

Greater New Haven Water Pollution Control Authority

Financial Report
June 30, 2018 and 2017

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Financial Section



RSM US LLP

Independent Auditor's Report

To the Board of Directors
Greater New Haven Water Pollution Control Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the Greater New Haven Water Pollution Control Authority (the Authority), as of and for the years ended June 30, 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

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 audit 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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Authority as of June 30, 2018 and 2017, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the Management Discussion and Analysis on pages 3-8, the Schedule of Contributions – Municipal Employees' Retirement System on page 33 and the Schedule of the Authority's Proportionate Share of the Net Pension Liability – Municipal Employees' Retirement System on page 34 be presented to supplement the basic financial statements. Such information, although not a 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 *Government Auditing Standards*, we have also issued our reports dated December 20, 2018, 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 these reports is 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 internal control over financial reporting or on compliance. These reports are 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.

RSM US LLP

New Haven, Connecticut
December 20, 2018

**Greater New Haven
Water Pollution Control Authority
Management's Discussion and Analysis – *Unaudited*
For the Year Ended June 30, 2018**

INTRODUCTION

The Greater New Haven Water Pollution Control Authority (the GNHWPCA or the Authority) was organized in 2005 as a political subdivision of the State of Connecticut (the State) established and created for the performance of an essential public and governmental function. It was created as a regional water pollution control authority under Connecticut Public Act 95-329, subsequently enacted as Title 22a, Sections 500 to 519 of the Connecticut General Statutes (the Statutes), as amended (the Act). The GNHWPCA was created pursuant to the Act by concurrent ordinances of the four municipalities (the City of New Haven, and the Towns of Hamden, East Haven and Woodbridge, the Constituent Municipalities). Under the Act, the GNHWPCA is empowered to purchase, own and operate a public sewer system; to levy assessments and sewer use fees; to place liens on real estate to secure such assessments; and to issue revenue bonds. The GNHWPCA is also eligible for grants and loans under the State of Connecticut Clean Water Fund program (CWF). Under the by-laws of the GNHWPCA, a governing Board of Directors comprised of representatives of the Constituent Municipalities was established.

On August 29, 2005, the GNHWPCA entered into an Asset Purchase Agreement (regionalization) with the Constituent Municipalities and thereby acquired ownership of the wastewater system assets of the Constituent Municipalities which included CWF obligations.

In order to finance the acquisition of the wastewater system assets, the GNHWPCA issued \$91,290,000 of revenue bonds (the 2005 Series A Bonds) subject to an Indenture of Trust (the Indenture). The Indenture constitutes a contract between the GNHWPCA, the Trustee and the holders of the 2005 Series A Bonds. The Indenture secures the 2005 Series A Bonds and the CWF loans assumed from the Constituent Municipalities. The majority of these bonds were refinanced in 2014.

The wastewater system assets acquired by the GNHWPCA included: the East Shore Wastewater Treatment Plant (the Treatment Plant), located in New Haven; 30 pump stations; a collection system of approximately 560 miles of sanitary and combined sewers (the Collection System); and machinery and equipment. The system provides wastewater treatment services to approximately 50,000 customers throughout the four communities.

The GNHWPCA operates on a fiscal year that starts on July 1 and ends on June 30.

Management's Discussion and Analysis (MD&A) provides supplemental information to the audit and should be read in conjunction with such audit. The purpose of the MD&A is to introduce and highlight the more detailed information provided in the audited financial statements. For example, it will assess improvement to or deterioration of the GNHWPCA financial position and will identify factors that, in management's opinion, affected financial performance during the fiscal period under review.

CONTENTS OF THE AUDITED FINANCIAL STATEMENTS

Our financial statements are prepared using proprietary fund (enterprise fund) accounting that employs essentially the same basis of accounting as private-sector business enterprises. Under this method of accounting, an economic resources measurement focus and the accrual basis of accounting are used.

Revenue is recorded when earned and expenses are recorded when incurred. The financial statements include statements of net position, statements of revenues, expenses and changes in net position, and statements of cash flows. These statements are followed by notes to the financial statements.

The GNHWPCA's audited financial statements include the following:

Statements of net position

These statements provide information about the GNHWPCA's investments in resources (assets) and deferred outflows of resources, and its obligations to creditors (liabilities) and deferred inflows of resources, with the difference between them 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 GNHWPCA is improving or deteriorating.

Statements of revenues, expenses, and changes in net position

These statements demonstrate changes in net position from one period to another by accounting for operating and non-operating revenues and expenditures and measuring the financial results of operations combined with any capital contributions to determine the net change in position for the period. This change combined with the beginning of the period net position balance reconciles to the net position at the end of the period. The information may be useful to determine how the GNHWPCA has funded its costs.

Statements of cash flows

These statements report cash and cash equivalent activity for the year resulting from operating activities, non-capital financing activities, capital and related financial activities and investing activities. The net result of these activities added to the beginning of the year cash balance reconciles to the cash and cash equivalents balance at the end of the year.

Notes to financial statements and required supplementary information

Notes to the financial statements contain information essential to understanding the financial statements, such as the GNHWPCA accounting methods and policies. Required supplementary information contains information on the GNHWPCA's pension plan.

THE GNHWPCA BUSINESS

The GNHWPCA was created pursuant to Sections 22a-500 to 22a-519, inclusive, of the Statutes to (a) operate the Treatment Plant and to (b) use, equip, re-equip, repair, maintain, supervise, manage, operate and perform any act pertinent to collection, transportation, treatment and disposal of sewage with respect to the Constituent Municipalities. Currently, the daily flow at the Treatment Plant is approximately 25 million gallons per day with a wet weather capacity of 100 million gallons per day.

The Authority is responsible for the day-to-day management of the operations of the Treatment Plant and Collection System. Currently, the Authority contracts out for the maintenance of the system and for the operation of the incinerator through two (2) long-term contracts (Note 10).

The Authority currently has 63 full time equivalent employees.

FINANCIAL HIGHLIGHTS

Condensed Statements of Revenues, Expenses and Changes in Net Position

<i>(Dollars in Thousands)</i>	Years ended June 30,			Dollar Variance		Percentage Variance	
	2018	2017	2016	18 vs. 17	17 vs. 16	18 vs. 17	17 vs. 16
Operating revenues	\$ 44,859	\$ 41,670	\$ 39,696	\$ 3,189	\$ 1,974	7.7%	5.0%
Operating expenses	25,200	22,384	24,129	2,816	(1,745)	12.6%	(7.2%)
Depreciation and amortization	9,348	9,303	5,554	45	3,749	0.5%	67.5%
Total operating expenses, including depreciation	34,548	31,687	29,683	2,861	2,004	9.0%	6.8%
Operating income	10,311	9,983	10,013	328	(30)	3.3%	(0.3%)
Nonoperating (expense) income	(4,419)	(3,338)	2,232	(1,081)	(5,570)	32.4%	(249.6%)
Capital grants	1,325	2,019	4,832	(694)	(2,813)	(34.4%)	(58.2%)
Change in net position	\$ 7,217	\$ 8,664	\$ 17,077	\$ (1,447)	\$ (8,413)	(16.7%)	(49.3%)

The following items highlight the condensed statements of revenues, expenses and changes in net position, shown above.

Operating Revenues

Operating revenue of \$44.9 million for fiscal year 2018 represents an increase of \$3.2 million or 7.7% compared to \$41.7 million in operating revenues for fiscal year 2017. The increase in operating revenue is primarily attributed to a rate increase of \$0.24 per centum cubic feet (CCF) from fiscal year 2017 to fiscal year 2018. The GNHWPCA Board approved a charge of \$4.36 per CCF to meet the requirements of the indenture and to fund capital improvements. Other contributing factors include an increase in permit fees and revenue received from the State Nitrogen Credit Exchange program.

Operating revenues of \$41.7 million for fiscal year 2017 represents an increase of \$2 million or 5% compared to \$39.7 million in operating revenues for fiscal year 2016. The increase in operating revenue is primarily attributed to a rate increase of \$0.15 per CCF from fiscal year 2016 to fiscal year 2017. The GNHWPCA Board approved a charge of \$4.12 per CCF to meet the requirements of the indenture and to fund capital improvements. Other contributing factors include an increase in connection fees, contract operators' reimbursements of utilities and a reduction in the provision for bad debt.

Operating Expenses

Operating expenses include all costs, including maintenance, necessary to deliver wastewater collection and treatment services. It also includes the administrative resources and billing and customer service costs employed to ensure efficient operations.

Operating expenses including depreciation and amortization for fiscal year 2018 increased to \$34.5 million an increase of \$2.8 million over fiscal year 2017 with a total of 31.7 million. The increase is mainly due to increases in employee benefits for health insurance and retirement contributions, legal and lawyer fees, contractual services and waste and ash disposal fees.

Operating expenses including depreciation and amortization for fiscal year 2017 increased to \$31.7 million an increase of \$2 million over fiscal year 2016 with a total of 29.7 million. The increase is mainly due to an increase in depreciation expense of \$3.7 million as a result of the completion of the treatment plant upgrade project offset by a decrease in operation and maintenance expenses from \$24.1 million to \$22.4 million in fiscal year 2017, which is a decrease of \$1.7 million. Contributing factors for the decrease were the reduction of legal and lawyer fees, retirement fund expenses, workers compensation savings and waste and ash disposal cost.

Non-operating Income and Expense

Non-operating income and expense includes revenue from investment income, reflective of market rates of return, which is used in the general operation of the entity; and interest expense which consists primarily of interest incurred on revenue bonds issued and outstanding and loans assumed in connection with the CWF Program.

Non-operating income and (expenses) in fiscal year 2018 Increased \$1.1 million or 32.4% from \$3.3 million in fiscal year 2017. The increase in non-operating income and (expenses) is directly related to an increase in interest expense due to the closing of CWF project 441-C in September of 2017. The non-operating expense of \$4.4 million is comprised of interest expense net of interest income received.

Non-operating income & (expenses) in fiscal year 2017 decreased \$5.6 million or 250% from \$2.2 million in fiscal year 2016. The decrease in non-operating income and (expenses) is directly related to the settlement received in 2016, the non-operating expense of \$3.3 million is comprised of interest expense net of interest income received.

Condensed Statements of Net Position

<i>(Dollars in Thousands)</i>	June 30,			Dollar Variance		Percentage Variance	
	2018	2017	2016	18 vs. 17	17 vs. 16	18 vs. 17	17 vs. 16
Assets							
Current assets	\$ 51,364	\$ 46,682	\$ 47,124	\$ 4,682	\$ (442)	10.0%	(0.9%)
Capital assets, net	228,732	231,347	224,874	(2,615)	6,473	(1.1%)	2.9%
Noncurrent assets							
Restricted assets	13,149	12,781	12,274	368	507	2.9%	4.1%
Other	8,345	9,604	11,355	(1,259)	(1,751)	(13.1%)	(15.4%)
Total assets	301,590	300,414	295,627	1,176	4,787	0.4%	1.6%
Deferred outflows of resources	5,392	7,364	5,864	(1,972)	1,500	(26.8%)	25.6%
Liabilities							
Current liabilities	16,033	16,473	21,610	(440)	(5,137)	(2.7%)	(23.8%)
Noncurrent liabilities	163,140	170,627	167,607	(7,487)	3,020	(4.4%)	1.8%
Total liabilities	179,173	187,100	189,217	(7,927)	(2,117)	(4.2%)	(1.1%)
Deferred inflows of resources	302	388	650	(86)	(262)	(22.2%)	(40.3%)
Net position							
Net investment in capital assets	91,681	91,092	81,391	589	9,701	0.6%	11.9%
Restricted	2,723	2,791	2,320	(68)	471	(2.4%)	20.3%
Unrestricted	32,413	25,717	27,225	6,696	(1,508)	26.0%	(5.5%)
Unrestricted – designated	690	690	690	-	-	-	-
Total net position	\$ 127,507	\$ 120,290	\$ 111,626	\$ 7,217	\$ 8,664	6.0%	7.8%

The following items highlight the condensed statements of net position shown above.

Current Assets

The increase of \$4.7 million in current assets between fiscal year 2017 and fiscal year 2018 resulted primarily from strong collections of outstanding sewer use fees which resulted in an increase in cash and cash equivalents at June 30, 2018.

Capital Assets

The Authority's investment in capital assets as of June 30, 2018 amounted to \$228,732,494 (net of accumulated depreciation). This investment in capital assets is attributable to additions to equipment and sanitary sewer infrastructure, such as repairs and replacement of equipment, facility upgrades to the waste water treatment facility, pump station rehabilitations and the renewal or replacement of the waste water collection system.

Capital assets are assets acquired for the use in operations that will benefit more than a single fiscal year. Capital assets are stated at cost. Normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized. Assets being constructed over a period of time are classified as construction in progress. No depreciation is computed on these assets until they are complete and placed into service. Depreciation is computed on a straight-line basis over the estimated useful lives of the respective assets. Additional information on capital assets is presented in Note 4.

Restricted Assets

The term "restricted assets" refers primarily to certain funds established under various bond indentures whose use is restricted for the following purposes:

- Debt Service
- Debt Service Reserves
- Construction
- Maintenance Escrow
- Solids Handling Sinking Fund

The increase of \$0.4 million in restricted assets between fiscal year 2017 and fiscal year 2018 is due to an increase to the debt service reserve fund related to revenue bonds and State Clean Water Fund obligations and an increase in the Solids Handling fund for capital expenditures at the incinerator.

The GNHWPCA invests these restricted assets in investments as allowed by the Indenture, for example, depository accounts in direct obligations of the federal or state governments (or agencies) or in guaranteed investment contracts.

Other Non-Current Assets

Other non-current assets decreased \$1.3 million or 13.1% to \$8.3 million from \$9.6 million for fiscal year 2018. The decrease is directly related to the reduction of the long-term portion of the receivable from the City of New Haven and the receivable from contract operator settlement.

Current Liabilities

The decrease of \$0.4 million in current liabilities from fiscal year 2017 to fiscal year 2018 is primarily attributed to a reduction in accrued interest payable of \$1.7 million due to the closing of Clean Water Fund project 441-C in September 2017 offset by an increase in accounts payable and accrued expenses of \$0.5 million and the increase of the current portion in long term debt in the amount of \$0.8 million.

Non-Current Liabilities

Non-current liabilities decreased by \$7.5 million from fiscal year 2017 to fiscal year 2018. This is primarily due to an reduction in net pension liability and long term debt payable at June 30, 2018. Additional information on non-current liabilities is presented in Note 6 and Note 9.

Net Position

By far the largest portion of the GNHWPCA's net position of \$127.5 million, 72% or \$91.7 million reflects our investment in capital assets (e.g. land, buildings, machinery, equipment and infrastructure) in the Constituent Municipalities served by the Authority. An additional portion of the Authority's net position \$2.7 million represents resources that are subject to external restrictions to the requirement of the indenture. The remaining balance of the unrestricted net position \$32.4 million may be used to meet the Authority's ongoing obligations and \$0.7 million has been designated for future debt service.

Total net position increased by \$7.2 million or 6.0% to \$127.5 million for fiscal year 2018 from \$120.3 million in fiscal year 2017 as a result of operations and the Authority's investment in capital assets.

THE GNHWPCA'S CUSTOMER BASE

The GNHWPCA serves a population of almost 201,000 users; the customer base is primarily residential and commercial. Of its approximately 50,000 customers, 46,500 are residential and approximately 3,500 are commercial, industrial and public authorities.

LIQUIDITY AND CAPITAL RESOURCES

In fiscal year 2018 the Authority generated \$44.9 million in total operating revenues and \$0.7 million from investment and other earnings. These amounts were used to pay operations and maintenance of \$25.2 million and to fund debt service of \$12.4 million (\$7.3 million principal and \$5.1 million interest).

The Authority funds its program of capital improvements largely through debt financing and capital contributions from the CWF program and through the issuance of revenue bonds.

CREDIT RATING

GNHWPCA's credit ratings for its bonds are AA by Standard & Poor's, A1 by Moody's and A+ by Fitch Investors Service

FINANCIAL STATEMENT PRESENTATION

The GNHWPCA financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

REQUEST FOR INFORMATION

This financial report is designed to provide a general overview of the Greater New Haven Water Pollution Control Authority's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed in writing to the Director of Finance & Administration, Greater New Haven Water Pollution Control Authority, 260 East Street, New Haven, Connecticut 06511.

Basic Financial Statements

Greater New Haven Water Pollution Control Authority

**Statements of Net Position
June 30, 2018 and 2017**

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 42,366,987	\$ 38,417,620
Accounts receivable, less allowance for doubtful accounts of \$3,796,356 and \$3,981,028 in 2018 and 2017, respectively	8,122,122	7,392,611
City of New Haven receivable	760,775	750,286
Other current assets	114,274	120,983
Total current assets	51,364,158	46,681,500
Noncurrent assets:		
Restricted assets	13,148,826	12,781,054
Due from settlement	2,131,396	2,631,396
City of New Haven receivable	6,214,009	6,973,025
Capital assets, net of accumulated depreciation and amortization	228,732,494	231,347,347
Total noncurrent assets	250,226,725	253,732,822
Total assets	301,590,883	300,414,322
Deferred outflows of resources		
Deferred pension expense	1,819,221	3,439,669
Deferred amounts on refunding	3,572,525	3,924,068
Total deferred outflows of resources	5,391,746	7,363,737
Liabilities		
Current liabilities:		
Accounts payable	3,745,595	3,444,251
Accrued interest	1,417,505	3,106,847
Accrued expenses	1,802,195	1,697,381
Retainage payable	123,721	21,651
Current portion of long-term debt	7,960,814	7,169,824
Contribution payable to state	983,660	1,032,843
Total current liabilities	16,033,490	16,472,797
Noncurrent liabilities:		
Net pension liability	4,877,689	5,948,997
Long-term debt, less current portion	158,262,526	164,677,991
Total noncurrent liabilities	163,140,215	170,626,988
Total liabilities	179,173,705	187,099,785
Deferred Inflows of Resources		
Deferred pension credit	301,730	388,206
Total deferred inflows of resources	301,730	388,206
Net position		
Net investment in capital assets	91,680,569	91,092,175
Restricted:		
Debt service	1,602,167	1,882,846
Escrow	1,120,971	908,349
Unrestricted	32,413,578	25,716,789
Unrestricted – designated for debt service reserve	689,909	689,909
Total net position	\$ 127,507,194	\$ 120,290,068

See notes to financial statements.

Greater New Haven Water Pollution Control Authority

**Statements of Revenues and Expenses and Changes in Net Positions
Years Ended June 30, 2018 and 2017**

	2018	2017
Operating revenues:		
Residential	\$ 27,574,363	\$ 26,158,080
Commercial and industrial	11,264,860	10,208,269
Municipal	1,675,181	1,464,207
Delinquent interest and lien fees	1,280,988	1,317,929
Outside sludge disposal	278,915	273,476
Other	2,697,613	2,089,721
Credit for bad debts	86,768	158,716
Total operating revenues	44,858,688	41,670,398
Operating expenses:		
Operation and maintenance	25,199,607	22,383,933
Depreciation and amortization	9,347,992	9,303,442
Total operating expenses	34,547,599	31,687,375
Operating income	10,311,089	9,983,023
Nonoperating income (expense):		
Other income	147,609	162,709
Interest income	530,192	348,771
Interest expense	(5,096,577)	(3,849,131)
Total nonoperating income (expense)	(4,418,776)	(3,337,651)
Income before capital contributions	5,892,313	6,645,372
Capital contributions	1,324,813	2,019,214
Change in net position	7,217,126	8,664,586
Net position, beginning of year	120,290,068	111,625,482
Net position, end of year	\$ 127,507,194	\$ 120,290,068

See notes to financial statements.

Greater New Haven Water Pollution Control Authority

Statements of Cash Flows Years Ended June 30, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Receipts from customers and users	\$ 43,629,177	\$ 42,341,416
Payments to suppliers	(16,021,071)	(18,892,919)
Payments to employees	(8,250,118)	(7,830,034)
Net cash provided by operating activities	19,357,988	15,618,463
Cash flows from capital and related financing activities:		
Proceeds from notes payable	44,113,512	8,715,549
Principal payments on debt (includes paydown/defeasance of \$41,788,726 and \$3,090,115 in 2018 and 2017, respectively)	(49,047,975)	(8,516,577)
Interest paid on debt	(7,124,388)	(3,594,510)
Proceeds from City of New Haven	748,527	758,591
Proceeds from settlement	1,000,000	1,000,000
Proceeds received from capital contributions	1,324,813	2,019,214
Acquisition and construction of capital assets	(6,733,139)	(15,776,546)
Net cash used in capital and related financing activities	(15,718,650)	(15,394,279)
Cash flows from non-capital activities:		
Other income	147,609	162,709
Cash flows from investing activities:		
Interest received	530,192	348,771
Net increase in cash and cash equivalents	4,317,139	735,664
Cash and cash equivalents:		
Beginning	51,198,674	50,463,010
Ending	<u>\$ 55,515,813</u>	<u>\$ 51,198,674</u>
Reported on statement of net position as follows:		
Unrestricted cash and cash equivalents	<u>\$ 42,366,987</u>	<u>\$ 38,417,620</u>
Restricted assets	<u>\$ 13,148,826</u>	<u>\$ 12,781,054</u>
Reconciliation of operating income to net cash		
Provided by operating activities:		
Operating income	\$ 10,311,089	\$ 9,983,023
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	9,347,992	9,303,442
(Credit) for bad debts	(86,768)	(158,716)
Changes in assets and liabilities:		
(Increase) decrease in accounts receivable	(1,142,743)	829,734
Decrease (increase) in other assets	6,709	(7,967)
Increase (decrease) in accounts payable and retainage	403,414	(4,782,231)
(Decrease) increase in other liabilities	(1,120,491)	2,605,720
Decrease (increase) in deferred outflows of resources	1,620,448	(1,890,252)
Decrease in deferred inflows of resources	(86,476)	(261,771)
Increase (decrease) in accrued expenses	104,814	(2,519)
Net cash provided by operating activities	\$ 19,357,988	\$ 15,618,463

See notes to financial statements.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 1. Reporting Entity and Summary of Significant Accounting Policies

Reporting entity: The Greater New Haven Water Pollution Control Authority (the GNHWPCA or the Authority) was organized in 2005 as a political subdivision of the State of Connecticut (the State), established and created for the performance of an essential public and governmental function. It was created as a regional water pollution control authority under Connecticut Public Act 95-329, subsequently enacted as Title 22a, Sections 500 to 519 of the Connecticut General Statutes (Statutes), as amended (the Act). The GNHWPCA was created pursuant to the Act by concurrent ordinances of the City of New Haven (City) and the Towns of Hamden, East Haven and Woodbridge (the Constituent Municipalities). Under the Act, the GNHWPCA is empowered to purchase, own and operate a public sewer system; to levy assessments and sewer use fees; to place liens on real estate to secure such assessments; and to issue revenue bonds. The GNHWPCA is also eligible for grants and loans under the State Clean Water Fund (CWF) program. Under the by-laws of the GNHWPCA, a governing Board of Directors comprised of representatives of the Constituent Municipalities was established.

Accounting principles generally accepted in the United States of America (GAAP) require that the reporting entity include organizations for which the nature and significance of their relationship with the primary entity are such that their exclusion would cause the reporting entity's financial statements to be misleading or incomplete. This criterion has been considered and there are no agencies or entities that should be, but are not, combined with the financial statements of the GNHWPCA.

In 2005, the GNHWPCA entered into an Asset Purchase Agreement (the Agreement) with the Constituent Municipalities. Under the Agreement, the Authority acquired ownership of their wastewater system assets and assumed certain obligations of the Constituent Municipalities.

Significant accounting policies are as follows:

Basis of accounting: The GNHWPCA utilizes the accrual basis of accounting, as required of proprietary funds under GAAP, under which revenues are recognized when earned and expenses are recognized when incurred.

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

Cash and cash equivalents: For purposes of reporting cash flows, the GNHWPCA considers all unrestricted and restricted highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

Accounts receivable: Accounts receivable are carried at the original amount billed less an estimate made for doubtful accounts based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by identifying troubled accounts and by using historical experience applied to an aging of accounts. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded as revenue when received.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 1. Reporting Entity and Summary of Significant Accounting Policies (Continued)

Capital assets: Property, plant and equipment are stated at cost when purchased and acquisition value when contributed. Normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized. Assets being constructed over a period of time are classified as construction in progress. No depreciation is computed on these assets until they are complete and placed into service. Property, plant and equipment are depreciated utilizing the following estimated useful lives:

	Years
Land improvements	15-50
Buildings and improvements	40
Machinery and equipment	5-20
Sewer lines	10-50
Vehicles	5

GNHWPCA capitalizes interest during the period of construction.

Debt issuance costs and bond premiums: Costs incurred in connection with issuance of long-term debt, consisting primarily of legal fees, are expensed as incurred. Bond premiums have been deferred and are being amortized over the life of the related debt.

Net position: Net position is classified in the following categories:

Net investment in capital assets: The net investment in capital assets component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, notes, or other borrowings that are attributable to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included in this component of net position.

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

Unrestricted net position: This category represents the amount not restricted for any project or other purpose.

Revenues: Revenues are based on the GNHWPCA authorized minimum charges and rates per hundred cubic feet (CCF) applied to customer consumption of water. Revenues are recognized when utility services are provided.

The GNHWPCA bills customers based on actual water consumption used during the previous calendar year (2016), with an adjustment for seasonal use for residential customers who use less than 300 CCF's per year.

Interest is levied on accounts that are 30 days past due. The GNHWPCA has the authority to file liens on past due accounts.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 1. Reporting Entity and Summary of Significant Accounting Policies (Continued)

Operating revenues and expenses: The GNHWPCA distinguishes operating revenues and expenses from non-operating. Operating revenues result from charges to customers for wastewater disposal and related services. Operating expenses include the cost of operations, maintenance, sales and service, administrative expenses and depreciation. All revenues and expenses not meeting this definition are reported as non-operating or capital contributions.

Capital contributions: Capital contributions are recognized when eligibility requirements are met. Capital contributions consist principally of grant funding received under the CWF Program, contributions received from the City under a cost sharing agreement for CWF projects and contributions received from the State Department of Transportation for costs incurred to move infrastructure.

Compensated absences: Under the terms of two collective bargaining agreements, employees are awarded vacation on January 1 of each year based on years of service, and can accumulate up to 40 days of unused vacation. Employees are also allowed sick leave, which is earned monthly, and can accumulate up to 150 days. Upon termination of employment without eligibility for retirement, each employee is paid for unused vacation. Retiring employees are paid for 100% of their unused vacation and unused sick leave up to 90 days. Such balances are recorded as a component of accrued expenses in the statement of net position.

Vested sick leave and accumulated vacation leave is recognized as an expense and liability as the benefits accrue to employees.

Net pension liability: The net pension liability is measured as the portion of the actuarial present value of projected benefits that is attributed to past periods of employee service (total pension liability), net of the pension plan's fiduciary net position. The pension plan's fiduciary net position is determined using the same valuation methods that are used by the pension plan for purposes of preparing its statement of fiduciary net position. The net pension liability is measured as of a date (measurement date) no earlier than the end of the employer's prior fiscal year, consistently applied from period to period.

Deferred outflows/inflows of resources: In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period or periods and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Authority reports a deferred charge on refunding and deferred outflows related to pension in the statements of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. A deferred outflow of resources related to pension results from differences between expected and actual experience, changes in assumptions or other inputs. These amounts are deferred and included in pension expense in a systematic and rational manner.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period or periods and so will not be recognized as an inflow of resources (revenue) until that time. The Authority reports a deferred inflow of resources related to pensions in the statements of net position. A deferred inflow of resources related to pension results from differences between expected and actual experience, changes in assumptions or other inputs. These amounts are deferred and included in pension expense in a systematic and rational manner.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 1. Reporting Entity and Summary of Significant Accounting Policies (Continued)

Fair value: The GNHWPCA uses fair value measurements to record fair value adjustments to certain assets and to determine fair value disclosures. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is best determined based upon quoted market prices. However, in certain instances, there are no quoted market prices for certain assets or liabilities. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. Accordingly, the fair value estimates may not be realized in an immediate settlement of the asset or liability.

Fair value measurements focus on exit prices in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions. If there has been a significant decrease in the volume and level of activity for the asset or liability, a change in valuation technique or the use of multiple valuation techniques may be appropriate. In such instances, determining the price at which willing market participants would transact at the measurement date under current market conditions depends on the facts and circumstances and requires the use of significant judgment.

The GNHWPCA's fair value measurements are classified into a fair value hierarchy based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value.

The three categories within the hierarchy are as follows:

Level 1: Quoted prices in active markets for identical assets and liabilities.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, interest rates and yield curves observable at commonly quoted intervals, implied volatilities, credit spreads, and market-corroborated inputs.

Level 3: Unobservable inputs shall be used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flows methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment.

See Note 2 for additional information regarding fair value.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 2. Cash, Cash Equivalents and Investments

Deposits: The GNHWPCA's custodial credit risk policy for deposits conforms to the State requirement that each depository maintain segregated collateral in an amount equal to a defined percentage of its public deposits based upon the bank's risk based capital ratio.

Investments: The GNHWPCA does not have a formal credit risk policy for investments; however, the GNHWPCA adheres to the Statutes which, in general, allows the GNHWPCA to invest in obligations of the United States of America or United States government sponsored corporations, in shares or other interests in any custodial arrangement, pool, or no-load, open-end management type investment company or investment trust (as defined), in obligations of any state or political subdivision rated within the top two rating categories of any nationally recognized rating service, or in obligations of the state or political subdivision rated within the top three rating categories of any nationally recognized rating service.

Investments in guaranteed investment contracts (GIC) are recorded at contract value, which approximate fair value, and are not part of the fair value hierarchy. The value of the GIC at June 30, 2018, is as follows:

Investments at contract value:

Guaranteed investment contract	<u>\$ 5,896,500</u>
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Interest rate risk: The GNHWPCA does not have a policy for interest rate risk. This is the risk that changes in market interest rates will adversely affect the fair value of the investment. Generally, the longer the maturity of the investment, the greater the sensitivity of its fair value to changes in market interest rates. The GIC matures August 15, 2035.

Credit risk: Generally, credit risk is the risk that an issuer of a debt type investment will not fulfill its obligation to the holder of the investment. This is measured by assignment of a rating by a nationally recognized rating organization. The GIC is not rated.

Concentrations: The GNHWPCA's policy is to maintain a diversified portfolio to minimize the risk of loss resulting from over-concentration of assets in a specific issuer. The GIC is with one issuer.

Custodial credit risks:

Deposits: The GNHWPCA is subject to custodial credit risk. This is the risk that, in the event of failure of a depository financial institution, an entity will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. At June 30, 2018 and 2017, \$12,365,791 and \$12,602,925 of the GNHWPCA's bank balance of \$50,941,559 and \$46,339,540, respectively, was uninsured and uncollateralized.

Investments: This is the risk that in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, an entity will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 2. Cash, Cash Equivalents and Investments (Continued)

A summary of balances as of June 30 consist of the following:

	2018		
	Unrestricted	Restricted	Total
Deposits	\$ 42,366,987	\$ 7,252,326	\$ 49,619,313
Guaranteed investment contract	-	5,896,500	5,896,500
	<u>\$ 42,366,987</u>	<u>\$ 13,148,826</u>	<u>\$ 55,515,813</u>

	2017		
	Unrestricted	Restricted	Total
Deposits	\$ 38,417,620	\$ 6,884,554	\$ 45,302,174
Guaranteed investment contract	-	5,896,500	5,896,500
	<u>\$ 38,417,620</u>	<u>\$ 12,781,054</u>	<u>\$ 51,198,674</u>

Note 3. Receivable

The Authority has a receivable from the City with respect to a cost sharing agreement entered into in conjunction with the State Department of Energy and Environmental Protections approved long term control plan for the CWF program. Under the terms of the cost sharing agreement, the City agreed to reimburse the GNHWPCA for 40% of the debt service costs associated with the funding received. Included in the balance at June 30, 2018, are certain outstanding obligations assumed pursuant to the Agreement. The terms associated with this receivable mirror the underlying terms of the CWF obligations of the GNHWPCA. The total receivable at June 30, 2018, is \$6,974,784 of which \$760,775 is current. The total receivable at June 30, 2017 was \$7,723,311. The City made principal payments of \$748,527 and \$758,591 during the years ended June 30, 2018 and 2017, respectively.

The Authority also has a receivable of approximately \$2,600,000 of which \$500,000 is current, related to a \$6,000,000 settlement of a lawsuit with a former contract operator. Installment payments will be made through 2023.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 4. Capital Assets

Capital assets activity for the year ended June 30, was as follows:

	2018				
	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Capital assets, not being depreciated:					
Land	\$ 2,967,937	\$ 51,713	\$ -	\$ -	\$ 3,019,650
Construction in progress	5,167,760	3,363,540	-	(623,521)	7,907,779
Total capital assets, not being depreciated	8,135,697	3,415,253	-	(623,521)	10,927,429
Capital assets, being depreciated:					
Buildings and improvements	45,733,367	274,834	-	-	46,008,201
Machinery and equipment	96,042,037	1,237,532	-	623,521	97,903,090
Furniture and fixtures	3,275,561	17,315	-	-	3,292,876
Infrastructure	131,095,031	1,418,647	-	-	132,513,678
Vehicles	1,159,973	369,558	-	-	1,529,531
Total capital assets, being depreciated	277,305,969	3,317,886	-	623,521	281,247,376
Less accumulated depreciation for:					
Buildings and improvements	15,928,497	1,545,218	-	-	17,473,715
Machinery and equipment	12,871,817	4,781,539	-	-	17,653,356
Furniture and fixtures	2,482,702	173,433	-	-	2,656,135
Infrastructure	22,086,274	2,652,790	-	-	24,739,064
Vehicles	725,029	195,012	-	-	920,041
Total accumulated depreciation	54,094,319	9,347,992	-	-	63,442,311
Total capital assets, being depreciated, net	223,211,650	(6,030,106)	-	623,521	217,805,065
Total capital assets, net	\$ 231,347,347	\$ (2,614,853)	\$ -	\$ -	\$ 228,732,494

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 4. Capital Assets (Continued)

Capital assets activity for the year ended June 30, was as follows:

	2017				
	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Capital assets, not being depreciated:					
Land	\$ 2,578,488	\$ 389,449	\$ -	\$ -	\$ 2,967,937
Construction in progress	68,431,359	12,314,671	-	(75,578,270)	5,167,760
Total capital assets, not being depreciated	71,009,847	12,704,120	-	(75,578,270)	8,135,697
Capital assets, being depreciated:					
Buildings and improvements	44,701,228	308,521	-	723,618	45,733,367
Machinery and equipment	24,984,208	1,482,599	-	69,575,230	96,042,037
Furniture and fixtures	3,258,096	17,465	-	-	3,275,561
Infrastructure	124,673,331	1,142,278	-	5,279,422	131,095,031
Vehicles	1,050,405	121,563	(11,995)	-	1,159,973
Total capital assets, being depreciated	198,667,268	3,072,426	(11,995)	75,578,270	277,305,969
Less accumulated depreciation for:					
Buildings and improvements	14,389,955	1,538,542	-	-	15,928,497
Machinery and equipment	8,183,342	4,688,475	-	-	12,871,817
Furniture and fixtures	2,149,308	333,394	-	-	2,482,702
Infrastructure	19,464,343	2,621,931	-	-	22,086,274
Vehicles	615,924	121,100	(11,995)	-	725,029
Total accumulated depreciation	44,802,872	9,303,442	(11,995)	-	54,094,319
Total capital assets, being depreciated, net	153,864,396	(6,231,016)	-	75,578,270	223,211,650
Total capital assets, net	\$ 224,874,243	\$ 6,473,104	\$ -	\$ -	\$ 231,347,347

Included in construction in progress is \$20,863 and \$1,339,767 of capitalized interest at June 30, 2018 and 2017, respectively.

Note 5. Restricted Assets

Pursuant to the 2005 Series A Bond Indenture and the Agreement, the 2008 Series A Bond Indenture, 2012 Series B Revenue Bond Indenture, the 2014 Series B Revenue Bond, the 2016 Series A Revenue Bond, as well as certain legal settlements, certain funds are required to be maintained for purposes specified in the applicable agreement.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 5. Restricted Assets (Continued)

At June 30, GNHWPCA's restricted assets were being maintained for the following purposes:

	2018	2017
Debt service reserve fund – Revenue Bonds and CWF*	\$ 9,590,416	\$ 9,045,016
Unspent construction funds from Revenue Bonds*	835,272	944,843
Debt service fund	1,602,167	1,882,846
Solids handling maintenance escrow	1,054,471	841,849
Maintenance escrow	66,500	66,500
	<u>\$ 13,148,826</u>	<u>\$ 12,781,054</u>

* Unspent bond proceeds

These funds come with a maximum debt service requirement, and minimum percentages of these issuances that the GNHWPCA is required to maintain at all times:

	Original Bond Issuance	Maximum Debt Service Requirement	Debt Service Reserve Fund Balance	DRSF Requirement*	Indenture
2005 Series A Rev Bonds	\$ 325,000	\$ 333,125	\$ 32,500	100%	1st
2007 Series A CWF 563-DC	8,961,758	548,910	281,507	50%	3rd
2007 Series C CWF Consolidated	20,560,842	2,199,723	1,110,804	50%	6th
2007 Series E CWF 463-CD1	934,984	61,896	31,743	50%	8th
2008 Series B (CREBS)	2,500,000	187,000	191,713	100%	10th
2009 Series C CWF 206-CSL	3,952,524	237,710	120,039	50%	13th
2011 Series D CWF 581-C1	6,121,755	368,171	61,971	2 months *	16th
2012 Series B Rev Bonds	9,295,000	538,800	540,549	100%	18th
2013 Series A CWF 627-C	656,236	39,467	6,642	2 months *	20th
2013 Series C CWF 441-D	3,571,120	214,772	36,147	2 months *	22nd
2013 Series D CWF 581-C2	6,276,714	377,490	63,532	2 months *	23rd
2014 Series B Rev Bond Refunding	77,510,000	5,497,675	5,497,675	100%	25th
2016 Series A Rev Bond Refunding	15,550,000	1,055,150	1,061,815	100%	27th
2016 Series B CWF 676-C	3,160,728	190,091	31,987	2 months *	28th
2017 Series A CWF 441-C	43,656,934	518,348	521,792	2 months *	29th
Total	<u>\$ 203,033,595</u>	<u>\$ 12,368,328</u>	<u>\$ 9,590,416</u>		

*Per State, a minimum of two month debt service payments is required to be maintained.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 6. Long-Term Debt

Long-term debt consists of the following at June 30:

	2018	2017
2005 Series A Revenue Bonds		
\$26,085,000 Term Bonds, issued August 2005, interest payable semi-annually at 5.0%, due August 15, 2035.	\$ 325,000	\$ 325,000
2008 Series B Clean Renewable Energy Bonds (CREBs)		
\$2,500,000 Term Bonds, issued April 2008, interest payable quarterly at 3.3% – 5.73%, due in annual principal amounts, beginning December 2008, of \$166,667, through December 2022.	833,333	1,000,000
2012 Series B Revenue Bonds		
\$9,295,000 of Revenue Bonds, issued July 12, 2012. The bonds bear interest of 2.00% to 4.180% and mature from July 12, 2013 to July 12, 2042.	8,325,000	8,530,000
2014 Series B Revenue Refunding Bonds		
\$62,265,000 of Revenue Bonds, issued July 10, 2014. The bonds bear interest of 2.00% to 5.00% and mature from July 10, 2014 to August 15, 2032.	51,845,000	54,205,000
\$15,245,000 Term Bond, issued July 2014, interest payable semi-annually at 4.00%, due August 15, 2035.	15,245,000	15,245,000
2016 Series A Revenue Refunding Bonds		
\$15,550,000 of Revenue Bonds, issued March 8, 2016. The bonds bear interest of 3.00% to 5.00% and mature from March 8, 2017 to November 15, 2037.	14,790,000	15,235,000
Notes Payable and Other		
State of Connecticut Clean Water Fund obligation, due in monthly principal amounts of \$32,000 to \$146,000, plus interest at 2%, through 2026(A).	8,594,496	9,927,571
State of Connecticut Clean Water Fund obligation, due in annual principal payments amounts of \$169,000 to \$233,000, plus interest at 2%, through 2029 (A).	2,233,559	2,424,523

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 6. Long-Term Debt (Continued)

Notes Payable and Other (Continued)	2018	2017
State of Connecticut Clean Water Fund obligation, due in annual principal payment amounts of \$183,000 to \$361,000, plus interest at 2%, through 2030 (A).	\$ 4,068,972	\$ 4,352,680
State of Connecticut Clean Water Fund obligation, due in annual principal payments amounts of \$152,000 to \$209,000, plus interest of 2%, through 2033 (A).	2,741,400	2,899,635
State of Connecticut Clean Water Fund obligation, due in annual principal payments amounts of \$266,000 to \$373,000, plus interest of 2%, through 2033 (A).	4,888,438	5,165,152
State of Connecticut Clean Water Fund obligation, due in annual principal payments amounts of \$27,613 to \$50,916, plus interest of 2%, through 2032.	491,480	520,798
State of Connecticut Clean Water Fund obligation, due in monthly principal payments amounts of \$10,854 to \$15,814, plus interest of 2%, through 2036.	2,860,401	2,991,856
State of Connecticut Clean Water Fund obligations, due in monthly principal payment amounts of \$186,568, plus interest at 2% (A).	41,977,821	-
State of Connecticut Clean Water Fund Interim obligations, bearing interest at 2% (A).	-	41,332,148
Total long-term debt	159,219,900	164,154,363
Unamortized bond Premium	7,003,440	7,693,452
	166,223,340	171,847,815
Less current portion	7,960,814	7,169,824
	\$ 158,262,526	\$ 164,677,991

(A) Pursuant to the Agreement, the GNHWPCA assumed outstanding obligations in connection with the CWF Program approved long term control program. Additionally, the GNHWPCA entered into a cost sharing agreement with the City with respect to CWF Program obligations issued to the GNHWPCA.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 6. Long-Term Debt (Continued)

The 2005 Series A Revenue Bonds are subject to mandatory sinking fund redemption requirements prior to maturity at a redemption price equal to the principal amount plus accrued interest to the date upon which the redemption takes place. For purposes of the \$20,310,000 and \$26,085,000 Term Bonds, the annual date of redemption begins on November 15, 2026 and August 31, 2031, respectively. Amounts were refunded with the Series B 2014 Revenue Bonds, leaving \$325,000 due as of 2018.

The 2012 Series B Revenue Bonds are subject to mandatory sinking fund redemption requirements prior to maturity at a redemption price equal to the principal amount plus accrued interest to the date upon which this redemption takes place. For purposes of the \$2,090,000 and \$7,205,000 Term bonds, the annual date of redemption begins on January 1, 2013 and July 1, 2024, respectively. Mandatory sinking fund redemption requirements range from \$240,000 to \$515,000.

The 2014 Series B Revenue Refunding Bonds are subject to mandatory sinking fund redemption requirements prior to maturity at a redemption price equal to the principal amount plus accrued interest to the date upon which this redemption takes place. For purposes of the \$62,265,000 and \$15,245,000 Term Bonds, the annual date of redemption begins on July 1, 2015 and July 1, 2036, respectively. Mandatory sinking fund redemption requirements range from \$2,290,000 to \$5,075,000.

The 2016 Series A Revenue Refunding Bonds are subject to mandatory sinking fund redemption requirements prior to maturity at a redemption price equal to the principal amount plus accrued interest to the date upon which this redemption takes place. For purposes of the \$15,550,000 Term Bond, the annual date of redemption begins on November 15, 2026.

Additionally, the 2005, 2008, 2012, 2014, and 2016 bond indentures contain certain restrictive and financial covenants, including a rate covenant which requires the GNHWPCA to set rates to provide for 100% of operating expenses and a Debt Service Coverage ratio of 115%.

The annual debt service requirements on the above debt at June 30, 2018, are as follows:

	Principal	Interest	Total
2019	\$ 7,960,814	\$ 5,294,076	\$ 13,254,890
2020	8,145,070	5,071,052	13,216,122
2021	8,333,984	4,825,676	13,159,660
2022	8,542,327	4,559,772	13,102,099
2023	8,638,530	4,285,663	12,924,193
2024-2028	40,657,328	17,447,642	58,104,970
2029-2033	43,228,147	9,866,346	53,094,493
2034-2038	31,328,700	2,369,408	33,698,108
2039-2043	2,385,000	245,900	2,630,900
Total	<u>\$ 159,219,900</u>	<u>\$ 53,965,535</u>	<u>\$ 213,185,435</u>

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 6. Long-Term Debt (Continued)

Long-term liability activity for the years ended June 30, was as follows:

	2018				
	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue obligation bonds	\$ 94,540,000	\$ -	\$ 3,176,667	\$ 91,363,333	\$ 3,281,667
Notes payable	28,282,215	43,656,934	4,082,582	67,856,567	4,679,147
Interim obligations	41,332,148	456,578	41,788,726	-	-
Net pension liability	5,948,997	-	1,071,308	4,877,689	-
Total long-term liabilities	<u>\$ 170,103,360</u>	<u>\$ 44,113,512</u>	<u>\$ 50,119,283</u>	<u>\$ 164,097,589</u>	<u>\$ 7,960,814</u>

	2017				
	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue obligation bonds	\$ 97,511,667	\$ -	\$ 2,971,667	\$ 94,540,000	\$ 3,176,667
Notes payable	27,576,282	3,160,728	2,454,795	28,282,215	2,403,459
Interim obligations	38,867,442	5,554,821	3,090,115	41,332,148	1,589,698
Net pension liability	3,294,094	2,654,903	-	5,948,997	-
Total long-term liabilities	<u>\$ 167,249,485</u>	<u>\$ 11,370,452</u>	<u>\$ 8,516,577</u>	<u>\$ 170,103,360</u>	<u>\$ 7,169,824</u>

Prior year defeasance: In prior years, the Authority has defeased various bond issues by creating separate irrevocable trust funds. New debt has been issued and the proceeds have been used to purchase U.S. government securities that were placed in the trust funds. The investments and fixed earning from the investments are sufficient to fully service the defeased debt until the debt is called or matures. For financial reporting purposes, the debt has been considered defeased and therefore removed as a liability from the Authority's financial statements. At June 30, 2018 and June 30, 2017, the defeased bonds outstanding were \$15,695,000 and \$16,165,000, respectively, which are to be called and redeemed on November 15, 2018.

Note 7. Interest Cost

The total interest cost incurred during the years ended June 30, 2018 and 2017, was \$5,117,440 and \$5,188,898, respectively, of which \$20,863 and \$1,339,767, respectively, were capitalized as part of the cost of various capital projects and offset by amortization of debt issuance costs and bond premiums and discounts, respectively.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 8. Risk Management

The GNHWPCA maintains commercial insurance for various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Claims have not exceeded coverage amounts in the last three fiscal years.

Note 9. Retirement Plan

Defined Benefit Pension Plan:

Plan description: Certain employees of the GNHWPCA participate in a cost-sharing multiple-employer defined benefit pension plan administered by the State of Connecticut Employees' Retirement System (MERS or the System). Under a cost-sharing plan, pension obligations for employees of all employers are pooled and plan assets are available to pay the benefits of the employees of any participating employer providing pension benefits through the plan, regardless of the status of the employers' payment of its pension obligation to the plan. The plan provides retirement and disability benefits and death benefits to plan members and beneficiaries.

MERS issues a publicly available financial report that includes financial statements and required supplementary information for the plans. The report may be obtained by writing to the State of Connecticut Retirement and Benefit Services Division, Office of the State Controller, 55 Elm Street, Hartford, CT 06106.

Benefit provisions: Plan provisions are set by the Statutes. MERS provides retirement benefits, as well as death and disability benefits. Membership is mandatory for all regular full time employees of participating departments.

Average final compensation: Average of the three highest paid years of service.

Normal form of benefit: life annuity.

Service retirement allowance:

Condition for allowance: Age 55 and 5 years of continuous service, or 15 years of active aggregate service, or 25 years of aggregate service. Compulsory retirement at age 65 for police and fire members.

Amount of allowance: For members not covered by Social Security: 2% of average final compensation times years of service. For members covered by Social Security: 1-1/2% of the average final compensation not in excess of the year's breakpoint plus 2% of average final compensation in excess of the year's breakpoint, times years of service. The maximum benefit is 100% of average final compensation and the minimum benefit is \$1,000 annually. Both the minimum and the maximum include Workers Compensation and Social Security benefits. If any member covered by Social Security retires before age 62, his/her benefit until he/she reaches age 62 or receives a Social Security disability award is computed as if he/she were not under Social Security.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 9. Retirement Plan (Continued)

Disability retirement allowance:

Condition for allowance: 10 years of service and permanently and totally disabled from engaging in any gainful employment in the service of the Authority.

Amount of allowance: Calculated as a service retirement allowance based on compensation and service to the date of the disability.

Service connected disability:

Condition for allowance: Totally and permanently disabled from engaging in any gainful employment in the service of the Authority provided such disability has arisen out of and in the course of his/her employment with the Authority. Disability due to hypertension or heart disease, in the case of firemen and policemen, is presumed to have been suffered in the line of duty.

Amount of allowance: Calculated as a service retirement allowance based on compensation and service to the date of the disability with a minimum benefit (including worker's compensation benefits) of 50% of compensation at the time of the disability.

Vesting retirement allowance:

Condition for allowance: 5 years of continuous or 15 years of active aggregate service.

Amount of allowance: Calculated as a service retirement allowance on the basis of average final compensation and service to the date of termination. Deferred to normal retirement age, or an actuarially reduced allowance may begin at the time of separation.

Death benefit:

Condition for benefit: Eligible for service, disability retirement, or vested allowance, and married for at least 12 months preceding death.

Amount of benefit: Computed on the basis of the member's average final compensation and creditable service at date of death, payable to the spouse. Benefit is equal to 50% of the average of the life annuity allowance and the reduced 50% joint and survivor allowance.

Return of deductions: Upon the withdrawal of a member the amount of his accumulated deductions is payable to him/her on demand, with 5% interest from July 1, 1983.

Optional benefits: Prior to the retirement, a member may elect to convert his retirement allowance into a benefit of equivalent actuarial value in accordance with one of the optional forms described below: 1. A reduced retirement allowance payable during his life with the provision that after his death the beneficiary designated by him at the time of his retirement; or 2. A reduced retirement allowance payable during his life with the provision that after his death an allowance of one half of his reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement; 3. A reduced retirement allowance payable during his life with a guarantee of 120 or 240 monthly payments to the member or his designated beneficiary.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 9. Retirement Plan (Continued)

Cost-of-living adjustment: For those retired prior to January 1, 2002: (i) the benefits of disabled retirees, service retirees who have reached age 65, and beneficiaries of deceased retirees who would have reached age 65 are adjusted each July 1. The difference between the actual annual yield of the actuarial value of assets on a calendar year basis to a 6% yield is calculated. This difference is the adjustment applied the following July 1. The minimum adjustment is 3% and the maximum is 5%; (ii) The benefits for all others on the roll are adjusted on January 1, 2002, and on each subsequent July 1. The amount of each adjustment is 2.5%. For those retiring on or after January 1, 2002, benefits are adjusted each July 1. The adjustment is 60% of the annual increase in the CPI up to 6%. The minimum annual COLA is 2.5%; the maximum is 6%.

Contributions – by members: For members not covered by Social Security: 5% of compensation. For members covered by the Social Security: 2-1/4% of compensation up to the Social Security taxable wage base plus 5% of compensation, if any, in excess of such base.

By entities: Participating entities make annual contributions consisting of a normal cost contribution, a contribution for the amortization of the net unfunded accrued liability and a prior service amortization payment which covers the liabilities of the System not met by member contributions.

Assumptions: The total pension liability was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Valuation date	July 1, 2016
Actuarial cost method	Entry Age Normal
Amortization method	Level dollar, closed
Remaining amortization period	23 years
Asset valuation method	5-year smoothed market with 20% recognition of investment gains and losses
Investment rate return	8.00%, net of investment related expense
Projected salary increases (3.25%)	4.25-11.00%, including inflation
Mortality	The RP-2000 Combined Mortality Table for annuitants and non-annuitants (set forward one year for males and set back one year for females).

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 9. Retirement Plan (Continued)

The long-term expected rate of return: The long-term expected rate of return on pension plan investments was determined using a lognormal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense 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 asset allocation and most recent best estimates of arithmetic real rates of return for each major asset class are to be provided by the fiduciary of the plan.

Asset Class	Target Allocation	Long-Term Expected Rate of Return
Large cap U.S. equities	16.00%	5.80%
Developed non – U.S. equities	14.00%	6.60%
Emerging markets (non – U.S.)	7.00%	8.30%
Real estate	7.00%	5.10%
Private equity	10.00%	7.60%
Alternative investment	8.00%	4.10%
Fixed income (core)	8.00%	1.30%
High yield bonds	14.00%	3.90%
Emerging market bond	8.00%	3.70%
Inflation linked bonds	5.00%	1.00%
Liquidity fund	3.00%	0.40%
	100.00%	

Discount rate: The discount rate used to measure the total pension liability was 8.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at the actuarially determined rates in future years. Based on those assumptions, the pension 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 net pension liability to changes in the discount rate: The following presents the net pension liability of the System, calculated using the discount rate of 8.00%, as well as what the System’s net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate:

	1% Decrease 7.00%	Current Discount Rate 8.00%	1% Increase 9.00%
Net pension liability	\$ 8,870,423	\$ 4,877,689	\$ 1,488,013
	\$ 8,870,423	\$ 4,877,689	\$ 1,488,013

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 9. Retirement Plan (Continued)

Pension liabilities, pension expense, and deferred outflows of resources and deferred inflows of resources: At June 30, 2018, the GNHWPCA reported a liability of \$4,877,689 for its proportionate share of the net pension liability related to its participation in MERS. The net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. GNHWPCA's proportion of the net pension liability was based on its share of contributions to the MERS for fiscal year 2017 relative to the total expected contributions of all participating employers for that fiscal year. At June 30, 2016 and 2017, GNHWPCA's proportion was 4.075540%.

For the year ended June 30, 2018, GNHWPCA recognized pension expense of \$883,249. At June 30, 2018, GNHWPCA 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	\$ -	\$ (288,409)
Net difference between projected and actual investments earnings	478,450	-
Change in proportion and differences between employer contributions and proportionate share of contributions	633,602	(13,321)
Contributions subsequent to the measurement date	707,169	-
Total	<u>\$ 1,819,221</u>	<u>\$ (301,730)</u>

\$707,169 reported as deferred outflows of resources related to pensions resulting from the GNHWPCA's contributions in fiscal year 2018 subsequent to the measurement date will be recognized as a reduction of the net pension liability for the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Years ending June 30:	
2019	\$ 978,124
2020	564,145
2021	243,480
2022	(268,258)
2023	-
Thereafter	-

The GNHWPCA also recognized a contribution payable to the State of approximately \$983,660 and \$1,032,843 at June 30, 2018 and 2017, respectively.

Note 10. Commitments and Contingencies

The GNHWPCA is a defendant in various litigation, principally involving property damage and other miscellaneous claims. Based upon the advice of legal counsel, management believes that the ultimate resolution of these matters will not have a material adverse effect on the financial condition or the results of operations of the GNHWPCA.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 10. Commitments and Contingencies (Continued)

The Authority executed a 15 year Maintenance Services Agreement with New Haven Residuals, LP (Maintenance Contractor) on September 30, 2013 that went into effect January 4, 2014. The comprehensive agreement with the Maintenance Contractor provides for the maintenance of the East Shore Treatment Plant and pump stations. The agreement establishes performance and reporting requirements for the maintenance of the system, and requires the implementation of the maintenance management program to include preventive, predictive, and corrective maintenance for all components of the system.

The agreement provides for payment of a service fee to the Maintenance Contractor consisting of the following components:

- A fixed component of \$1,930,000 (2014 dollars, adjusted annually);
- Reimbursement for expenditures for maintenance, major repairs, capital costs and outside services up to a project expense limit of \$1,100,000 (2014 dollars, adjusted annually). Amounts expended by the Maintenance Contractor in excess of the limit are paid by the GNHWPCA, subject to a markup due to the Maintenance Contractor if project expense limit exceed \$2,000,000; and
- 50% of the revenues collected by the GNHWPCA from the Fats, Oils and Greases Facility.
- The GNHWPCA is responsible for all utility costs except for natural gas for the maintenance building.

As a result of the new Maintenance Services Contract the Authority assumed the day to day operations of the Treatment Plant and sewer collection system effective January 4, 2014. For fiscal year ended June 30, 2018, the Authority paid operations and maintenance fees totaling \$2,012,350 compared to \$1,954,353 for fiscal year ended June 30, 2017.

The GNHWPCA executed a new 10 year extension on August 25, 2014, with New Haven Residuals, LP (Synagro) for the receipt and disposal of sludge at the East Shore Treatment Plant and operation of the sludge burning incinerator. Under the terms of the new agreement Synagro is responsible for reimbursing the GNHWPCA for the cost of all utilities, except water, associated with the specified services. The agreement provides a payment of a service fee to Synagro to process 6,570 dry tons of sludge with provisions for adjusted fees for defined deviations from that level. The Service Fee is \$385 per dry ton for 2014 subject to annual adjustments for inflation. As of July 1, 2018, the Service Fee is \$380.82 per dry ton subject to annual adjustments for inflation.

Under the terms of the new agreement, Synagro is allowed to solicit sludge from other entities (outside sludge) to utilize the capacity of the on-site incinerator. Synagro is required to pay as a royalty \$35 per dry ton of outside sludge processed to a sinking fund. The GNHWPCA is required to match all such payments into the sinking fund with all combined contributions to be used for any capital projects that exceed a cost of \$20,000. Synagro is responsible for all capital projects costing less than \$20,000. Combined payments to the sinking fund are expected to approximate \$500,000 annually. As of July 1, 2016, Synagro is responsible for any capital projects costing less than \$50,000 and the GNHWPCA is not required to contribute to sinking funds making the expected annual sinking fund payment approximately \$250,000.

At June 30, 2018, the GNHWPCA has approximately \$123,721 of unbilled, ongoing contracts for construction and improvements of its sewer systems. Funding for these projects is primarily being provided by the CWF in the form of loans and grants and through excess revenue bond proceeds.

Greater New Haven Water Pollution Control Authority

Notes to Financial Statements

Note 11. Pronouncements Issued, Not Yet Effective

The Governmental Accounting Standards Board (GASB) has issued several pronouncements that have effective dates that may impact future financial presentations.

Management has not currently determined what, if any, impact implementation of the following statements may have on the financial statements:

GASB Statement No. 83, *Certain Asset Retirement Obligations*. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

GASB Statement No. 87, *Leases*. This Statement improves the accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This Statement defines debt purposes of disclosure in the notes to financial statements as a liability that arises from a contractual obligation to pay cash, or other assets in lieu of cash, to settle a fixed amount established at the date of obligation. The Statement requires additional information related to debt to be disclosed in the notes to financial statements, including unused lines of credit, assets pledged as collateral for the debt, and specified terms in debt agreements related to significant events of default and the resulting financial consequences. The Statement also requires disclosure be provided for direct borrowings and direct placements of debt separate from other forms of debt. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Earlier application is encouraged. The requirements of this Statement should be applied prospectively.

GASB Statement No. 90, *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61*. The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Earlier application is encouraged.

Required Supplementary Information – Unaudited

**Schedule of Contributions – Municipal Employees' Retirement System
Required Supplementary Information – Unaudited
Last Five Fiscal Years**

Measurement Period Ended June 30,	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 707,169	\$ 628,493	\$ 640,404	\$ 740,570	\$ 550,085
Contributions in relation to the actuarially determined contribution	707,169	628,493	640,404	740,570	550,085
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 5,715,345	\$ 5,583,297	\$ 5,349,972	\$ 5,260,359	\$ 3,821,094
Contributions as a percentage of covered-employee payroll	12.37%	11.26%	11.97%	14.08%	14.40%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Authority will present information for those years for which information is available.

Greater New Haven Water Pollution Control Authority

RSI-2

**Schedule of the Authority's Proportionate Share of the Net
Pension Liability – Municipal Employees' Retirement System
Required Supplementary Information – Unaudited
Last Four Fiscal Years****

	2018	2017	2016	2015*
GNHWPCA's proportion of the net pension liability	4.075540%	4.075540%	3.011707%	3.011707%
GNHWPCA's proportionate share of the net pension liability	<u>\$ 4,877,689</u>	<u>\$ 5,948,997</u>	<u>\$ 3,294,094</u>	<u>\$ 2,259,514</u>
GNHWPCA's covered-employee payroll	<u>\$ 5,715,345</u>	<u>\$ 5,583,297</u>	<u>\$ 5,349,972</u>	<u>\$ 5,260,359</u>
GNHWPCA's proportionate share of the net pension liability as a percentage of its covered payroll	<u>85.34%</u>	<u>106.55%</u>	<u>61.57%</u>	<u>42.95%</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>91.68%</u>	<u>88.29%</u>	<u>92.72%</u>	<u>90.48%</u>

* as restated

**This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Authority will present information for those years for which information is available.