts					
New Croton	New Croton to Jerome Park	24.0	13.5 x 13.6 (1)	300	1893
	Jerome Park to 135th St. Gatehouse	9.0	12.25-10.5 (2)	250	1893
Catskill	Ashokan to Kensico	75.0	17 x 17.5 (1)	610	1915
	Kensico to Hillview	17.0	17.5 x 18 (1)	800	1915
Delaware	Rondout to West Branch	44.2	13.5	890	1944
	West Branch to Kensico	27.2	15	1,045	1943
	Kensico to Hillview	13.6	19.5	1,450	1942
Tunnels Downstate	2				
Tunnel 1	Hillview to distribution system	18.0	15-11 (2)	1,000	1917
Tunnel 2	Hillview to distribution system	20.0	17-15 (2)	1,000	1936
Richmond Tunnel	Tunnel 2 to Staten Isl. Uptake Shaft	5.0	10	350	1970

<sup>(1)</sup> Tunnels are not round.

<sup>(2)</sup> Variable diameter tunnels.

# **Statistics**

New York City Water and Sewer System

### **Largest System Customers**

The New York City Housing Authority			
The City of New York			
The New York City Health and Hospitals Corporation			
Consolidated Edison Company of New York, Inc.			
The Board of Education of the City of New York			
The Riverbay Corporation (Co-op City)			

### **Water Pollution Control Plants Daily Flow**

Plant	Design Flow (mgd) <sup>1</sup>	12 month avg. July 98-July 99	12 month avg. July 97-July 98
Wards Island	250	194	210
North River	170	136	131
Hunts Point	200	111	121
26th Ward	85	61	62
Coney Island	100	95	101
Owls Head	120	105	109
Newtown Creek	310	222	238
Red Hook	60	32	33
Jamaica	100	77	81
Tallmans Island	80	53	56
Bowery Bay	150	103	110
Rockaway	45	19	20
Oakwood Beach	n 40	25	27
Port Richmond	60	33	38
Total	1,770	1,266	1,337

<sup>(1)</sup> mgd=millions of gallons per day.

## The New York City Municipal Water Finance Authority

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### **INVESTOR RELATIONS CONTACT**

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www.nyclink.org/nyw

#### PHOTOGRAPHY CAPTIONS

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Page 5: Diesel Pressure Expansion Cylinder Gauge

Valve Chamber 2B

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North River Plant

Page 14: Safety Sign

North River Plant

Page 15: **Pump Control** 

Valve Chamber 2B

Pipe Connections North River Plant Page 16:

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**North River Plant** 

Page 19: **Line Pressure Gauge** 

Valve Chamber 2B

**Pump Indicator Light** Page 31:

North River Plant

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