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ERIE COUNTY WATER AUTHORITY

Basic Financial Statements and Required Supplementary Information for the Years Ended December 31, 2018 and 2017 and Independent Auditors' Reports

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ERIE COUNTY WATER AUTHORITY
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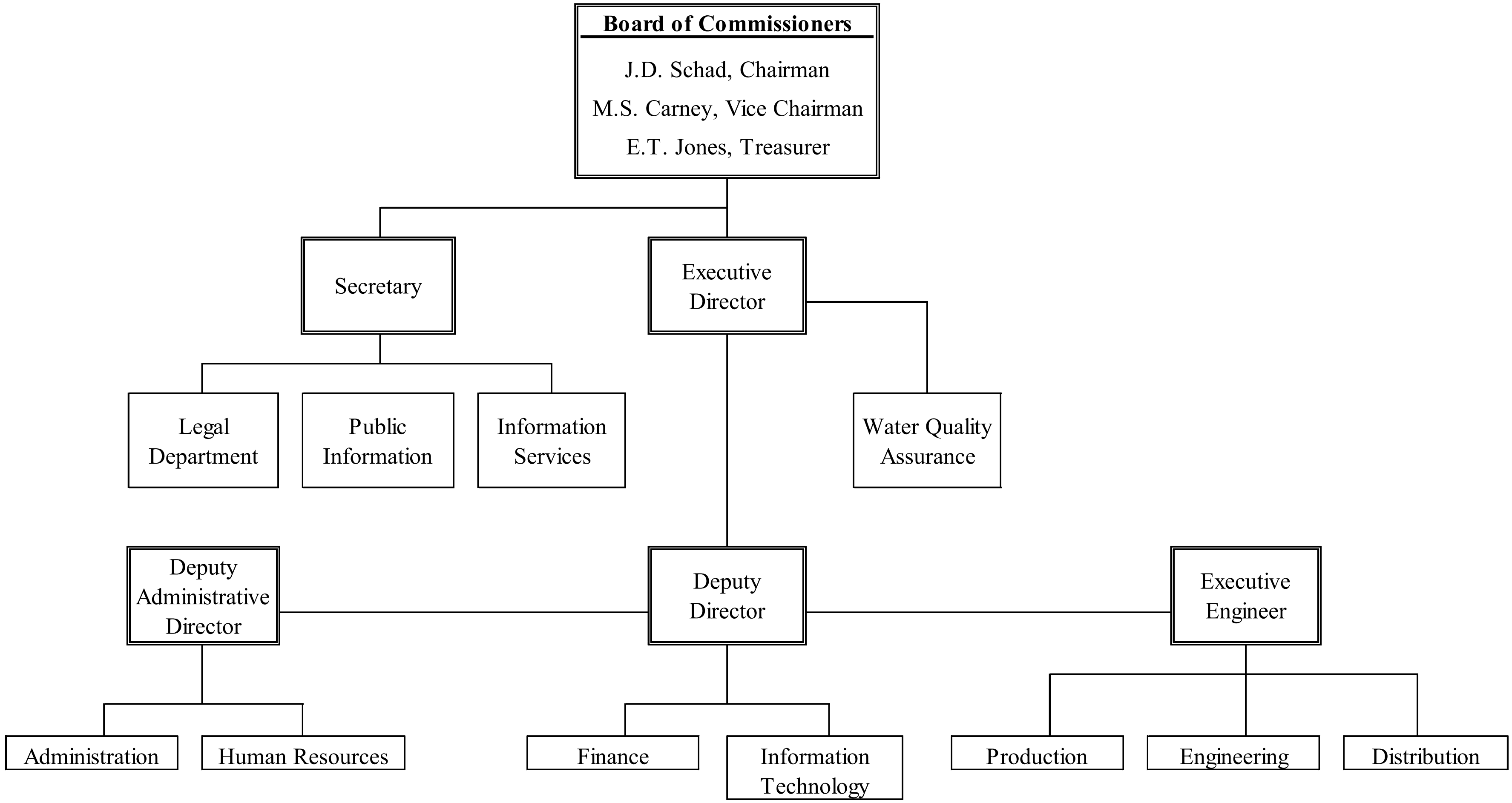
Erie County Water Authority
Members of the Board of Commissioners

Members of the Board of the Erie County Water Authority are appointed by the Chairman of the Erie County Legislature upon receiving nominations from the majority of the Majority Caucus or the Minority Caucus, subject to confirmation by a majority of the Legislature. Each Member is appointed to a three year term; and, not more than two members of the Authority's Board of Commissioners, at any time, shall belong to the same political party.

Board Members on 12/31/2018	Most Recent Appointment Date
Jerome D. Schad, Chairman	2016
Mike S. Carney, Vice Chairman	2018
E. Thomas Jones, Treasurer	2018

ERIE COUNTY WATER AUTHORITY
Organizational Chart



INDEPENDENT AUDITORS' REPORT

The Board of Commissioners
Erie County Water Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Erie County Water Authority (the "Authority"), as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The Authority's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Authority, as of December 31, 2018 and 2017, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 to the financial statements, during the year ended December 31, 2018, the Authority implemented Governmental Accounting Standards Board ("GASB") Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and other Required Supplementary Information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Governmental Auditing Standards,* we have also issued our report dated March 26, 2019 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Report on Other Legal and Regulatory Requirements

We have also issued our report dated March 26, 2019 on our consideration of the Authority's compliance with Section 2925(3)(f) of the New York State Public Authorities Law ("Law"). The purpose of that report is to describe the scope and results of our tests of compliance with the Law.

March 26, 2019

ERIE COUNTY WATER AUTHORITY
Management's Discussion and Analysis
For the Years Ended December 31, 2018 and 2017

Management provides the following discussion and analysis ("MD&A") of the Erie County Water Authority's (the "Authority") financial activities and statements for the years ended December 31, 2018 and 2017. The information contained in this analysis should be used by the reader in conjunction with the information contained in the audited financial statements and the notes to those financial statements, all of which follow this narrative on the subsequent pages. The Authority is not required to legally adopt a budget; therefore, comparative budgetary information is not included in this report.

Financial Highlights

- The Authority's net position increased $18,251,049 as a result of activity for the year ended December 31, 2018. Net income represents $17,138,048 of the 2018 increase. The remaining increase of $1,113,001 resulted from capital contributions (contributions in aid of construction). During 2017, the Authority's net position increased $14,412,814. Net income represents $12,784,445 of the 2017 increase. The remaining increase of $1,628,369 represents capital contributions.
- The assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows of resources by $316,143,055 and $297,892,006, representing net position at December 31, 2018 and 2017, respectively. During the year ended December 31, 2018, the Authority implemented Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* as a result the 2017 net position was decreased by $60,776,065.
- The Authority's bonded indebtedness, including related bond premiums and discounts, increased $18,059,540 in 2018 compared to a decrease of $9,097,408 in 2017. The net increase resulted from the issuance of the Series 2018 Bonds in July of 2018. The principal amount of the issue is $24,900,000 with premiums of $3,089,043 and discounts of $22,969. The issuance was offset by decreases resulting from $9,380,000 in principal payments and $526,534 net effect of premium and discount amortization. The net decrease in 2017 resulted from scheduled principal payments of $8,590,000 and annual net amortization of premiums and discounts of $507,408.

Overview of the Financial Statements

This discussion and analysis are intended to serve as an introduction to the Authority's basic financial statements. The financial statements are organized as follows:

- The ***Statement of Net Position*** presents information on all of the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference reported as "net position". Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.
- The ***Statement of Revenue, Expenses, and Changes in Net Position*** presents information showing how the Authority's net position changed during the most recent reporting period. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus,

revenues and expenses are reported in this statement for some items that will result in cash flows in future periods (e.g., earned but unbilled revenue and earned but unused vacation leave).

- The ***Statement of Cash Flows*** presents information depicting the Authority's cash flow activities for the most recent reporting period and the effect that these activities had on the Authority's cash and cash equivalent balances.
- The ***Notes to Financial Statements*** present additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found following the financial statements section of this report.

Financial Analysis

As noted earlier, net position may over time serve as a useful indicator of an entity's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $316,143,055 at December 31, 2018 compared to $297,892,006 at December 31, 2017, as presented below in Table 1:

Table 1—Condensed Statements of Net Position

	December 31,		Increase/(Decrease)	
	2018	2017	Dollars	Percent
Current assets	$ 78,568,616	$ 46,299,755	$ 32,268,861	69.7
Noncurrent assets:				
Other noncurrent assets	27,080,698	30,403,535	(3,322,837)	(10.9)
Capital assets	392,868,668	380,221,994	12,646,674	3.3
Total assets	498,517,982	456,925,284	41,592,698	9.1
Deferred ouflows of resources	7,813,239	6,316,419	1,496,820	23.7
Current liabilities	16,896,255	20,914,751	(4,018,496)	(19.2)
Noncurrent liabilities	155,042,743	143,611,384	11,431,359	8.0
Total liabilities	171,938,998	164,526,135	7,412,863	4.5
Deferred inflows of resources	18,249,168	823,562	17,425,606	n/a
Net investment in capital assets	347,028,354	332,979,635	14,048,719	4.2
Restricted	3,388,454	8,375,301	(4,986,847)	(59.5)
Unrestricted	(34,273,753)	(43,462,930)	9,189,177	(21.1)
Total net position	$ 316,143,055	$ 297,892,006	$ 18,251,049	6.1

(continued)

Table 1—Condensed Statements of Net Position (concluded)

	December 31,		Increase/(Decrease)	
	2017	2016	Dollars	Percent
Current assets	$ 46,299,755	$ 46,028,227	$ 271,528	0.6
Noncurrent assets:				
Other noncurrent assets	30,403,535	31,621,936	(1,218,401)	(3.9)
Capital assets	380,221,994	369,413,111	10,808,883	2.9
Total assets	456,925,284	447,063,274	9,862,010	2.2
Deferred outflows of resources	6,316,419	11,107,335	(4,790,916)	(43.1)
Current liabilities	20,914,751	21,577,629	(662,878)	(3.1)
Noncurrent liabilities*	143,611,384	91,245,363	52,366,021	57.4
Total liabilities	164,526,135	112,822,992	51,703,143	45.8
Deferred inflows of resources	823,562	1,092,360	(268,798)	(24.6)
Net investment in capital assets	332,979,635	313,073,344	19,906,291	6.4
Restricted	8,375,301	8,345,445	29,856	0.4
Unrestricted*	(43,462,930)	22,836,468	(66,299,398)	(290.3)
Total net position	$ 297,892,006	$ 344,255,257	$ (46,363,251)	(13.5)

* During the year ended December 31, 2018, the Authority implemented GASB Statement No. 7, noncurrent liabilities and unrestricted net position at December 31, 2017 have been updated to reflect this implementation.

At December 31, 2018, the largest portion of the Authority's net position, $347,028,354, consists of the Authority's investment in capital assets. This amount is presented net of any outstanding debt which was used to acquire such capital assets.

The Authority's liabilities totaled $171,938,998, $164,526,135, and $112,822,992, at December 31, 2018, 2017 and 2016 respectively. The largest component of liabilities in 2017 and 2018 after the implementation of GASB Statement No. 75 is other postemployment benefits ("OPEB"), the largest component in 2016 was outstanding water revenue bonds.

The Authority had current ratios of 4.65, 2.21, and 2.13 at December 31, 2018, 2017 and 2016, respectively. Such a ratio implies that the Authority has sufficient assets on hand to cover its liabilities that will come due in the ensuing year.

A comparison of current assets as compared to current liabilities of the Authority at December 31, 2018, 2017, and 2016 follows:

Table 2—Comparison of Current Assets and Current Liabilities

	December 31,		
	2018	2017	2016
Current assets	$ 78,568,616	$ 46,299,755	$ 46,028,227
Current liabilities	16,896,255	20,914,751	21,577,629
Ratio of current assets to current liabilities	4.65	2.21	2.13

Table 3 shows the changes in net position for the years ended December 31, 2018, 2017 and 2016:

Table 3—Changes in Net Position

	Year Ended December 31,	
	2018	2017
Operating revenues	$ 79,010,108	$ 73,291,512
Operating expenses:		
Operation and administration	28,496,565	27,918,914
Maintenance	15,212,914	13,770,443
Depreciation	13,038,530	12,823,738
Other postemployment benefit expense	4,669,997	5,118,264
Total operating expenses	61,418,006	59,631,359
Operating income	17,592,102	13,660,153
Nonoperating revenues (expenses):		
Interest income	1,006,077	434,340
Interest on loans receivable	86,443	90,084
Interest capitalization during construction	145,112	151,474
Interest expense	(1,691,686)	(1,551,606)
Total nonoperating revenues (expenses)	(454,054)	(875,708)
Net income before contribution in aid of construction	17,138,048	12,784,445
Contribution in aid of construction	1,113,001	1,628,369
Change in net position	18,251,049	14,412,814
Total net position - beginning of year	297,892,006	344,255,257
GASB Statement No. 75 implementation	-	(60,776,065)
Total net position - end of year	$ 316,143,055	$ 297,892,006

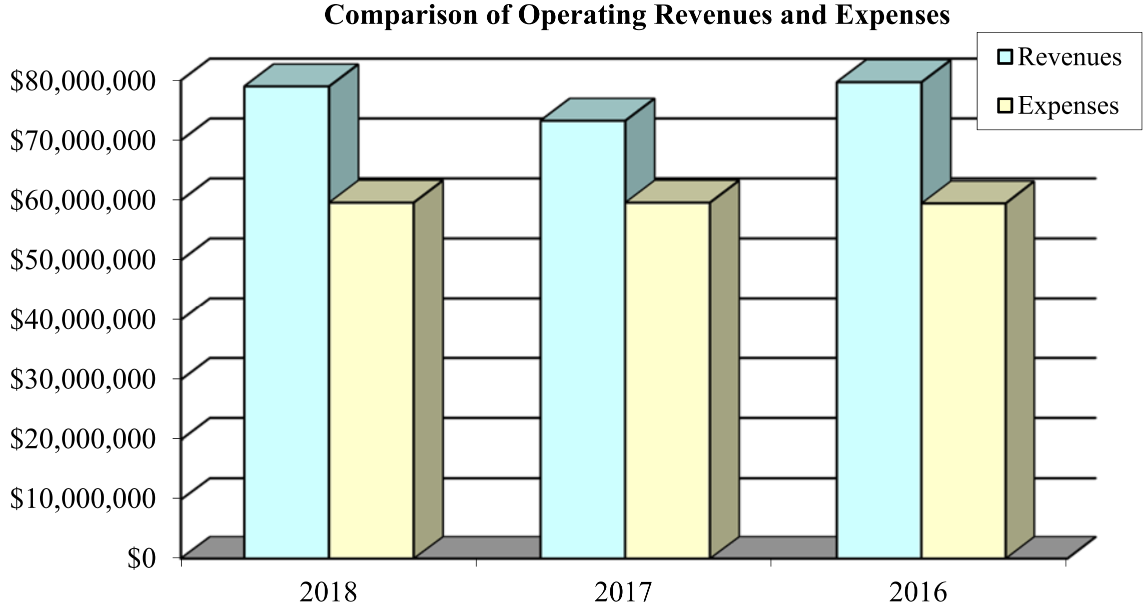
(continued)

Table 3—Changes in Net Position (concluded)

	Year Ended December 31,	
	2017	2016
Operating revenues	$ 73,291,512	$ 79,711,080
Operating expenses:		
Operation and administration	27,918,914	28,452,632
Maintenance	13,770,443	13,813,338
Depreciation	12,823,738	12,713,386
Other postemployment benefit expense	5,118,264	4,522,436
Total operating expenses	59,631,359	59,501,792
Operating income	13,660,153	20,209,288
Nonoperating revenues (expenses):		
Interest income	434,340	359,812
Gain on sale of investments	-	852,694
Interest on loans receivable	90,084	58,554
Interest capitalization during construction	151,474	105,383
Interest expense	(1,551,606)	(2,189,655)
Total nonoperating revenues (expenses)	(875,708)	(813,212)
Net income before contribution in aid of construction	12,784,445	19,396,076
Contribution in aid of construction	1,628,369	1,644,087
Change in net position	14,412,814	21,040,163
Total net position - beginning of year	344,255,257	323,215,094
GASB Statement No. 75 implementation	(60,776,065)	-
Total net position - end of year	$ 297,892,006	$ 344,255,257

The following chart depicts a 7.8% increase in operating revenue from $73,291,512 in 2017, to $79,010,108 in 2018, compared to an 8.1% decrease in operating revenue from $79,711,080 in 2016 to $73,291,512 in 2017. Operating expenses increased 3.0% from $59,631,359 in 2017 to $61,418,006 in 2018, compared to a 0.2% increase from $59,501,792 in 2016 to $59,631,359 in 2017.

Comparison of Operating Revenues and Expenses



A summary of operating revenues for the years ended December 31, 2018, 2017 and 2016 is presented below in Table 4:

Table 4—Summary of Operating Revenues

	Year Ended December 31,		Increase/(Decrease)	
	2018	2017	Dollars	Percent
Water sales:				
Residential	$ 38,757,174	$ 36,925,206	$ 1,831,968	5.0
Commercial	8,087,910	7,577,863	510,047	6.7
Industrial	2,120,799	1,957,186	163,613	8.4
Public authorities	2,553,389	2,438,488	114,901	4.7
Fire protection	4,396,402	4,366,663	29,739	0.7
Sales to other utilities	4,265,708	3,940,896	324,812	8.2
Infrastructure investment charge	15,479,723	14,186,008	1,293,715	9.1
Other water sales	1,368,416	1,348,055	20,361	1.5
Total water sales	77,029,521	72,740,365	4,289,156	5.9
Other operating revenues:				
Rents from water towers	529,015	505,662	23,353	4.6
Miscellaneous	1,451,572	45,485	1,406,087	n/a
Operating revenues	$ 79,010,108	$ 73,291,512	$ 5,718,596	7.8

	Year Ended December 31,		Increase/(Decrease)	
	2017	2016	Dollars	Percent
Water sales:				
Residential	$ 36,925,206	$ 41,060,222	$ (4,135,016)	(10.1)
Commercial	7,577,863	8,601,762	(1,023,899)	(11.9)
Industrial	1,957,186	1,910,133	47,053	2.5
Public authorities	2,438,488	2,519,639	(81,151)	(3.2)
Fire protection	4,366,663	4,336,263	30,400	0.7
Sales to other utilities	3,940,896	4,281,064	(340,168)	(7.9)
Infrastructure investment charge	14,186,008	13,251,131	934,877	7.1
Other water sales	1,348,055	3,153,218	(1,805,163)	(57.2)
Total water sales	72,740,365	79,113,432	(6,373,067)	(8.1)
Other operating revenues:				
Rents from water towers	505,662	551,765	(46,103)	(8.4)
Miscellaneous	45,485	45,883	(398)	(0.9)
Operating revenues	$ 73,291,512	$ 79,711,080	$ (6,419,568)	(8.1)

Water sales represent the vast majority of revenue for the Authority, 97.5% for the year ended December 31, 2018, 99.2% and 99.3% for the years ended December 31, 2017 and December 31, 2016, respectively.

The following are some of the issues and events affecting revenue in 2018:

- Total water sales increased 5.9%, due to the following rate changes:

  - ✓ Volumetric rates across all customer classes were raised 2.0% effective January 1, 2018. Coupled with a 4.0% increase in billed consumption, total metered water sales increased 5.1%, or $2,995,441 more than metered sales in 2017.

  - ✓ Revenue from infrastructure investment charges increased 9.1% due to the continued implementation of a 2016 rate study, discussed below, which recommended higher charges on accounts with larger meter sizes. 2018 is the second of a three-year phase-in of the recommended rates.

- Miscellaneous operating revenue increased significantly due to a $1,369,179 insurance recovery from a forty-two (42) inch main failure at the Sturgeon Point water treatment plant in August of 2017 which is discussed below.

Comparatively, these issues and events impacted revenue in 2017:

- Revenue from water sales decreased 8.1% in 2017, compared to a 14.8% increase in 2016. Decreases of 6.2% in total water output from both treatment plants and 7.7% in billed consumption in 2017 resulted in revenue reductions.

- The Authority asked for voluntary water restrictions in many of our larger service areas between August 6th and August 13th, 2017 due to a leak in the forty-two-inch transmission main leaving our Sturgeon Point Treatment Plant. Those restrictions also contributed to the reduction in consumption in 2017. The main was subsequently repaired.

- As a result of the rate study completed in 2016, a new rate structure was adopted and became effective January 1, 2017. The structural changes were designed to allow for a more equitable distribution of fixed costs among customer classifications, and to ensure a more dependable revenue stream in years of extreme weather. Although the changes were largely revenue neutral overall, a summary of the changes are as follows:

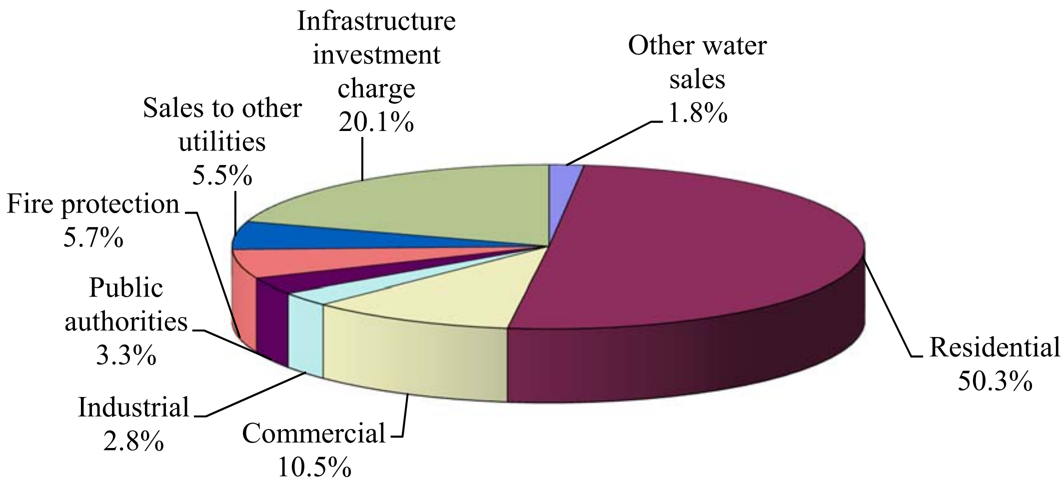
  - ✓ Revenue from Infrastructure Investment Charges (IIC), a fixed fee based on meter size, increased 7.1% in 2017. IIC revenue represented 19.5% of all water revenue — up from 16.8% in 2016. Charges on meters one-inch and smaller remained unchanged. Recommended increases on larger meters are being phased-in over a three-year period beginning in 2017.

  - ✓ The declining block rate structure was eliminated. Volumetric rates per gallon are now based on a flat rate per 1,000 gallons with minimum billed usages based on meter size. Rates for those customers with small meters (one-inch and smaller) remained the same. Rates for larger meters, and customers who buy water for resale to others experienced slight decreases in their rate per 1,000 gallons to mitigate the elimination of the declining block structure.

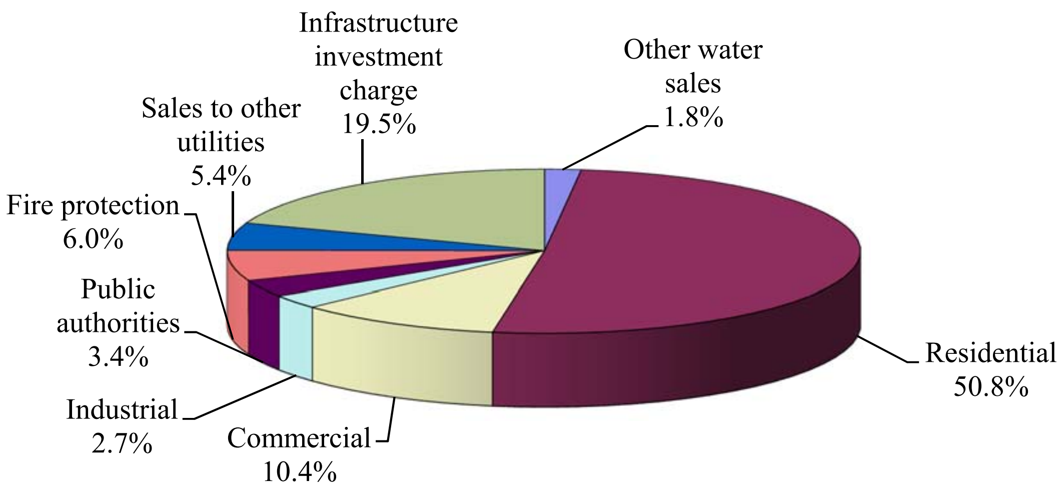
  - ✓ Surcharges for excessive summer usage where also removed from the rate structure. On average, summer surcharges made up 1.6% of total water revenue over the past ten years.

As presented in the illustration below, residential water sales represent the largest portion of water sales for the Authority, which was 50.3%, 50.8%, and 51.9% of total water sales for the years ended December 31, 2018, 2017 and 2016, respectively. Infrastructure investment charges were the next largest revenue component at 20.1%, 19.5%, and 16.8% in the years ended December 31, 2018, 2017, and 2016, respectively.

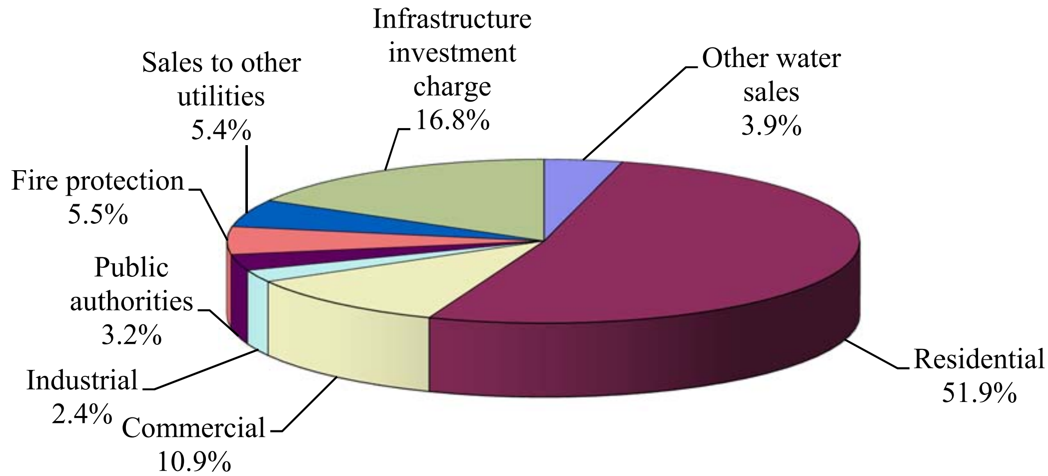
2018 Water Sales Revenue



2017 Water Sales Revenue



2016 Water Sales Revenue



A summary of expenses for the years ended December 31, 2018, 2017 and 2016 is presented below in Table 5.

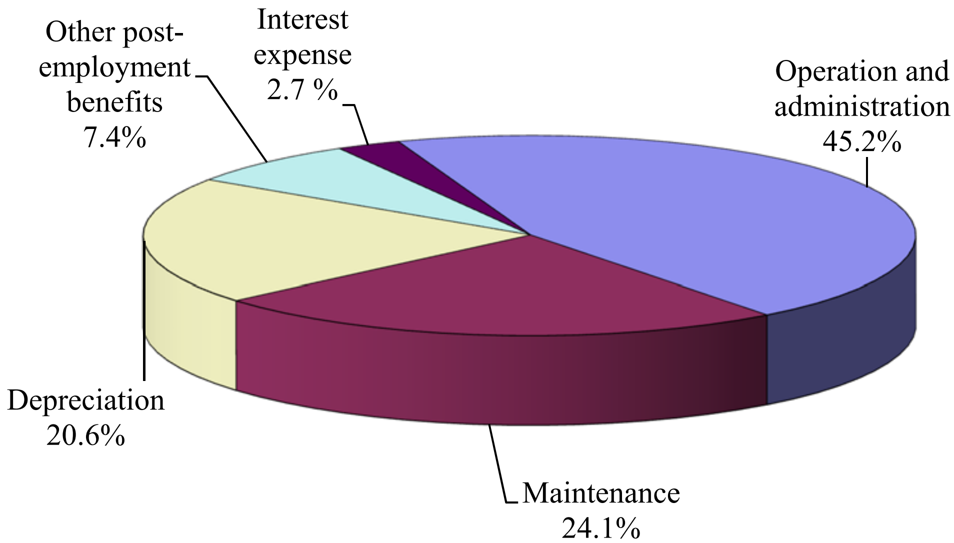
Table 5—Summary of Expenses

	Year Ended December 31,		Increase/(Decrease)	
	2018	2017	Dollars	Percent
Operation and administration	$ 28,496,565	$ 27,918,914	$ 577,651	2.1
Maintenance	15,212,914	13,770,443	1,442,471	10.5
Depreciation	13,038,530	12,823,738	214,792	1.7
Interest expense	1,691,686	1,551,606	140,080	9.0
Other postemployment benefits	4,669,997	5,118,264	(448,267)	(8.8)
Total	$ 63,109,692	$ 61,182,965	$ 1,926,727	3.1

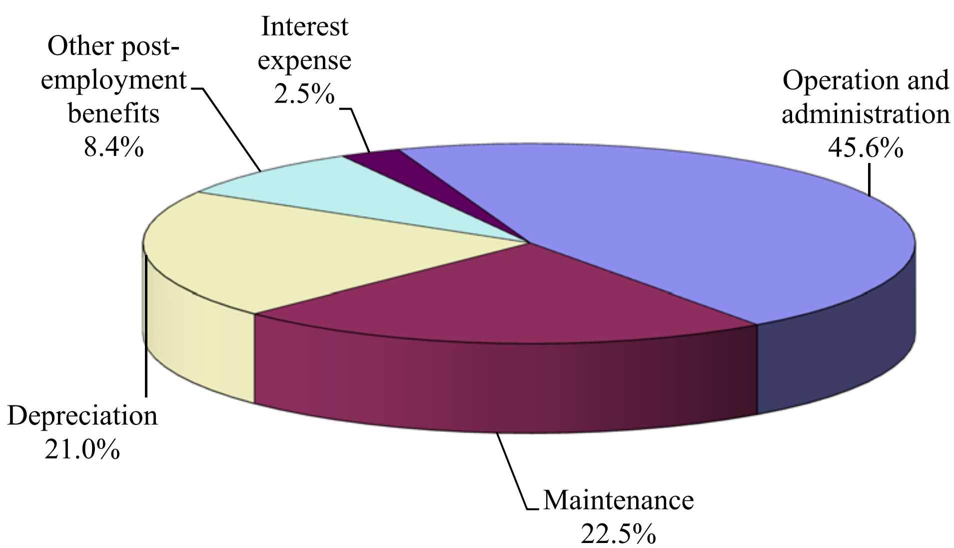
	Year Ended December 31,		Increase/(Decrease)	
	2017	2016	Dollars	Percent
Operation and administration	$ 27,918,914	$ 28,452,632	$ (533,718)	(1.9)
Maintenance	13,770,443	13,813,338	(42,895)	(0.3)
Depreciation	12,823,738	12,713,386	110,352	0.9
Interest expense	1,551,606	2,189,655	(638,049)	(29.1)
Other postemployment benefits	5,118,264	4,522,436	595,828	13.2
Total	$ 61,182,965	$ 61,691,447	$ (508,482)	(0.8)

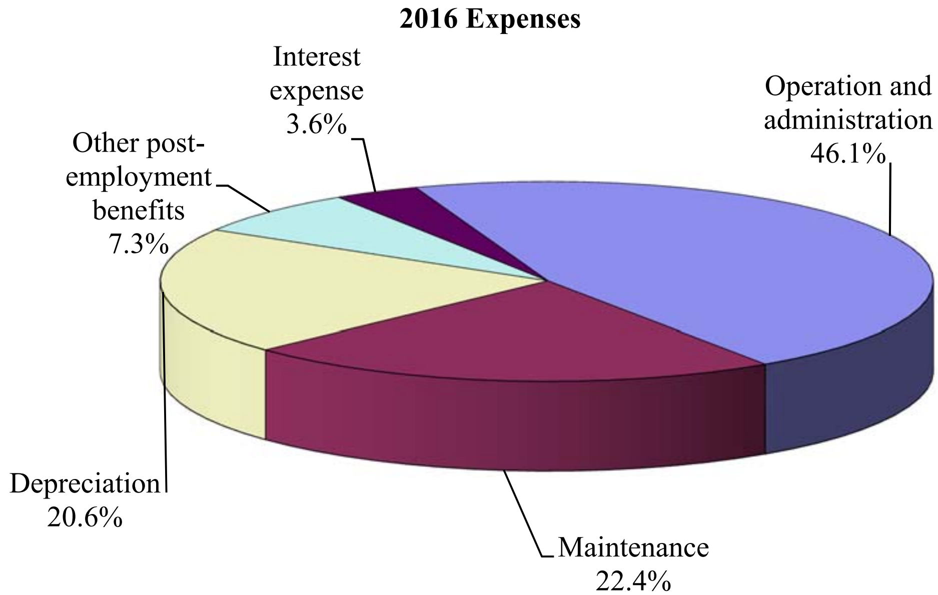
As illustrated on the following page, operation and administration expenses are the largest expense and account for 45.2%, 45.6%, and 46.1% of the Authority's expenses for the years ended December 31, 2018, 2017 and 2016, respectively. The second largest expense for the Authority for the years ended December 31, 2018, 2017 and 2016 was maintenance, which was 24.1%, 22.5%, and 22.4%, respectively.

2018 Expenses



2017 Expenses





The following are some of the issues and events affecting expenses in 2018:

- Fringe benefit charges increased 30.5%, equally impacting operation and administration, and maintenance expenses for the following reasons:

  - ✓ GASB Statement No. 75 classifies accrued sick time which can be used in retirement to make required health insurance premium contributions as compensated absences. Prior treatment under GASB Statement No. 45 included the accruals as OPEB expense; as a result, an adjustment of $1,867,715 was made to total compensated absences in 2018.

  - ✓ Health insurance costs increased 32.3%, due to increases in minimum premiums across all policy types and a 29.8% increase in health claims paid for all active employees.

- Operation and administration expenses remained relatively flat despite significant increases in fringe benefits due to the following significant fluctuations:

  - ✓ Retiree health insurance premiums and claims of $2,234,009 previously recorded as an administrative expense is a reduction of OPEB liability under GASB Statement No. 75.

  - ✓ Power costs increased 26%, due to a 13.6% increase in kilowatt hours used and a 23.4% increase in the cost per kilowatt hour. The average amount of delivered water pumped increased 6.9% from 68.1millions of gallons of water per day (MPD) in 2017 to 72.8 MPD in 2018. Increases in production and pumping of delivered water resulted in increases in power usage.

  - ✓ Corporate and fiscal expenses increased $236,284 due to costs associated with the issuance of the Series 2018 bonds in July of 2018.

  - ✓ Payments to contractors for tank inspection and refurbishing rose 35% due to the normal cycle of inspections and scheduled work. Work on tanks inspected in 2017 was deferred to 2018.

- ➢ Maintenance expenses rose 10.5% due to a 4.2% increase in the number of main and valve leaks in direct service and lease managed areas, and a 22.8% increase in cost per leak.

  - ✓ A new 7-year collective bargaining agreement with the Brotherhood of Western New York Water Workers increased wages across the collective bargaining unit. Members did not receive a general wage increase in 2017.

  - ✓ Payments to contractors for repairs increased 7.5%.

  - ✓ New restoration contracts in April 2018 resulted in a 47.1%. increase in restoration costs. Per unit costs for asphalt rose 18% and 20% in the north and south service areas respectively; concrete costs rose 28% and 71%, respectively.

- ➢ Other postemployment benefit expense decreased 8.8% due to a change in the actuarial cost method from projected unit credit under GASB Statement No. 45 to entry age normal required under GASB Statement No. 75. Other contributing factors include changes to mortality tables and healthcare trend rates.

- ➢ Nonoperating expenses net of related revenues decreased 48% in 2018 due primarily to the following:

  - ✓ Interest income on investments rose to $1,006,077 from $434,340 in 2017 due to the investment of Series 2018 bond proceeds, and a $56,919 increase in market values as a result of general interest rate improvements.

  - ✓ Interest expense increased $140,080, 9%, due to the issuance of the Series 2018 bonds offset by scheduled bond maturities in other issues.

Comparatively, these issues and events impacted expenses in 2017:

- ➢ Operation and administration expenses decreased 1.9%, or $533,718.

  - ✓ Health insurance costs decreased $457,538, 16.1%, from $2,837,324 in 2016 to $2,379,786 in 2017. The decline is a direct result of lower medical and prescription claims for both active and Medicare eligible retirees.

  - ✓ Pension expense decreased $144,391, due, in part, to improved market results on New York State and Local Retirement System (NYSLRS) investments. The Authority is allocated 0.0561145% of the NYSLRS's net pension liability. Contributions based on employee retirement tiers and salaries also decreased $340,519 from $2,733,700 in 2017 to $2,393,181 in 2017.

  - ✓ Power costs decreased $370,744, 11.2%, from $3,309,796 in 2016 to $2,939,052 in 2017. The amount paid for the commodity decreased $512,130 which was offset by a $141,386 increase in delivery charges. Overall, usage decreased 13.8% during 2017, while the commodity rate increased 2.4%.

  - ✓ The cost of small service installations increased 16.0%, a net cost increase of $105,538. Although tariff fees remained unchanged, new contracts in 2017 contained a 46.0% increase in our payments to contractors for installations in the North service area.

- ✓ In 2016, the Authority contracted with an engineering firm to review operational processes at our water treatment plants. Payments under that contract increased $114,379 in 2017.

- ➢ Maintenance expenses decreased 0.3%, or $42,895.

  - ✓ A significant decrease in the number of main breaks and hydrant replacements in 2017 resulted in reduced payments to contractors for repairs and restoration costs. In 2016, Authority forces and contractors responded to 1,554 breaks compared to 1,250 in 2017, a 19.5% reduction. Repair payments to contractors decreased $244,423, 15.5%, even with $406,507 in payments for the Sturgeon Point repair (mentioned below). Restoration costs decreased 25.8%, or $578,121 as a result of the decreased number of breaks in 2017.

  - ✓ On August 6, 2017, a serious leak was discovered in the forty-two-inch water transmission main leaving the Sturgeon Point Water Treatment Plant. The repair, which was completed with no loss of service to Authority customers, cost $1,078,538.

- ➢ Interest expense decreased $638,049 due to a decrease in the bond principal outstanding as a result of the 2017 bond maturities and the refunding of the 2007 Series Bonds and 2012 Series Bonds in September of 2016. Overall, true interest costs on the 2016 Series Bonds are lower at 2.40% as compared to the 2007 Series Bonds at 4.77%, and 2012 Series Bonds at 2.41%.

- ➢ Other postemployment benefit (OPEB) expense increased $595,828 from $4,522,436 in 2016 to $5,118,264 in 2017. In addition to the accumulation of interest on unpaid actuarial accrued liability and normal cost plus the current amortization of unpaid liability, updated health care trend rates impacted the Authority's net OPEB obligation.

Table 6—Summary of Cash Flow Activities

	Year Ended December 31,		Increase/(Decrease)
	2018	2017	Dollars
Cash flows provided (used) by:			
Operating activities	$ 35,861,692	$ 30,955,017	$ 4,906,675
Capital and related financing activities	(7,262,649)	(32,492,312)	25,229,663
Investing activities	7,830,247	(15,123,932)	22,954,179
Net increase (decrease) in cash and cash equivalents	36,429,290	(16,661,227)	53,090,517
Cash and cash equivalents, beginning of year	23,307,046	39,968,273	(16,661,227)
Cash and cash equivalents, end of year	$ 59,736,336	$ 23,307,046	$ 36,429,290

	Year Ended December 31, 2017	2016	Increase/(Decrease) Dollars
Cash flows provided (used) by:			
Operating activities	$ 30,955,017	$ 38,166,569	$ (7,211,552)
Capital and related financing activities	(32,492,312)	(34,331,732)	1,839,420
Investing activities	(15,123,932)	(1,284,186)	(13,839,746)
Net (decrease) increase in cash and cash equivalents	(16,661,227)	2,550,651	(19,211,878)
Cash and cash equivalents, beginning of year	39,968,273	37,417,622	2,550,651
Cash and cash equivalents, end of year	$ 23,307,046	$ 39,968,273	$ (16,661,227)

At December 31, 2018, 2017, and 2016, cash and cash equivalents were restricted for various purposes as presented below:

Table 7—Summary of Cash and Cash Equivalents

	Year Ended December 31, 2018	2017	2016
Unrestricted	$ 28,469,639	$ 12,703,139	$ 20,556,168
Restricted	31,266,697	10,603,907	19,412,105
Total	$ 59,736,336	$ 23,307,046	$ 39,968,273

Cash and cash equivalents increased $36,429,290 from $23,307,046 in 2017 to $59,736,336 at the end of 2018. Proceeds of $19,461,585 from the 2018 Series bond issue remained unspent at the end of 2018. Increased water sales of $4,289,156 over last year, and the decreased use of certificates of deposit also contributed to the increase in cash and cash equivalents.

Total cash and cash equivalents decreased $16,661,227 from $39,968,273 in 2016 to $23,307,046 in 2017, primarily due to an increased use of investments.

Capital Assets

The Authority's investment in capital assets as of December 31, 2018 amounted to $392,868,668 (net of accumulated depreciation) as compared to $380,221,994 as of December 31, 2017 and $369,413,111 as of December 31, 2016. This investment includes land, buildings and structures, mains and hydrants, equipment, construction in progress and other (service installations, leasehold improvements, etc.). The Authority's greatest investment in capital assets is in buildings and structures and mains and hydrants.

Presented in Table 8 is a comparative summary of capital assets. Additional information on the Authority's capital assets can be found in Note 4 of the financial statements.

Table 8—Summary of Capital Assets (Net of Accumulated Depreciation)

	December 31,		Increase/(Decrease)	
	2018	2017	Dollars	Percent
Capital assets not being depreciated:				
Land	$ 2,231,137	$ 2,231,137	$ -	-
Construction work in progress	5,209,224	6,972,702	(1,763,478)	(25.3)
Total capital assets, not being depreciated	7,440,361	9,203,839	(1,763,478)	(19.2)
Capital assets being depreciated:				
Buildings and structures	292,916,407	290,606,197	2,310,210	0.8
Mains and hydrants	243,860,750	230,584,540	13,276,210	5.8
Equipment	68,132,715	60,926,418	7,206,297	11.8
Other	58,404,446	54,254,087	4,150,359	7.6
Total capital assets, being depreciated	663,314,318	636,371,242	26,943,076	4.2
Less accumulated depreciation	277,886,011	265,353,087	12,532,924	4.7
Total capital assets, being depreciated, net	385,428,307	371,018,155	14,410,152	3.9
Total capital assets, net	$ 392,868,668	$ 380,221,994	$ 12,646,674	3.3

	December 31,		Increase/(Decrease)	
	2017	2016	Dollars	Percent
Capital assets not being depreciated:				
Land	$ 2,231,137	$ 2,231,137	$ -	-
Construction work in progress	6,972,702	3,990,410	2,982,292	74.7
Total capital assets, not being depreciated	9,203,839	6,221,547	2,982,292	47.9
Capital assets being depreciated:				
Buildings and structures	290,606,197	279,652,616	10,953,581	3.9
Mains and hydrants	230,584,540	226,025,894	4,558,646	2.0
Equipment	60,926,418	58,878,144	2,048,274	3.5
Other	54,254,087	58,218,045	(3,963,958)	(6.8)
Total capital assets, being depreciated	636,371,242	622,774,699	13,596,543	2.2
Less accumulated depreciation	265,353,087	259,583,135	5,769,952	2.2
Total capital assets, being depreciated, net	371,018,155	363,191,564	7,826,591	2.2
Total capital assets, net	$ 380,221,994	$ 369,413,111	$ 10,808,883	2.9

Debt Administration

At December 31, 2018 the Authority had $65,301,899 in water revenue bond principal outstanding, net of deferred amounts for bond premiums and discounts, as compared to $47,242,359 and $56,339,767 on December 31, 2017 and 2016. Water revenue bonds outstanding, net of deferred amounts from bond premiums and discounts, increased $18,059,540. In July of 2018 the Authority issued Series 2018 bonds with a principal balance of $24,900,000, $3,089,043 in premiums and $22,969 in discounts. The increase was offset by $9,906,534, as a result of principal payments and amortization of premiums and discounts as shown in Table 9.

Table 9—Summary of Bond Payments, Premiums and Discounts

	Year Ended December 31,	
	2018	2017
1998D Series	$ 1,125,000	$ 1,080,000
2003F Series	760,000	740,000
2008 Series	5,610,000	5,340,000
2016 Series	1,885,000	1,430,000
Total water revenue bond payments	9,380,000	8,590,000
Amortization of bond premiums	532,298	512,844
Amortization of bond discount	(5,764)	(5,436)
Total water revenue bond payments, bond premiums and bond discounts	$ 9,906,534	$ 9,097,408

The Authority’s issuance of 1998D Series and 2003F Series Bonds were through the New York State Environmental Facilities Corporation (EFC) and are rated based on the EFC’s rating.

The Authority's bond ratings have remained stable receiving an AA+ rating from both Fitch Ratings and Standard & Poor's Rating Services.

For additional information on long-term debt activity, see Note 5 to the basic financial statements.

Economic Factors

The local economic outlook for Western New York has improved as a result of several economic development projects in the region. However, due to individual conservation efforts and changes in Federal and State laws and regulations which require appliances to use less water, significant increases in consumption other than those caused by extreme weather conditions are not expected.

A nearly four decade effort to promote conservation and water appliance efficiency is showing results with decreased water consumption per customer. At present, 34% of the bills sent to Authority customers are for the monthly or quarterly minimum. Given the reality of rising repair and replacement costs of an aging infrastructure, and decreasing consumption, the Authority established an infrastructure investment charge in 2011. The infrastructure investment charge was implemented to maintain the Authority’s aggressive investment program in very costly system-wide infrastructure, and to allow for a more equitable distribution among customer classifications of fixed costs to provide a dependable, high quality water supply and fire protection services to all customers.

In an effort to measure the effectiveness of this approach, the Authority contracted with consultants to conduct a Cost of Service and Rate Structure Review. A new rate structure, based on their recommendations, was adopted and made effective January 1, 2017. The new structure assigns infrastructure charges and volumetric rates on meter size and removes the declining block rate structure. A complete summary of the Authority's rate structure can be found in Table 10. As a result of continuing implementation of recommended changes, the infrastructure investment charge was 20.1% of water sales in 2018 as compared to 19.5% and 16.8% in 2017 and 2016, respectively. Recommended increases in infrastructure charges for larger meters customers are being phased in over a three-year period; 2018 was the second phase of the increase.

Over the past fifteen years the Authority has also been engaged in a series of water system consolidations whereby independent municipal water system operators have transferred ownership of their systems to the Authority. The continuation of this trend will have the effect of shifting costs from smaller systems and rate bases to the Authority. However, due to economies of scale enjoyed by the Authority, the overall community-wide costs should be lower in a coordinated, unified system compared to those of a patchwork network of small systems.

Table 10—Tariff Rates

All rates are presented as quarterly. Some accounts are billed monthly at one-third of the quarterly fees. A complete copy of the Tariff can be found at www.ecwa.org.

A. SMALL METER CUSTOMERS - Installed Meter Sizes 5/8", 3/4" and 1"

2018 Volumetric Rate — $3.23 per 1000 gallons
2019 Volumetric Rate — $3.29 per 1000 gallons

Size of Meter (inches)	Quarterly Commodity Allowance (gallons)	Quarterly Minimum Commodity Charge		Quarterly Infrastructure Investment Charge		Quarterly Minimum Charge	
		2018	2019	2018	2019	2018	2019
5/8	9,000	$ 29.07	$ 29.61	$ 19.65	$ 19.65	$ 48.72	$ 49.26
3/4	9,000	29.07	29.61	19.65	19.65	48.72	49.26
1	9,000	29.07	29.61	19.65	19.65	48.72	49.26

(continued)

Table 10—Tariff Rates (concluded)

B. LARGE METER CUSTOMERS - Installed Meter Sizes 1 1/4" and larger

2018 Volumetric Rate — $2.89 per 1000 gallons
2019 Volumetric Rate — $2.95 per 1000 gallons

Size of Meter (inches)	Quarterly Commodity Allowance (gallons)	Quarterly Minimum Commodity Charge		Quarterly Infrastructure Investment Charge		Quarterly Minimum Charge	
		2018	2019	2018	2019	2018	2019
1 1/4	27,000	$ 78.03	$ 79.65	$ 50.76	$ 76.89	$ 128.79	$ 156.54
1 1/2	39,000	112.71	115.05	50.76	76.89	163.47	191.94
2	63,000	182.07	185.85	81.18	123.00	263.25	308.85
3	120,000	346.80	354.00	152.22	230.64	499.02	584.64
4	198,000	572.22	584.10	253.74	384.39	825.96	968.49
6	390,000	1,127.10	1,150.50	507.42	768.75	1,634.52	1,919.25
8	630,000	1,820.70	1,858.50	811.80	1,230.00	2,632.50	3,088.50
10	900,000	2,601.00	2,655.00	1,167.00	1,768.14	3,768.00	4,423.14
12	1,230,000	3,554.70	3,628.50	2,181.72	3,305.64	5,736.42	6,934.14
20	2,820,000	8,149.80	8,319.00	9,389.52	14,226.48	17,539.32	22,545.48
24	3,840,000	11,097.60	11,328.00	18,961.68	28,729.80	30,059.28	40,057.80

C. PUBLIC CORPORATIONS AND SPECIAL IMPROVEMENT DISTRICTS - Customers who buy water for resale

2018 Volumetric Rate — $2.53 per 1000 gallons
2019 Volumetric Rate — $2.58 per 1000 gallons

Size of Meter (inches)	Quarterly Commodity Allowance (gallons)	Quarterly Minimum Commodity Charge		Quarterly Infrastructure Investment Charge		Quarterly Minimum Charge	
		2018	2019	2018	2019	2018	2019
1 1/4	27,000	$ 68.31	$ 69.66	$ 50.76	$ 76.89	$ 119.07	$ 146.55
1 1/2	39,000	98.67	100.62	50.76	76.89	149.43	177.51
2	63,000	159.39	162.54	81.18	123.00	240.57	285.54
3	120,000	303.60	309.60	152.22	230.64	455.82	540.24
4	198,000	500.94	510.84	253.74	384.39	754.68	895.23
6	390,000	986.70	1,006.20	507.42	768.75	1,494.12	1,774.95
8	630,000	1,593.90	1,625.40	811.80	1,230.00	2,405.70	2,855.40
10	900,000	2,277.00	2,322.00	1,167.00	1,768.14	3,444.00	4,090.14
12	1,230,000	3,111.90	3,173.40	2,181.72	3,305.64	5,293.62	6,479.04
20	2,820,000	7,134.60	7,275.60	9,389.52	14,226.48	16,524.12	21,502.08
24	3,840,000	9,715.20	9,907.20	18,961.68	28,729.80	28,676.88	38,637.00

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to Robert J. Lichtenthal, Jr., Deputy Director, Erie County Water Authority, 295 Main Street, Rm. 350, Buffalo, New York 14203-2494.

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BASIC FINANCIAL STATEMENTS

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ERIE COUNTY WATER AUTHORITY
Statements of Net Position
December 31, 2018 and 2017

	2018	2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 28,469,639	$ 12,703,139
Restricted cash and cash equivalents	21,210,186	1,451,796
Unrestricted investments	9,986,408	11,758,380
Restricted investments	685,439	1,185,927
Customer accounts receivable, (net of allowance for doubtful accounts)	4,073,593	5,066,187
Materials and supplies	2,675,660	2,369,571
Accrued revenue	8,560,205	8,228,853
Prepaid expenses and other assets	2,907,486	3,535,902
Total current assets	78,568,616	46,299,755
Noncurrent assets:		
Restricted cash and cash equivalents	10,056,511	9,152,111
Restricted investments	14,456,262	18,961,349
Long term accounts receivable	2,567,925	2,290,075
Capital assets, not being depreciated	7,440,361	9,203,839
Capital assets, net of accumulated depreciation	385,428,307	371,018,155
Total noncurrent assets	419,949,366	410,625,529
Total assets	498,517,982	456,925,284
DEFERRED OUTFLOWS OF RESOURCES		
Post-measurement date retirement contributions	1,745,033	1,754,021
Changes in retirement system assumptions	4,721,300	3,311,948
Actual versus projected other postemployment benefit factor	162,559	-
Advanced refunding of 2007 Series Bonds	1,184,347	1,250,450
Total deferred outflows of resources	7,813,239	6,316,419
LIABILITIES		
Current liabilities:		
Accounts payable	6,552,759	6,271,334
Advances for construction	676,381	507,701
Construction retention	1,534,637	1,020,108
Accrued interest on water revenue bonds	291,169	243,891
Accrued liabilities	1,693,813	1,635,248
Compensated absences	1,629,869	1,373,712
Water revenue bonds - current portion	4,517,627	9,862,757
Total current liabilities	16,896,255	20,914,751
Noncurrent liabilities:		
Compensated absences	2,847,268	1,318,834
Net pension liability	1,764,324	5,272,641
Other postemployment benefit liability	89,646,879	99,640,307
Water revenue bonds - long term	60,784,272	37,379,602
Total noncurrent liabilities	155,042,743	143,611,384
Total liabilities	171,938,998	164,526,135
DEFERRED INFLOWS OF RESOURCES		
Changes in retirement system assumptions	5,657,193	823,562
Changes in other postemployment benefit assumptions	12,591,975	-
Total deferred inflows of resources	18,249,168	823,562
NET POSITION		
Net investment in capital assets	347,028,354	332,979,635
Restricted:		
Debt service reserve account	2,042,226	6,619,191
Debt service account	1,346,228	1,756,110
Unrestricted	(34,273,753)	(43,462,930)
Total net position	$ 316,143,055	$ 297,892,006

The notes to the financial statements are an integral part of these statements.

ERIE COUNTY WATER AUTHORITY
Statements of Revenue, Expenses, and Changes in Net Position
Years Ended December 31, 2018 and 2017

	2018	2017
Operating revenues	$ 79,010,108	$ 73,291,512
Operating expenses:		
Operation and administration	28,496,565	27,918,914
Maintenance	15,212,914	13,770,443
Depreciation	13,038,530	12,823,738
Other postemployment benefit expense	4,669,997	5,118,264
Total operating expenses	61,418,006	59,631,359
Operating income	17,592,102	13,660,153
Nonoperating revenues (expenses):		
Interest income on investments	1,006,077	434,340
Interest on loans receivable	86,443	90,084
Interest capitalization during construction	145,112	151,474
Interest expense	(1,691,686)	(1,551,606)
Total nonoperating revenues (expenses)	(454,054)	(875,708)
Net income before contribution in aid of construction	17,138,048	12,784,445
Contribution in aid of construction	1,113,001	1,628,369
Change in net position	18,251,049	14,412,814
Net position—beginning	297,892,006	344,255,257
GASB Statement No. 75 implementation	-	(60,776,065)
Net position—ending	$ 316,143,055	$ 297,892,006

The notes to the financial statements are an integral part of these statements.

ERIE COUNTY WATER AUTHORITY
Statements of Cash Flows
Years Ended December 31, 2018 and 2017

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	$ 79,980,969	$ 73,120,940
Payments to contractors	(17,005,771)	(18,586,949)
Payments to employees including fringe benefits	(27,113,506)	(23,578,974)
Net cash provided by operating activities	35,861,692	30,955,017
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(25,170,671)	(23,591,512)
Bond issuance	27,966,074	-
Bond repayment	(9,380,000)	(8,590,000)
Interest paid on revenue bonds	(1,959,733)	(1,884,747)
Advances for construction	168,680	(54,422)
Contribution in aid of construction	1,113,001	1,628,369
Net cash used for capital and related financing activities	(7,262,649)	(32,492,312)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of investment securities	(72,825,231)	(47,743,691)
Proceeds from sale or maturity of investments	79,659,697	32,125,466
Interest received	995,781	494,293
Net cash provided by (used for) investing activities	7,830,247	(15,123,932)
Net increase (decrease) in cash	36,429,290	(16,661,227)
Cash and cash equivalents—beginning (including amounts restricted for future construction, debt service reserve, debt service, and customer deposits)	23,307,046	39,968,273
Cash and cash equivalents—ending (including amounts restricted for future construction, debt service reserve, debt service, and customer deposits)	$ 59,736,336	$ 23,307,046

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ERIE COUNTY WATER AUTHORITY
Statements of Cash Flows
Years Ended December 31, 2018 and 2017

(concluded)

	2018	2017
Reconciliation of operating income to net cash provided by operating activities:		
Operating income:	$ 17,592,102	$ 13,660,153
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation expense	13,038,530	12,823,738
Other postemployment benefits expense	4,669,997	5,118,264
GASB Statement No. 75 implementation	-	(60,776,065)
Decrease (increase) in customer accounts receivable	992,594	(41,828)
(Increase) decrease in material and supplies	(306,089)	85,238
(Increase) decrease in accrued revenue	(331,352)	390,056
Decrease (increase) in other assets	282,136	(578,616)
Decrease in long term accounts receivable	108,250	79,150
Increase (decrease) in deferred outflows of resources	(1,562,923)	4,724,813
Increase (decrease) in accounts payable	281,425	(1,584,540)
Increase in other accrued liabilities	58,565	154,934
Increase in compensated absences	1,784,591	78,059
(Decrease) in net pension liability	(3,508,317)	(3,685,606)
(Decrease) increase in other postemployment liability	(14,663,424)	60,776,065
Increase (decrease) in deferred inflows of resources	17,425,607	(268,798)
Total adjustments	18,269,590	17,294,864
Net cash provided by operating activities	$ 35,861,692	$ 30,955,017

The notes to the financial statements are an integral part of these statements.

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ERIE COUNTY WATER AUTHORITY
Notes to the Financial Statements
Years Ended December 31, 2018 and 2017

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting entity—The Erie County Water Authority (the "Authority") is a public benefit corporation created in 1949 by the State of New York. The accounts of the Authority are maintained generally in accordance with the Uniform System of Accounts prescribed by the New York State Public Service Commission (PSC), although the Authority is not subject to PSC rules and regulations. The rates established by the Authority do not require PSC approval.

The Authority operates its business activities on a direct service basis where the Authority owns the assets and is responsible for their operation, maintenance, improvement and replacement; on a leased managed service basis where the Authority is responsible for the operation and maintenance of the assets while the lessor is responsible for the improvement and replacement of assets; and on a bulk sales basis where the Authority contracts with the customer to provide water while the customer owns the assets and is responsible for their operation, maintenance, improvement and replacement as well as billings and customer collections.

Basis of accounting—The financial statements of the Authority have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

The activities of the Authority are accounted for similar to those often found in the private sector using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, deferred outflows, liabilities, deferred inflows, net position, revenues and expenses are accounted for through a single enterprise fund with revenues recorded when earned and expenses recorded at the time liabilities are incurred.

Revenues from providing water services are reported as operating revenues. Operating revenues are recorded as water service is supplied. Water supplied, but not billed, as of the calendar year end is estimated based upon historical usage and has been accounted for as accrued revenue.

Transactions which are capital, financing or investing related are reported as nonoperating revenues. All expenses related to operating the system are reported as operating expenses. Interest expense and financing costs are reported as nonoperating expenses.

Budgets—The Authority is not required to have a legally adopted budget.

Compensated absences—Authority employees earn vacation, sick leave and compensatory time in varying amounts. In the event of termination or upon retirement, represented employees are entitled to payment for accrued vacation, sick and compensatory time limited to amounts defined under their respective collectively bargained agreements. All non-represented employees receive benefits as defined by Authority policy or by resolution of the Board.

Retirement plan—The Authority provides retirement benefits for all of its employees through contributions to the New York State and Local Employees' Retirement System. The system provides various plans and options, some of which require employee contributions.

Cash and cash equivalents—The Authority considers cash and cash equivalents to be all unrestricted and restricted cash accounts and short-term investments purchased with an original maturity of three months or less.

Investments—The Authority considers cash invested for more than three months investments. Investments are carried at fair value based on quoted market prices. The cost of investments sold is determined using the specific identification method and then adjusted to fair value changes to reflect the combined net change in these elements in the statements of revenue, expenses and changes in net position.

Customer accounts receivable—All receivables are reported at their gross values and, where appropriate, are reduced by the estimated portion that is expected to be uncollectible. The Authority recognizes water revenues in the period in which the service is provided. Billings to customers generally consist of revenues earned from the prior three months for quarterly billed customers and revenues earned from the prior month for monthly-billed customers.

Materials and supplies—Materials and supplies are stated at the lower of cost or market, cost being determined on the basis of moving-average cost.

Accrued revenue—This account represents earned water revenues as of the end of the year that have not yet been billed to customers.

Prepaid expenses and other assets—These consist primarily of certain payments reflecting costs applicable to future accounting periods and interest earned from securities and investments but not yet received.

Capital assets—Capital assets are defined by the Authority as assets with an initial, individual cost of more than $10,000 and an estimated useful life in excess of two years. Infrastructure assets with individual costs less than $10,000 are treated as a class of assets and are capitalized. The cost of additions to capital assets, including purchased property or property contributed in aid of construction, and replacement of property, is capitalized. Cost includes direct material, labor, overhead and an allowance for funds used during construction equivalent to the average cost of borrowed funds advanced for construction purposes. Overhead is added proportionately to the cost of a project on a monthly basis. The cost of retirements of capital assets is charged against accumulated depreciation. Maintenance and repairs are charged to expenses as incurred, and major betterments are capitalized.

Depreciation of capital assets is computed using the composite and straight-line methods based upon annual rates established in accordance with PSC guidelines: buildings and structures, 15 to 76 years; hydrants and mains, 64 to 100 years; equipment, 5 to 43 years; and other, 4 to 50 years. Depreciation expense approximated 2.01% and 2.04% of the original cost of average depreciable property for the years ended December 31, 2018 and 2017 respectively.

Long-term obligations—Long term debt is reported as a liability in the statements of net position. Bond premiums and bond discounts are deferred and amortized over the life of the bonds using the straight-line method. Bonds payable are reported net of the applicable bond premium or discount.

Advances for construction—Advances for construction primarily represent amounts received from contractors for water system expansions. Upon completion of the expansion, the cost of the construction is transferred to contributions in aid of construction, with any remaining advance being refunded.

Accrued liabilities—Included are provisions for estimated losses and surcharges collected from customers on behalf of various municipalities and unpaid at year end.

Contributions in aid of construction—Contributions in aid of construction represent amounts received from individuals, governmental agencies, and others to reimburse the Authority for construction costs incurred on capital projects or the original cost of certain water plant systems conveyed to the Authority by municipalities and others. Only those water plant systems resulting in increased revenue generation are assigned any value and, therefore, recorded as a contribution in aid of construction.

Risk management—The Authority limits its risk exposure to risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters through various insurance policies. Insurance coverage has remained relatively stable from the previous year. Insurance expense for the years ended December 31, 2018 and 2017 totaled $2,505,067 and $2,656,697, respectively. There were no settlements that significantly exceeded insurance coverage or reserved amounts for each of the last three years. Any unpaid claims outstanding as of December 31, 2018 and 2017 have been adequately reserved for.

Use of estimates—The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and related notes. Actual results could differ from those estimates.

Adoption of new accounting pronouncements—During the year ended December 31, 2018, the Authority implemented GASB Statements No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions;* No. 85, *Omnibus 2017;* and No. 86, *Certain Debt Extinguishment Issues;* effective for the year ending December 31, 2018. GASB Statement No. 75 had a material effect on the Authority's net position. The Statement of Net Position and Statement of Changes in Net Position have been restated for December 31, 2017 to reflect implementation as follows:

Net position—December 31, 2017, as previously stated	$ 358,668,071
GASB Statement No. 75 implementation	(60,776,065)
Net position—December 31, 2017, as restated	$ 297,892,006

Future impacts of accounting pronouncements—The Authority has not completed the process of evaluating the impact that will result from adopting GASB Statements No. 83, *Certain Asset Retirement Obligations;* No. 84, *Fiduciary Activities;* No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements;* and No. 90, *Majority Equity Interests — an amendment of GASB Statements No. 14 and No. 61,* effective for the year ending December 31, 2019 or GASB No. 87, *Leases;* and No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period,* effective for the fiscal year ending December 31, 2020. The Authority is therefore unable to disclose the impact that adopting these Statements will have on its financial position and results of operations when such Statements are adopted, if any.

2. CASH, CASH EQUIVALENTS AND INVESTMENTS

Deposits—All uninsured bank deposits are fully collateralized.

Investments—The Authority's bond resolutions and investment guidelines allow for monies to be invested in the following instruments:

- Obligations of the United States Government;
- Obligations of Federal Agencies which represent full faith and credit of the United States Government;
- Bonds issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation with remaining maturities not exceeding three years;
- Time deposits and money market accounts;
- Commercial paper which matures not more than 270 days after the date of purchase; and
- Municipal obligations of any state, instrumentality, or local governmental unit of such state.

Restricted cash, cash equivalents, and investments—Cash has been deposited into various trust accounts with a fiscal agent to satisfy certain legal covenants, or restricted internally through Board resolution. Further, the amounts are invested in compliance with the Authority's investment guidelines. The following is a brief synopsis of restricted cash:

Restricted for debt service—Cash restricted for debt service was established to fulfill the debt service requirements on the outstanding water revenue bonds as they become due and payable.

Restricted for customer deposits—Cash restricted for customer deposits was established to keep customer deposits for future work to be performed and deposits taken from customers to secure payment of their water bills segregated from the Authority's operating cash.

Restricted for employee pension contributions—New employees meeting eligibility requirements can elect participation in the New York State Voluntary Defined Contribution Program sponsored by the State University of New York (SUNY) Optional Retirement Plan. Eligible employees have a 366 day vesting period during which the employer retains the employee and employer contributions.

Restricted employee payroll withholdings—Employee elective payroll withholding under Title 26 U.S. Code §125 - Cafeteria plans and §105(h) - Amounts received under accident and health plans.

Restricted for future construction—Cash restricted for future construction was established to maintain a construction account, which has been committed for future capital expenditures.

Restricted for debt service reserve—The Authority restricts investments in the debt service reserve account as required by various bond resolutions.

As of December 31, 2018 and 2017, the Authority had the following restricted cash, cash equivalents, and investments:

	December 31, 2018		December 31, 2017	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Restricted for debt service:				
Cash	$ 660,789	$ 660,789	$ 570,183	$ 570,183
Investments - U.S. Treasury bills	684,313	685,439	1,185,468	1,185,927
	1,345,102	1,346,228	1,755,651	1,756,110
Restricted for customer deposits:				
Cash	1,055,449	1,055,449	849,784	849,784
Restricted for employee payroll withholdings:				
Cash	25,473	25,473	31,829	31,829
Restricted for future construction:				
Cash	7,563	7,563	-	-
Investment - U.S. Treasury bills	19,453,820	19,460,912	-	-
	19,461,383	19,468,475	-	-
Current restricted cash, cash equivalents, and investments	$ 21,887,407	$ 21,895,625	$ 2,637,264	$ 2,637,723
Restricted for future construction:				
Cash	$ 10,056,390	$ 10,056,390	$ 9,152,025	$ 9,152,025
Investment - Certificate of Deposit	480,000	480,000	5,490,921	5,490,921
Investment - U.S. Treasury bills	2,002,098	2,002,944	3,969,894	3,976,407
Investment - U.S. Treasury notes	9,935,055	9,931,213	2,877,609	2,874,916
	22,473,543	22,470,547	21,490,449	21,494,269
Restricted for debt service reserve:				
Cash	121	121	86	86
Investment - State and Local Government Series Treasury bonds	2,042,105	2,042,105	6,619,105	6,619,105
	2,042,226	2,042,226	6,619,191	6,619,191
Noncurrent restricted cash, cash equivalents, and investments	$ 24,515,769	$ 24,512,773	$ 28,109,640	$ 28,113,460
Total restricted cash, cash equivalents and investments	$ 46,403,176	$ 46,408,398	$ 30,746,904	$ 30,751,183

Fair value measurement—The Authority reports its fair value measures using a three-level hierarchy that prioritizes the inputs used to measure fair value. This hierarchy, established by GAAP, requires that entities maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The three levels of inputs used to measure fair value are as follows:

- Level 1. Quoted prices for identical assets or liabilities in active markets to which the Authority has access at the measurement date.
- Level 2. Inputs other than quoted process included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include:
    - Quoted prices for similar assets or liabilities in active markets;
    - Observable inputs other than quoted prices for the asset or liability (for example, interest rates and yield curves); and
    - Inputs derived principally from, or corroborated by, observable market data by correlation or by other means.
- Level 3. Unobservable inputs for the asset or liability. Unobservable inputs should be used to measure fair value to the extent that observable inputs are not available.

Authority has the following fair value measurements as of December 31, 2018:

- Money market funds, DDA and NOW accounts of $40,275,424 are values using quoted prices for identical assets in active markets (Level 1 input).
- Certificates of deposit of $480,000 are values using quoted prices for identical assets in active markets (Level 1 input).
- U.S. treasury bills of $32,135,703 and treasury notes of 9,931,213 are values using quoted prices for identical assets in active markets (Level 1 input).
- Treasury Securities - State and Local Government Series (SLGS) of $2,042,105 is valued using quoted prices for similar assets or liabilities in active markets (Level 2 input).

Description	12/31/2018	Level 1	Level 2	Level 3
Money Market/DDA/NOW Accounts	$ 40,275,424	$ 40,275,424	$ -	$ -
Certificate of Deposit	480,000	480,000	-	-
U.S. Treasury bills/notes	42,066,916	42,066,916	-	-
Treasury Securities - SLGS	2,042,105	-	2,042,105	-
Total	$ 84,864,445	$ 82,822,340	$ 2,042,105	$ -

Description	12/31/2017	Level 1	Level 2	Level 3
Money Market/DDA/NOW Accounts	$ 23,307,046	$ 23,307,046	$ -	$ -
Certificate of Deposit	7,339,921	7,339,921	-	-
U.S. Treasury bills/notes	17,946,630	17,946,630	-	-
Treasury Securities - SLGS	6,619,105	-	6,619,105	-
Total	$ 55,212,702	$ 48,593,597	$ 6,619,105	$ -

***Custodial credit risk*—**For deposits, this is the risk that in the event of a bank failure, the Authority's deposits may not be returned. For cash equivalents and investments, this is the risk that in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments that are in the possession of an outside party. By State statute all deposits in excess of FDIC insurance coverage must be collateralized. As of December 31, 2018 and 2017, all uninsured bank deposits were fully collateralized with securities held by the pledging financial institutions' trust departments or agents in the Authority's name and all of the Authority's cash equivalents and investments were registered in the Authority's name.

***Interest rate risk*—**For investments, this is the risk that potential purchasers of debt securities will not agree to pay face value for those securities if interest rates subsequently increase. There is the prospect of a loss should those securities be sold prior to maturity. The Authority uses the specific identification method to identify the maturity for each investment and evaluate risk accordingly. For the year ended December 31, 2018 the Authority had $42,066,916 in US Treasury securities and $2,042,105 in SLGS with the longest maturity dates being December 15, 2019 and July 15, 2023.

3. CUSTOMER ACCOUNTS RECEIVABLE

Customer accounts receivable primarily represent amounts due from customers for current and past due water services provided, including penalties, unpaid bill charges, collection fees and shut-off charges.

Customers are billed either on a monthly or quarterly basis depending on the type of customer and the level of water usage. Municipalities are billed for hydrant maintenance annually. Customers are provided a fifteen day (15) payment period from the billing date to pay their current water charges. A late penalty of 10% is assessed on any unpaid balance 10 days after the due date. An account will receive a collection letter if the account is active, has a receivable balance greater than $100, has a receivable that is 90 days or greater in arrears and has no current collections activity. The collection letter indicates that the customer could be subject to the discontinuance of their water service and additional delinquent charges.

Following fifteen (15) days from the collection letter date, an unpaid account is sent to a collector who schedules a visit to the customer with an unpaid bill notice. At the visit, the account is "posted," and the customer has three (3) working days to either pay the bill in full, or submit a partial payment (25%-33%) with a signed promissory agreement for the remaining balance. The agreement is normally kept to a term of 90 days, with some exceptions to 180 days. In agreements with lease managed water districts and in some direct service districts, unpaid water bills are referred to municipalities for payment per the terms of the service agreement. Allowances for doubtful accounts at December 31, 2018 and 2017 total $247,398 and $214,404, respectively.

4. CAPITAL ASSETS

Capital asset activity for the years ended December 31, 2018 and December 31, 2017 is presented below:

	Balance 1/1/2018	Additions	Retirements & Reclassifications	Balance 12/31/2018
Capital assets not being depreciated:				
Land	$ 2,231,137	$ -	$ -	$ 2,231,137
Construction work in progress	6,972,702	25,562,909	(27,326,387)	5,209,224
Total non-depreciable capital assets	9,203,839	25,562,909	(27,326,387)	7,440,361
Capital assets being depreciated:				
Buildings and structures	290,606,197	2,310,210	-	292,916,407
Mains and hydrants	230,584,540	13,408,646	(132,435)	243,860,751
Equipment	60,926,418	8,176,605	(970,308)	68,132,715
Other	54,254,087	4,150,361	-	58,404,448
Total depreciable capital assets	636,371,242	28,045,822	(1,102,743)	663,314,321
Less accumulated depreciation:				
Buildings and structures	145,734,200	6,864,987	-	152,599,187
Mains and hydrants	55,082,443	2,325,412	(132,435)	57,275,420
Equipment	37,712,798	2,900,180	(373,168)	40,239,810
Other	26,823,646	947,951	-	27,771,597
Total accumulated depreciation	265,353,087	13,038,530	(505,603)	277,886,014
Capital assets being depreciated, net	371,018,155	15,007,292	(597,140)	385,428,307
Total capital assets, net	$ 380,221,994	$ 40,570,201	$ (27,923,527)	$ 392,868,668

	Balance 1/1/2017	Additions	Retirements & Reclassifications	Balance 12/31/2017
Capital assets not being depreciated:				
Land	$ 2,231,137	$ -	$ -	$ 2,231,137
Construction work in progress	3,990,410	22,944,823	(19,962,531)	6,972,702
Total non-depreciable capital assets	6,221,547	22,944,823	(19,962,531)	9,203,839
Capital assets being depreciated:				
Buildings and structures	279,652,616	10,953,581	-	290,606,197
Mains and hydrants	226,025,894	4,566,550	(7,904)	230,584,540
Equipment	58,878,144	3,420,645	(1,372,371)	60,926,418
Other	58,218,045	2,308,241	(6,272,199)	54,254,087
Total depreciable capital assets	622,774,699	21,249,017	(7,652,474)	636,371,242
Less accumulated depreciation:				
Buildings and structures	139,030,016	6,704,184	-	145,734,200
Mains and hydrants	52,810,592	2,279,755	(7,904)	55,082,443
Equipment	35,589,174	2,897,307	(773,683)	37,712,798
Other	32,153,353	942,492	(6,272,199)	26,823,646
Total accumulated depreciation	259,583,135	12,823,738	(7,053,786)	265,353,087
Capital assets being depreciated, net	363,191,564	8,425,279	(598,688)	371,018,155
Total capital assets, net	$ 369,413,111	$ 31,370,102	$ (20,561,219)	$ 380,221,994

5. LONG-TERM DEBT

Summary of long-term debt—the following is a summary of the Authority's water revenue bonds outstanding at December 31, 2018:

Series	Final Annual Installment Payment Due	Year of Earliest Principal Payment	Interest Rate		Original Issue	Principal Outstanding 12/31/2018
1998D Series	10/15/2019	2000	0.845-3.355%	(*)	$ 16,859,700	$ 1,170,000
2003F Series	7/15/2023	2004	0.79-4.50%	(*)	15,544,443	5,008,384
2016 Series	12/1/2036	2017	2.00-5.00%		30,725,000	27,410,000
2018 Series	12/1/2048	2019	3.00-5.00%		24,900,000	24,900,000
						58,488,384
Less portion due within one year						(4,205,000)
						$ 54,283,384

(*) Gross rates subject to subsidy from the New York State Environmental Facilities Corporation (EFC)

All outstanding bonds have been issued under the Authority's Fourth Resolution and, therefore, all of the current bondholders have equal claims against the Authority's revenues.

1998D Series Bonds

The Current Interest 1998D Series Bonds were issued to the EFC under their aggregate pool financing identified as New York State Environmental Facilities Corporation State Clean Water and Drinking Water Revolving Funds Revenue 1998D Series in 1998.

The 1998D Series Bonds in the amount of $16,859,700, representing the Authority's portion of the financing, were issued to cover the cost of the construction of two new clearwell water tanks and a new pumping station at the Authority's Sturgeon Point plant.

Interest on the 1998D Series Bonds ranges from 0.845% to 3.355% and is payable semi-annually on April 15 and October 15. The terms of the EFC borrowings provide for an interest subsidy of approximately one-third of the stated interest rates shown above. The subsidy is generated from a United States Environmental Protection Agency grant to the EFC which the EFC invests and credits the borrower with the earnings on the invested funds as an offset to the interest payable on the bonds.

Principal is payable on October 15. The final maturity of the bonds is October 15, 2019.

2003F Series Bonds

On July 24, 2003 the 2003F Series Bonds were issued to the EFC under their aggregate pool financing identified as New York State Environmental Facilities Corporation State Clean Water and Drinking Water Revolving Funds Revenue 2003F Series Bonds.

The 2003F Series Bonds in the amount of $15,544,443 representing the Authority's portion of this financing were issued to cover the cost of new pump stations along with meters, water mains, a pump station and a storage tank in the City of Tonawanda.

On August 1, 2013 EFC refunded the 2003F Series Bonds. New bonds were issued in the same principal denomination. The Authority paid off $691,616 on the outstanding bond principal. The Authority did not issue new bonds to EFC. The interest rates on the outstanding bonds were significantly reduced. The net present value savings as calculated by EFC is $1,382,895.

Interest on the 2003F Series Bonds ranges from 0.79% to 4.50% and is payable semi-annually on January 15 and July 15. The terms of the EFC borrowings provide for an interest subsidy of approximately one-third of the stated interest rates shown above. The subsidy is generated from a United States Environmental Protection Agency grant to the EFC which the EFC invests and credits the borrower with the earnings on the invested funds as an offset to the interest payable on the bonds.

Principal is payable on July 15. The final maturity of the bonds is July 15, 2023.

2007 Series Bonds

On September 13, 2007, the 2007 Series Bonds were issued for $35,194,288, which includes a premium of $194,288 that is amortized over the life of the bonds. The purpose of these bonds includes the replacement of various water mains and valves in the distribution system, construction of new pump stations, upgrades to the coagulation basins, the replacement of electrical equipment and installation of standby emergency generators at the Authority's Sturgeon Point and Van de Water Treatment Plants.

The 2007 Series Bonds were advance refunded on September 29, 2016 as part of the 2016 bond issuance and is discussed in more detail in the 2016 Series Refunding Bonds Section. Outstanding bonds were called on the first allowable date, December 1, 2017.

The required rebate calculation was performed on the 2007 Series Bonds for the period from September 13, 2007 to September 13, 2017. The Authority owed arbitrage rebate of $53,687. The Authority elected to pay 90% of this amount or $48,318 to the IRS in November 2017. The final rebate calculation was performed on the final maturity date of December 1, 2017. The total owed by the Authority for the 2007 Bonds was calculated to be $26,728. As a result, the Authority received a refund from the IRS of $21,590 in July 2018.

Interest on the 2007 Series Bonds ranged from 4.50% to 5.00% and was payable semi-annually on June 1 and December 1.

Principal was payable on December 1. The original final maturity of the bonds was scheduled for December 1, 2037.

2008 Series Bonds

On June 25, 2008, the Authority issued $45,770,000 of Water Revenue Refunding Bonds, Series 2008. The proceeds of the issue, including a $3,081,304 premium which is amortized over the life of the 2008 Series Bonds, were used to refund the principal of the 1993A Series and 1993B Series Bonds, $27,500,000 and $15,000,000, respectively. A portion of the proceeds covered the costs of issuance including a fee in connection with the termination of the swap agreement related to the 1993A Series and 1993B Series Bonds. The remaining proceeds were deposited into the 2008 Series Debt Service Reserve Account. The 1993A Series and 1993B Series Bonds were redeemed on July 25, 2008. The issuance of the 2008 Series Refunding Bonds reduced the debt service by $7,481,572 and has a net present value cash flow savings of $8,393,467.

Interest on the 2008 Series Bonds ranged from 4.0% to 5.0% and was payable semi-annually on June 1 and December 1.

Principal was payable on December 1. The final maturity of the bonds was December 1, 2018.

2016 Series Refunding Bonds

On September 29, 2016, the Authority issued $30,725,000 of Water Revenue Refunding Bonds, Series 2016. The proceeds of the issue after premium of $4,378,154 and discount of $109,654 were used to refund the principal of the 2007 Series and 2012 Series Bonds, $29,705,000 and $7,850,000, respectively. A portion of the proceeds were deposited into a Rebate Liability Fund to be used to pay any arbitrage rebate due on the 2007 Series Bonds in September 2017. The remainder of the proceeds covered the costs of issuance. The issuance of the 2016 Series Refunding Bonds reduced the debt service by $9,330,782 and has a net present value cash flow savings of $6,787,290.

The advance refunding resulted in a deferred outflow of resources of $1,333,446 which is being amortized over the life of the 2016 Series Refunding Bonds. The deferred outflow is the difference between the reacquisition price, which is the amount deposited into the escrow account, and the carrying amount of the 2007 Series Bonds at the time of defeasance.

The 2012 Series Bonds were redeemed immediately. The remaining net proceeds from the issuance and certain existing funds were deposited into an escrow account by an escrow agent pursuant to the refunding agreement and invested in U.S. Government securities for the 2007 Series Bonds. The maturities of these invested funds and related earnings thereon provided sufficient cash flow to meet the debt service requirements of the defeased bonds. These advance refunding transactions effectively released the Authority from its obligation to repay these bonds and constituted in-substance defeasances. The 2007 Series Bonds were callable on December 1, 2017. Prior to December 31, 2017, interest and principal payments were being made from the escrow account. On December 1, 2017 the remaining bonds were redeemed. The principal outstanding on the bonds defeased is $0 at December 31, 2018 and $0 at December 31, 2017.

Interest on the 2016 Refunding Bonds ranges from 2.00% to 5.00% and is payable semi-annually on June 1 and December 1.

Principal is payable on December 1. The final maturity of the bonds is December 1, 2036.

2018 Series Refunding Bonds

On July 25, 2018, the Authority issued $24,900,000 of Water Revenue Refunding Bonds, Series 2018. The bonds were issued at a premium of $3,089,043 offset by a discount of $22,969. The premium and discount will be amortized over the life of the bonds. The proceeds of the issue will be used to finance the cost of development, acquisition and construction of certain improvements and additions to the Water Works System and to pay the costs of issuance of the 2018 Series Bonds.

Interest on the 2018 Series Bonds ranges from 3.00% to 5.00% and is payable semi-annually on June 1 and December 1.

Principal is payable on December 1. The final maturity of the bonds is December 1, 2048.

Long-term debt requirements—Long-term debt requirements are summarized as follows:

Year ending December 31,	Bond Principal	Interest on Bonded Debt
2019	$ 4,205,000	$ 2,518,262
2020	3,170,000	2,342,638
2021	3,305,000	2,205,421
2022	3,455,000	2,049,952
2023	3,548,384	1,771,504
2024-2028	10,855,000	7,770,410
2029-2033	11,150,000	5,068,010
2034-2038	9,885,000	3,342,200
2039-2043	4,000,000	1,848,000
2044-2048	4,915,000	761,000
	58,488,384	29,677,397
Less portion due within one year	4,205,000	2,518,262
	$ 54,283,384	$ 27,159,135

Summary of changes in long-term debt—The following is a summary of changes in water revenue bonds and other long-term debt for the years ended December 31, 2018 and December 31, 2017:

	Balance 1/1/2018	Additions and Appreciation	Reductions	Balance 12/31/2018	Due Within One Year
1998D Series	$ 2,295,000	$ -	$ (1,125,000)	$ 1,170,000	$ 1,170,000
2003F Series	5,768,384	-	(760,000)	5,008,384	780,000
2008 Series	5,610,000	-	(5,610,000)	-	-
2016 Series	29,295,000	-	(1,885,000)	27,410,000	1,955,000
2018 Series	-	24,900,000	-	24,900,000	300,000
Total bonds payable	42,968,384	24,900,000	(9,380,000)	58,488,384	4,205,000
Bond premiums	4,376,804	3,089,043	(532,298)	6,933,549	318,820
Bond discounts	(102,829)	(22,969)	5,764	(120,034)	(6,193)
Net bonds payable	$ 47,242,359	27,966,074	$ (9,906,534)	$ 65,301,899	$ 4,517,627
Compensated absences	$ 2,692,546	$ 2,136,321	$ (351,730)	$ 4,477,137	$ 1,629,869

	Balance 1/1/2017	Additions and Appreciation	Reductions	Balance 12/31/2017	Due Within One Year
1998D Series	$ 3,375,000	$ -	$ (1,080,000)	$ 2,295,000	$ 1,125,000
2003F Series	6,508,384	-	(740,000)	5,768,384	760,000
2008 Series	10,950,000	-	(5,340,000)	5,610,000	5,610,000
2016 Series	30,725,000	-	(1,430,000)	29,295,000	1,885,000
Total bonds payable	51,558,384	-	(8,590,000)	42,968,384	9,380,000
Bond premiums	4,889,648	-	(512,844)	4,376,804	488,193
Bond discounts	(108,265)	-	5,436	(102,829)	(5,436)
Net bonds payable	$ 56,339,767	-	$ (9,097,408)	$ 47,242,359	$ 9,862,757
Compensated absences	$ 2,614,487	$ 751,815	$ (673,756)	$ 2,692,546	$ 1,373,712

6. PENSION PLAN

Plan Description— The Authority participates in the New York State and Local Employees' Retirement System ("State Plan"), which is a cost-sharing, multiple-employer, public employee retirement system. The State Plan provides retirement, disability, and death benefits to members as authorized by the New York State Retirement and Social Security Law (NYSRSSL). The net position of the State Plan is held in the New York State Common Retirement Fund (the Fund), which was established to hold all net assets and record changes in plan net position allocated to the State Plan. The Comptroller of the State of New York ("Comptroller") serves as the trustee of the Fund and is the administrative head of the State Plan. The Comptroller is an elected official determined in a direct statewide election and serves a four year term. Thomas P. DiNapoli has served as Comptroller since February 7, 2007. In November 2018 he was elected for a new term commencing January 1, 2019. Once a public employer elects to participate in the State Plan, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. The Authority also participates in the Public Employees' Group Life Insurance Plan (GLIP) which provides death benefits in the form of life insurance. The State Plan is included in the State's financial report as a pension trust fund. That report, including information with regard to benefits provided, may be found at www.osc.state.ny.us/retire/publications/index.php or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, New York 12244.

Funding Policy—Plan members who joined the State Plan before July 27, 1976 are not required to make contributions. Those joining on or after July 27, 1976 are required to contribute 3% of their annual salary for the first ten years of their membership, and members hired after January 1, 2010 generally contribute 3% of their salary for the duration of their membership. For members hired after April 1, 2012 the contribution rate varies from 3% to 6% depending on salary.

Under the authority of the NYSRSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the State Plans fiscal year ending March 31. Contributions for the current year and two preceding years were equal to 100% of the contributions required, as presented below.

Year Ended December 31,	Amount
2018	$ 2,326,711
2017	2,338,695
2016	2,386,624

Pension Liabilities, Pension Expense, and Deferred Outflows and Inflows of Resources Related to Pensions—The Authority's proportionate share of net pension liability was $1,764,324 and $5,272,641 as of December 31, 2018 and 2017 respectively. The net pension liability is measured as of March 31 of each year, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Authority's proportion of the net pension liability was based on the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating members, actuarially determined.

At December 31, 2018 and 2017 the Authority's proportion of the pension liability was 0.055% and 0.056%, respectively. For the years ended December 31, 2018 and December 31, 2017, the Authority recognized pension expense of $2,254,658 and $2,849,957, respectively. As of December 31, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 629,277	$ 520,011
Changes of assumptions	1,169,892	-
Net difference between projected and actual earnings on pension plan investments	2,562,541	5,058,198
Changes in proportion and differences between Authority contributions and proportionate share of contributions	359,590	78,984
Authority contributions subsequent to the measurement date	1,745,033	-
Total deferred outflows/inflows of resources	$ 6,466,333	$ 5,657,193

As of December 31, 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 132,127	$ 800,680
Changes of assumptions	1,801,327	-
Net difference between projected and actual earnings on pension plan investments	1,053,160	-
Changes in proportion and differences between Authority contributions and proportionate share of contributions	325,334	22,882
Authority contributions subsequent to the measurement date	1,754,021	-
Total deferred outflows/inflows of resources	$ 5,065,969	$ 823,562

The $1,745,033 reported as deferred outflows of resources related to pensions resulting from Authority contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2019. Other amounts reported as deferred outflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending December 31,	Amount
2019	$ 499,370
2020	365,325
2021	(1,226,889)
2022	(573,699)

Actuarial assumptions—The total pension liability for the March 31, 2018 measurement dates was determined by using an actuarial valuation as of April 1, 2017, with update procedures used to roll forward the total pension liability to March 31, 2018. The valuation used the following actuarial assumptions:

Actuarial cost method	Entry Age Normal
Inflation	2.5%
Salary scale	3.8%, indexed by service
Investment rate of return	7.0%
Cost of living adjustments	1.3%
Decrements	Based upon fiscal year 2011-2015
Mortality improvement	Gender/Collar specific tables based on fiscal years 2011-2015 with Society of Actuaries Scale MP-2014 loading for mortality improvement

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized as follows for the measurement date of March 31, 2018.

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Asset class	Target allocation	Long-term expected real rate of return
Domestic equity	36.00%	4.55%
International equity	14.00%	6.35%
Private equity	10.00%	7.50%
Real estate	10.00%	5.55%
Absolute return strategies	2.00%	3.75%
Opportunistic portfolio	3.00%	5.68%
Real assets	3.00%	5.29%
Bonds and mortgages	17.00%	1.31%
Cash	1.00%	-0.25%
Inflation-indexed bonds	4.00%	1.25%
	100.00%	

Discount rate—The discount rate used to calculate the total pension liability at December 31, 2018 and 2017 was 7.0%. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at the statutorily required rates, actuarially determined. Based upon the assumptions, the State Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the proportionate share of the net pension liability to the discount rate assumption—The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate of 7.0%, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower (6.0%) or 1% higher (8.0%) than the current rate:

	Employer's proportionate share of the net pension liability/(asset)		
	1% Decrease 6.0%	Current Assumption 7.0%	1% Increase 8.0%
As of December 31, 2018	$ 13,349,349	$ 1,764,324	$ (8,036,145)
As of December 31, 2017	16,839,771	5,272,641	(4,507,345)

Collective net position liability of participating employers and actuarial information—The components of the net position liability of the employers as of March 31, 2018 were as follows:

	2018 (in thousands)	2017 (in thousands)
Employers' total pension liability	$ 183,400,590	$ 177,400,586
Plan net position	(180,173,145)	(168,004,363)
Employers' net pension liability	$ 3,227,445	$ 9,396,223
Fiduciary net position as a percentage of total pension liability	98.2%	94.7%

7. LABOR RELATIONS

Certain Authority employees are represented by two bargaining units, Brotherhood of Western New York Water Workers (BWNYWW), and Civil Service Employees Association, Inc. (CSEA). The CSEA and the Authority entered into a five-year collective bargaining agreement dated May 1, 2017.

On December 13, 2018, the Authority entered into a seven-year collective bargaining agreement with the BWNYWW.

8. POSTEMPLOYMENT BENEFITS

Plan Description and Benefits Provided—The Authority provides retiree health plans through Labor Management Healthcare Fund (LMHF). Retirees must meet age and years of service requirements to qualify for health benefits under this multiple-employer defined benefit healthcare plan (the "Plan"). Retiree benefits continue for the lifetime of the retiree and spousal benefits continue for their lifetime unless they remarry.

Authorization for the Authority to pay a portion, or all, of retiree health insurance premiums was enacted by resolution of the Authority's Board of Commissioners or through union contracts, which are ratified by the Board of Commissioners. Retired employees that met the age and years of service requirements and were enrolled in any healthcare plan prior to June 1, 2004 are not required to make a contribution. Retirees enrolling in the Traditional Blue PPO 812 plan after June 1, 2004 are required to make contributions equal to the difference between the Traditional Blue PPO 812 plan premium and the highest premium of any other plan offered to that retiree.

The table below defines employee eligibility and the required contribution level for each class of employee.

		Eligibility for Health Benefits		
Employee Group	Hire Date	Age	Years of Service	15% Contribution
CSEA	Before 01/01/2008	55	10	No
CSEA	01/01/2008-07/26/2012	58	15	No
CSEA	After 07/26/2012	58	15	Yes
BWNYWW	Before 01/01/1984	56	35	No
BWNYWW	01/01/1984-01/01/2006	58	15	No
BWNYWW	01/01/2006-07/26/2012	58	20	No
BWNYWW	After 07/26/2012	58	20	Yes
Non-represented	All	55	15	Yes
Non-represented	All	Age + Years of Service = 70		Yes

Employees Covered by Benefit Terms—At December 31, 2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	282
Active employees	227
	509

Total OPEB Liability

The Authority's total OPEB liability of $89,646,879 was measured as of December 31, 2018, and was determined by an actuarial valuation as of that date.

Actuarial Assumptions and Other Inputs—The total OPEB liability in the December 31, 2018 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods in the measurement, unless otherwise specified:

Reporting date — December 31, 2018
Measurement date — December 31, 2018
Actuarial valuation date — January 1, 2018
Discount rate as of the measurement date — 3.31%/3.71% as of January 1 and December 31, 2018
Rate of compensation increase — 2.5 %
Consumer price index (CPI) — 2.25%
Inflation rate (chained CPI) — 2.0 %
Actuarial cost method — Entry age normal
Amortization method — Level percent of pay
Amortization period — 6.648 years

Mortality — The sex-distinct RPH-2014 Mortality Tables for employees and healthy annuitants, adjusted backward to 2006 with Scale MP-2014, and then adjusted for mortality improvements with Scale MP-2018 mortality improvement scale on a generational basis.

Disability — Rates of decrement due to disability are assumed to be 0%.

Turnover – Rates of turnover are based on experience under the New York State Employees' Retirement System (State Plan).

Retirement incidence – Rates of retirement are based on the experience under the State Plan.

Election percentage – It was assumed 97% of future retirees eligible for coverage will elect postretirement healthcare coverage.

Spousal coverage – 80% of future retirees are assumed to elect spousal coverage upon retirement.

Per capita costs – All retiree health plans are offered through LMHF. Actual claims experience from LMHF was used to develop retiree claim costs for ECWA

Annual rate of increase in the consumer price index — CPI of 2.25% was assumed for purposes of developing the rate of increase in healthcare costs. C-CPI of 2.00% was assumed for purposes of determining future increases in limits corresponding to the excise tax of the Affordable Care Act on high cost employer-sponsored health plans. These assumptions are consistent with historical CPI and chained CPI as well as future expectations.

Healthcare cost trend rate – The assumed rates of increase in health care costs are presented in the table below. The trend rate schedule has been developed based on a review of published National trend survey data in relation to the retiree health plan offerings and updated long-term rates based on the Society of Actuaries Long Term Healthcare Cost Trends Model v2018c (The Getzen model), as well as Labor Management Healthcare Fund's expectations.

Year	Pre-65 Medical	Post-65 Medical	Post-65 Medicare Advantage	Prescription Drug
2018	7.000%	6.250%	5.000%	10.000%
2019	7.000%	6.000%	5.000%	10.000%
2020	6.750%	5.750%	4.750%	10.000%
2021	6.500%	5.500%	4.500%	10.000%
2022	6.237%	5.404%	4.500%	9.154%
2023	5.975%	5.308%	4.500%	8.308%
2024	5.712%	5.212%	4.500%	7.462%
2025	5.450%	5.117%	4.500%	6.617%
2035	4.925%	4.925%	4.500%	4.925%
2045	4.706%	4.706%	4.500%	4.706%
2055	4.562%	4.562%	4.500%	4.562%
2065	4.469%	4.469%	4.469%	4.469%
2075+	3.886%	3.886%	3.886%	3.886%

Changes in the Total OPEB Liability—The following table presents the changes to the total OPEB liability during the fiscal year, by source:

	Total OPEB Liability December 31, 2018
Beginning balance	$ 99,640,307
Changes for the year:	
Service cost	3,378,431
Interest cost	3,372,947
Change of benefit terms	119,294
Differences between expected and actual experience	191,341
Change of assumptions or other inputs	(14,821,432)
Actual benefit payments	(2,234,009)
Net changes	(9,993,428)
Ending balance	$ 89,646,879

Sensitivity of the Total OPEB Liability to the Change in the Discount Rate and Healthcare Cost Trend Rate—The discount rate assumption can have an impact on the net OPEB liability. The following table presents the effect of a 1% change in the discount rate assumption would have on the net OPEB liability:

	1% Decrease (2.71%)	Current Discount Rate (3.71%)	1% Increase (4.71%)
Total OPEB liability	$ 106,545,777	$ 89,646,879	$ 76,301,598

Additionally, healthcare costs can be subject to considerable volatility over time. The following table presents the effect on the net OPEB liability of a 1% change in the initial (7.0%)/ ultimate (3.78%) healthcare cost trend rates.

	1% Decrease (6.0%/ 2.78%)	Healthcare Cost Trend Rates (7.0%/ 3.78%)	1% Decrease (8.0%/ 4.78%)
Total OPEB liability	$ 72,855,121	$ 89,646,879	$ 112,487,720

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB—For the year ended December 31, 2018 the Authority recognized an annual OPEB expense of $4,669,997. The Authority reports deferred outflows of resources and deferred inflows of resources due to differences during the measurement period between certain of the employer's contributions and its proportionate share of the total of certain contributions from employers included in the collective net OPEB liability are required to be determined. The table below presents the Authority's deferred outflows and inflows of resources at December 31, 2018.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 162,559	$ -
Changes of assumptions	-	12,591,975
Total	$ 162,559	$ 12,591,975

The amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ending December 31,	
2019	$ (2,200,675)
2020	(2,220,675)
2021	(2,220,675)
2022	(2,220,675)
2023	(2,220,675)
Thereafter	(1,426,041)

9. NET POSITION AND RESERVES

The Authority financial statements utilize a net position presentation. Net position is categorized into net investment in capital assets, restricted and unrestricted.

Net investment in capital assets—This category groups all capital assets into one component of net position. Accumulated depreciation and the outstanding balances of debt that are attributable to the acquisition, construction or improvement of these assets reduce the balance in this category.

	December 31,	
	2018	2017
Capital assets, net of accumulated depreciation	$ 392,868,668	$ 380,221,994
Related debt:		
Water revenue bonds issued for capital assets	(39,026,799)	(42,968,384)
Bond premium	(6,933,549)	(4,376,804)
Bond discount	120,034	102,829
Net investment in capital assets	$ 347,028,354	$ 332,979,635

Restricted net position—This category presents external restrictions imposed by creditors, grantors, contributors, or laws and regulations of other governments and restrictions imposed by law through constitutional provisions or enabling legislation.

For the years ended December 31, 2018 and 2017, net position was restricted for the following purposes:

- ***Debt Service Reserve Account*** — During 1998, the Authority established a Debt Service Reserve Account as required by the 1998D Series bond resolution. The bond resolution requires a reserve amount equal to the average of the annual installments of debt service. The required amount was determined by EFC and must remain on deposit until the bonds mature.

  During 2003, per the 2003F bond resolution the Authority established a Debt Service Reserve Account from a portion of the 2003F bond proceeds. The required debt service reserve is based on ten percent of the total principal of the loan. The required amount was determined by EFC and must remain on deposit until the bonds mature.

During 2008, the Authority established a Debt Service Reserve Account as required by the 2008 Series bond resolution to maintain a specified amount of funds to meet future debt service requirements. The Authority established the Debt Service Reserve Account based on ten percent of the total principal of the loan. The final maturity of the 2008 Series Bonds was 12/1/18. Therefore, there is no restriction for this account at 12/31/18 since the balance is $0.

- ***Debt Service Account*** — The 1992 Fourth Resolution, 1998D, 2003F, 2008, and 2016 Supplemental Fourth Resolution bond resolutions require that a specified amount of funds be maintained in the Debt Service Account. The requirements of the Debt Service Account state that the Authority must deposit funds to provide for monthly interest and principal payments to start not later than six months prior to the payment of interest and twelve months prior to the payment of principal.

Unrestricted net position—This category represents the amount of net position the Authority has not restricted for any project or other purpose. Management intends to utilize a portion of unrestricted net position to finance the Authority's projected five-year capital spending, which will require future resources in excess of $181,000,000.

When an expense is incurred for purposes for which both restricted and unrestricted amounts are available, the Authority's policy concerning which to apply first varies with the intended use and associated legal requirements. Management typically makes this decision on a transactional basis.

10. COMMITMENTS AND CONTINGENCIES

The Authority maintains and operates certain facilities employed in the sale and distribution of water which it leases from various local municipal water districts pursuant to lease management agreements. No financial consideration is afforded the municipalities in conjunction with these lease agreements. Such agreements generally are for at least ten-year terms and automatically renew for additional ten-year terms unless terminated by either party one year prior to expiration of the term. The agreements provide that the municipalities obtain water exclusively from the Authority. Future maintenance and operating costs to be incurred by the Authority under such arrangements presently in effect are not determinable.

The Authority is also committed under various operating leases for the use of certain equipment and office space. Rental expense for 2018 and 2017 aggregated $254,589 and $230,334, respectively. Future commitments under these leases total $1,152,074.

The Authority is subject to various laws and regulations, which primarily establish uniform minimum national water quality standards. The Authority has established procedures for the on-going evaluation of its operations to identify potential exposures and assure continued compliance with these regulatory standards.

The Authority is involved in litigation and other matters arising in its normal operating, financing, and investing activities. While the resolution of such litigation or other matters could have a material effect on earnings and cash flows in the year of resolution, the Authority has obtained various liability, property, and workers' compensation insurance policies which would reduce exposure to loss on the part of the Authority. Management has made provisions for anticipated losses in the accompanying financial statements as advised by legal counsel. None of this litigation and none of these other matters are expected to have a material effect on the financial condition of the Authority at this time.

11. SUBSEQUENT EVENTS

Management has evaluated subsequent events through March 26, 2019, which is the date the financial statements are available for issuance, and have determined that there are no subsequent events that require disclosure under generally accepted accounting principles.

REQUIRED SUPPLEMENTARY INFORMATION

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ERIE COUNTY WATER AUTHORITY
Schedule of the Authority's Proportionate Share of the Net Pension Liability—New York State Employees' Retirement System Last Five Fiscal Years*

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Measurement date	March 31, 2018	March 31, 2017	March 31, 2016	March 31, 2015	March 31, 2014
Authority's proportion of the net pension liability/(asset)	0.0546663%	0.0561145%	0.0558137%	0.0572349%	0.0572349%
Authority's proportionate share of the net pension liability/(asset)	$ 1,764,324	$ 5,272,641	$ 8,958,247	$ 1,933,536	$ 2,586,366
Authority's covered payroll	$ 16,019,184	$ 15,648,444	$ 15,035,523	$ 15,112,883	$ 15,752,018
Authority's proportionate share of the net pension liability/(asset) as a percentage of its covered payroll	11.0%	33.7%	59.6%	12.8%	16.4%
Plan fiduciary net position as a percentage of the total pension liability	98.2%	94.7%	90.7%	97.9%	97.2%

* Information prior to the year ended December 31, 2014 is not available.

ERIE COUNTY WATER AUTHORITY
Schedule of Contributions to the New York State Employees' Retirement System
Last Ten Fiscal Years
(Dollar amounts in thousands)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Contractually required contribution	$ 2,327	$ 2,339	$ 2,387	$ 2,595	$ 2,996	$ 2,905	$ 2,564	$ 2,208	$ 1,658	$ 962
Contributions in relation to required contribution	2,327	2,339	2,387	2,595	2,996	2,905	2,564	2,208	1,658	962
Contribution deficiency (excess)	-	-	-	-	-	-	-	-	-	-
Covered payroll	$16,272	$15,800	$15,567	$15,708	$15,438	$14,800	$14,550	$14,446	$14,431	$14,642
Contributions as a percentage of covered payroll	14.301%	14.804%	15.334%	16.520%	19.407%	19.628%	17.622%	15.285%	11.489%	6.570%

ERIE COUNTY WATER AUTHORITY
Schedule of Changes in the Authority's Total OPEB Liability and Related Ratios
Last Fiscal Year*

	Year Ended December 31, 2018
Total OPEB Liability	
Service cost	$ 3,378,431
Interest cost	3,372,947
Change of benefit terms	119,294
Differences between expected and actual experience	191,341
Change of assumptions or other inputs	(14,821,432)
Actual benefit payments	(2,234,009)
Net change in total OPEB liability	(9,993,428)
Total OPEB liability—beginning	99,640,307
Total OPEB liability—ending	$ 89,646,879
Plan fiduciary net position	
Contributions—employer	2,234,009
Actual benefit payments	(2,234,009)
Net change in plan fiduciary net position	-
Plan fiduciary net position—beginning	-
Plan fiduciary net position—ending	$ -
Authority's net OPEB liability—ending	$ 89,646,879
Plan's fiduciary net position as a percentage of the total OPEB liability	0.00%
Covered-employee payroll	$ 16,271,826
Total OPEB liability as a percentage of covered employee payroll	550.93%

*Information prior to the year ended December 31, 2018 is not available.

The note to the Required Supplementary Information is an integral part of this schedule.

1. OPEB LIABILITY

***Changes of assumptions*—**The assumption changes as of December 31, 2018 include a change in the discount rate from 3.31% to 3.71%, a change to RPH-14 bas mortality tables with projected mortality improvement scale MP-2018, and updated health care trends. These changes resulted in a deferred inflow of resources.

Changes in expected versus actual experience—Expected benefit payments to retirees used to calculate the OPEB liability were somewhat lower than the actual payments resulting in a deferred outflow of resources.

Changes in benefit terms—In December of 2018 the Authority entered into a new collective bargaining agreement with the Brotherhood of Western New York Water Workers. The new agreement contained modest changes to member eligibility and contribution requirements for retiree health insurance, increasing OPEB liability. These increases were somewhat offset by voiding employment contracts for the Deputy and Executive Directors, which eliminated health insurance premium contributions in retirement.

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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

The Board of Commissioners
Erie County Water Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Accounting Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities of the Erie County Water Authority (the "Authority") as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated March 26, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

March 26, 2019

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH SECTION 2925(3)(f) OF THE NEW YORK STATE PUBLIC AUTHORITIES LAW

The Board of Commissioners
Erie County Water Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the business-type activities of the Erie County Water Authority (the "Authority"), as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and we have issued our report thereon dated March 26, 2019.

In connection with our audit, nothing came to our attention that caused us to believe that the Authority failed to comply with Section 2925(3)(f) of the New York State Public Authorities Law regarding investment guidelines during the year ended December 31, 2018. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding the Authority's noncompliance with the above rules and regulations.

The purpose of this report is solely to describe the scope and results of our testing. This communication is not suitable for any other purpose.

March 26, 2019

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