

**TOWNSHIP OF NEPTUNE
SEWERAGE AUTHORITY
COUNTY OF MONMOUTH, NEW JERSEY**

**ANNUAL FINANCIAL REPORT
YEARS ENDED DECEMBER 31, 2018 and 2017**

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY

**Board of Commissioners and Management
December 31, 2018**

Board of Commissioners

James W. Manning Jr.	Chairman
Harry Devine	Vice Chairman
Alonzo Wright	Treasurer
James Mowczan	Secretary
Linda Johnson	Secretary Asst.

Management

Tina M. Cunningham	Executive Director
Christopher Kelly	Superintendent

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
ANNUAL FINANCIAL REPORT**

**Table of Contents
December 31, 2018 and 2017**

	<u>Page</u>
<u>PART I</u>	
Independent Auditor's Report	1-2
Independent Auditor's Report on Internal Control Over Financial Reporting and On Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	3-4
<u>MANAGEMENT DISCUSSION AND ANALYSIS</u>	5-13
<u>FINANCIAL STATEMENTS</u>	
Comparative Statements of Net Position	14-15
Comparative Statements of Revenues, Expenses and Changes in Net Position	16
Comparative Statements of Cash Flows	17-18
<u>NOTES TO FINANCIAL STATEMENTS</u>	19-44
<u>SUPPLEMENTARY INFORMATION</u>	
Schedule of Operating Revenues and Costs Funded by Operating Revenues (Budgetary Basis) – Schedule I	45-47
Schedule of the Proportionate Share of Net Pension Liability – Schedule II	48
Schedule of Contributions – Schedule III	49
<u>PART II</u>	
Schedule of Findings and Recommendations	50
Summary Schedule of Prior Year Audit Findings and Recommendations as Prepared by Management	51

PART I
REPORT OF AUDIT OF FINANCIAL STATEMENTS
AND
REQUIRED SUPPLEMENTARY INFORMATION

INDEPENDENT AUDITOR'S REPORT

The Board of Commissioners
Township of Neptune Sewerage Authority
Neptune, New Jersey

We have audited the accompanying financial statements of the Township of Neptune Sewerage Authority ("Authority") of the Township of Neptune, State of New Jersey, as of and for the year ended December 31, 2018 and 2017, and the related notes to the 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 audit. We conducted our audit 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, and in compliance with audit requirements as prescribed by the Division of Local Government Services, Department of Community Affairs, State of New Jersey. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit 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 financial position of the Township of Neptune Sewerage Authority of the Township of Neptune, State of New Jersey, as of December 31, 2018 and 2017, and the 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, the financial statements present only the Authority and do not purport to, and do not present fairly the financial position of the Township of Neptune, State of New Jersey, as of December 31, 2018 and 2017, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. 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, budgetary comparison information and pension liability and contribution information on pages 5-13, 45-49, respectively, 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 supplementary information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other supplementary information, also listed as supplementary information in the table of contents is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 14, 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 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 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.

Fallon & Company LLP

FALLON & COMPANY
Hazlet, New Jersey
August 14, 2019

**INDEPENDENT AUDITOR'S 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
Township of Neptune Sewerage Authority
Neptune, New Jersey

We have audited, in accordance with the auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, and the audit requirements prescribed by the Division of Local Government Services, Department of Community Affairs, State of New Jersey ("Division"), the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Township of Neptune Sewerage Authority ("Authority"), as of and for the year ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated August 14, 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 opinions 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 was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 results 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* and the audit requirements prescribed by the Division of Local Government Services, Department of Community Affairs, State of New Jersey in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Fallon & Company LLP

FALLON & COMPANY
Hazlet, New Jersey
August 14, 2019

MANAGEMENT DISCUSSION AND ANALYSIS

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY**

FOR THE CALENDAR YEAR ENDED DECEMBER 31, 2018

MANAGEMENT DISCUSSION AND ANALYSIS

INTRODUCTION

Mission

The Township of Neptune Sewerage Authority (“Authority”) was created to protect and preserve the vital ecology of its service area and that of adjoining areas. The Authority accomplishes this by effectively treating wastewater and recycling safe, clean water back into the Atlantic Ocean. The Authority efficiently meets or surpasses all mandated federal and state regulations and standards.

The Authority extends its mission beyond the geographical boundaries of its service area by affiliating with and participating in various organizations and activities dedicated to preserving the environment. By cooperating with many watershed groups and agencies operating within its Service Area, the Authority further demonstrates its commitment to environmental protection.

Responsibility and Controls

The Authority has prepared, and is responsible for, the financial statements and related information included in this report. A system of internal accounting controls is maintained to provide reasonable assurance that assets are safeguarded and the books and records reflect only authorized transactions. Limitations exist in any system of internal controls. However, recognizing that the cost of a system should not exceed its benefits, management believes its system of internal accounting controls maintains an appropriate cost/benefit relationship.

The Authority’s system of internal accounting controls is evaluated on an ongoing basis by the Authority’s financial staff. Independent external auditors also consider certain elements of the internal control system in order to determine their auditing procedures for the purpose of expressing an opinion on the financial statements.

Management believes that its policies and procedures provide guidance and reasonable assurance that the Authority’s operations are conducted in accordance with management’s intentions and to a high standard of business ethics.

In management’s opinion, the financial statements present fairly, in all material respects, the financial position, results of operations and cash flow of the Authority in conformity with accounting principles generally accepted in the United States of America. The

unqualified opinion of our independent external auditors, Fallon & Company, LLP is included in this report.

Management's Discussion and Analysis ("MD&A") provides an introduction to, and should be read with, the basic audited financial statements and supplementary information. It presents management's analysis of the Authority's financial condition and performance. Financial Statement data, key financial and operational indicators, the operating budget, bond resolutions and other management tools were used for this analysis.

Financial Highlights

- Total assets decreased \$2,306,910.
- Total liabilities decreased by \$1,083,663.
- Operating expenses increased \$193,531.
- Net position at year-end was \$25,952,264, a decrease of \$1,223,247.

Overview of Annual Financial Report

The Financial Statements utilize full accrual accounting methods such as are applicable for similar business activities in the private sector. However, rate-regulated accounting principles applied to private utilities are not used by government utilities. The financial statements included a Statement of Net Position; a Statement of Revenues, Expenses, and Changes in Net Position; a Statement of Cash Flows; and Notes to the Financial Statements.

The Statement of Net Position presents the Authority's year-end financial position on a full accrual, historical cost basis. It provides information on Authority assets and liabilities, with the difference reported as net position. Over time, increases and decreases in net position are an indicator of whether the financial position of the Authority is improving or deteriorating.

The Statement of Revenues, Expenses, and Changes in Net Position present the results of business activities for the fiscal year and information as to how the net position changed during the year. All changes in net position are reported as soon as the underlying event giving rise to change occurs, regardless of the timing of related cash flows.

The Statement of Cash Flows presents changes in cash and cash equivalents resulting from operational, financing, and investing activities. Receipts and disbursements are presented on a cash, not an accrual, basis.

The Notes to the Financial Statements present such required disclosures and information as are essential to fully understanding material data provided in the statements, including significant policies, balances, activities, risks, obligations, commitments, contingencies and subsequent events, if any.

Summary of Organization and Business

The Authority, a public body corporate and politic, was created pursuant to Chapter 138 of the Laws of 1946 of the State of New Jersey (“Original Act”). It serves seven (7) municipal entities: Neptune Township, Ocean Grove, Bradley Beach, Avon-by-the-Sea, Neptune City, Tinton Falls and Wall Township. Each customer municipality must comply with the Authority’s Rules and Regulations, wherein uniform requirements for system users assure the Authority’s compliance with applicable federal and state laws.

The Authority owns and operates an 8.5 Million Gallons per Day (MGD) wastewater treatment system consisting of a secondary trickling filter treatment facility, with an aerated stabilization pond, and a new “state of the art” biological aerated filtration plant that is used as a polishing point before discharging effluent a mile into the Atlantic Ocean via an Authority-owned outfall pipe. The system includes an elaborate series of trunk lines and force mains, plus one pump station (Laird Ave.) that handles the majority of the wastewater flow from customer municipalities.

the Authority has completed many upgrades to its treatment facility over the past ten years. Most notable are: 1) Replacement of trickling filter media, from stone to cross flow plastic, 2) Upgrading the aeration system and cleaning the aerated stabilization pond; and 3) installation of a “state of the art” biological-filtration-oxygenated-reactor (BIOFOR) system.

In addition to these upgrades, the Authority has made several mechanical equipment upgrades at the wastewater treatment facility. These upgrades included the purchase and installation of new Horizontal Chopper Sludge Recirculation Pumps, new Rotary Lobe Sludge Transfer Pumps, new energy efficient turbo blower for the Stabilization Pond Aeration System, new Trickling Filter Re-circulation Pumps, new waste gas burner to comply with current NJDEP air emission permit requirements, new dry pit submersible pumps located in the Chlorine Contact Tank Number 1 and Intermediate and Outfall Pump Station Buildings and new grit conveyance pumps for Grit Chamber Numbers 1 and 2.

the Authority’s treatment facility is divided into three complete sections called “trains”. Each train consists of a muffin monster (grinder), flow meter, grit chamber, primary clarifier, trickling filter (with media and distributor), secondary clarifier and a chlorine contact tank. After wastewater has flowed through a treatment train it is pumped from the chlorine contact tank up to the aerated stabilization pond before entering the BIOFOR system.

The BIOFOR system is the last treatment process the wastewater goes through before being discharged into the Atlantic Ocean. The BIOFOR treatment system employs a biological fixed-film technology, using proprietary media that acts as both a biological contactor and a filter, thereby eliminating the need for separate clarification. The primary advantages of the BIOFOR system, when compared to conventional activated sludge systems, are reduced space requirements, elimination of secondary clarifiers, and

improved treatment of cold and diluted wastewaters, rapid startup and fully automated operation.

A five-member board of Commissioners, appointed by Neptune Township, governs the Authority. An Executive Director, appointed by the Commissioners, administers the Authority. Including the Executive Director, the Authority has 21 full time employees and 1 part time administrative employee.

The Authority has no power to levy or to collect taxes. Operation and maintenance costs are funded from service fees and other charges. Acquisition and construction of capital assets are funded through Operating Revenues, the General Fund, Federal and State Grants, Sewer Revenue Bonds and New Jersey Environmental Infrastructure Trust Financing Program Loans.

Trends

In the early 1960s, the Township of Neptune constructed a wastewater treatment plant with a capacity of 2.5 million gallons per day to serve the western part of the Township. The plant employed the trickling filter process to provide “secondary treatment” according to then-current New Jersey treatment standards.

The Public Sanitary Sewerage Facilities Assistance Act of 1965 authorized municipal participation in federal grants-in-aid programs for wastewater treatment. In 1972, in furtherance of the State’s regionalization policy, the Authority was created to implement, build, and operate pollution abatement facilities for Avon-by-the-Sea, Bradley Beach, Neptune City, Neptune Township (including Ocean Grove) and parts of Tinton Falls and Wall Township.

Under the Federal Water Pollution Control Act Amendments of 1972 (PL92-500), the United States Environmental Protection Agency (“USEPA”) provided substantial funding of wastewater treatment facilities, provided those facilities were designed according to USEPA national standards. the Authority’s plan called for the nucleus of the plant to be Neptune Township’s original 2.5 million gallon per day trickling filter plant, called “Train #1”. The Authority would add a parallel, interconnected, 2.5 million gallon per day “Train #2”, and a parallel, essentially separate, 3.5 million gallon per day “Train #3”.

Over time, as USEPA’s standards became more stringent, additional treatment procedures were required. An aerated effluent stabilization lagoon, to enhance the trickling filter process, added in 1976. The State of New Jersey and USEPA provided 14.5 million of grants-in-aid to the Authority for construction.

In 1977, the State adopted the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) to address requirements of the Federal Clean Water Act of 1977 (PL 95-217). Under the New Jersey Act, wastewater treatment plants were required to obtain permits for the discharge of effluents to State waters. The permits would contain specific effluent limitations for each wastewater discharger based on so-called “conventional pollutants”

(oxygen demand, suspended solids, coliforms, and certain physical/chemical parameters widely used at the time). The same pollutants had been the basis for both design and approval of the original the Authority treatment plant. Eventually, USEPA delegated permitting authority to the New Jersey Department of Environmental Protection (“NJDEP”) under the New Jersey Pollutant Discharge Elimination System (“NJPDES”).

The Clean Water Act emphasized toxic substances that had not been addressed by the USEPA national standards nor, therefore, by most 1970s plant designs. In 1986, NJDEP added a limit on effluent acute toxicity to the Authority’s permit. Consequently, from January 1987 through December 1990, the Authority failed 56 percent of its quarterly toxicity tests, although maintaining a solid record of passing grades for conventional pollutants.

NJDEP did not cite the Authority for the failures because its plant had not been designed to handle toxicity. However, in 1994 and under 1991 amendments to NJ’s Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), NJDEP was compelled to initiate enforcement action. On June 26, 1995, the Authority accepted an Administrative Consent Order (“ACO”) with NJDEP that temporarily set aside toxicity limitations in its permit while the Authority sought the causes of, and remedies to, the toxicity problem.

Events

the Authority embarked on a comprehensive program aimed at bringing the treatment facility to complete compliance with all NJDEP parameters. The comprehensive program included:

- Pilot studies (GAC/Activated Sludge/BIOFOR)
- Toxicity identification, evaluation and reduction studies
- Service area studies and surveys

As a result of many plant upgrades the Authority has effected since 1996, and for the first time in well over a decade, the Authority is out of NJDEP “ACO” program. The plant has passed the majority of its bioassay tests with better than 100% results and no measurable trace of toxicity.

Financial Analysis

Financial Condition

The Authority's financial condition remained strong at year end with adequate liquid assets, a reasonable level of unrestricted net position, and reliable facilities and systems to meet demand. The Authority's financial condition, technical capabilities, and operating and modernization plans are secure.

	<u>2018</u>	<u>2017</u>
Total current assets	\$ 16,757,220	\$ 16,568,682
Total deferred outflow of resources	1,586,582	1,576,087
Net capital assets	<u>28,800,150</u>	<u>31,306,093</u>
Total assets	<u>\$ 47,143,952</u>	<u>\$ 49,450,862</u>
Total current liabilities payable from unrestricted assets	\$ 1,692,975	\$ 2,151,523
Total current liabilities payable from restricted assets	3,352,330	3,340,082
Total noncurrent liabilities	11,944,302	14,486,158
Deferred inflow of resources	<u>4,202,081</u>	<u>2,297,588</u>
Total liabilities	<u>21,191,688</u>	<u>22,275,351</u>
Total net position invested in capital assets, net of related debt	26,177,624	26,927,924
Total restricted net position	1,472,800	1,710,533
Total unrestricted net position	<u>(1,698,160)</u>	<u>(1,462,946)</u>
Total net position	<u>25,952,264</u>	<u>27,175,511</u>
Total liabilities and net position	<u>\$ 47,143,952</u>	<u>\$ 49,450,862</u>

Results of Operations

Operations and administrative functions were conducted as intended by, and within the budget established by, the Authority's Board of Commissioners:

	<u>2018</u>	<u>2017</u>
Total operating revenues	\$ 6,747,359	\$ 6,736,459
Operating expenses	4,913,873	4,840,593
Depreciation	<u>1,235,717</u>	<u>1,115,466</u>
Total operating expenses	\$ 6,149,590	\$ 5,956,059
Operating income	<u>597,769</u>	<u>780,400</u>
Nonoperating revenues/(expenses):		
Interest income	176,021	75,547
Impairment of fixed assets	(1,898,003)	-
Interest expense	(87,337)	(121,891)
Amortization expense	<u>(11,697)</u>	<u>(17,308)</u>
Total nonoperating revenues /(expenses)	<u>(1,821,016)</u>	<u>(63,652)</u>
Net income	(1,223,247)	716,748
Net position, January 1	\$ 27,175,511	\$ 26,458,763
Net position, December 31	<u>\$ 25,952,264</u>	<u>\$ 27,175,511</u>

Statement of Cash Flows

Cash flow was adequate to meet operating, capital and debt requirements.

	<u>2018</u>	<u>2017</u>
Net cash provided by operating activities	\$ 3,034,751	\$ 1,195,470
Net cash used in capital and related financing activities	(2,046,963)	(3,479,146)
Net cash provided by investing activities	<u>169,019</u>	<u>70,567</u>
Net increase in cash and cash equivalents	1,156,807	(2,213,109)
Balance, January 1	<u>15,027,796</u>	<u>17,240,905</u>
Balance, December 31	<u>\$ 16,184,603</u>	<u>\$ 15,027,796</u>

Rates, Billing and Collection Processes

The annual Service Charge to each of the Authority's seven customers is set by allocating the year's operating and debt service requirements among the customers, based on their actual prior-year inflows and capacity ownership, respectively.

Service Charges are certified to each customer not later than January 31st of each year and are due, in equal installments on and be made on or before the 1st day of April, July, October and January. Pursuant to the "Sewerage Authorities Law" (N.J.S.A. 40:14A), customers are assessed interest at the rate of one and one-half percent (1.5%) per month on any Service Charge installment, or portion thereof, unpaid beyond its due date.

Capital Improvement Program and Debt Administration

the Authority’s 5-Year Capital Improvement Program (“Plan”) was prepared in consultation with, and reviewed by, the Authority’s engineer, commissioners, and staff and presented as directed by the Division of Local Government Services (“Division”), State of New Jersey. Funding the plan will not result in extraordinary increases in annual Service Charges to customers.

	<u>Est. Total Cost</u>	<u>Unreserved Retained Earnings</u>	<u>Debt Auth.</u>
Biofilter Odor Control	\$ 380,000	\$ 380,000	
System Transfer Switch/ Substation Upgrades	350,000	350,000	
Collection System Evaluation	100,000	100,000	
Contingencies	50,000	50,000	
Grit Chamber Rehabilitation	2,005,000		\$ 2,005,000
Stabilization Pond Rehabilitation	750,000	750,000	
Repair Plant Roadways & Site Lighting	<u>500,000</u>	<u>500,000</u>	<u> </u>
Total	<u>\$ 4,135,000</u>	<u>\$ 2,130,000</u>	<u>\$ 2,005,000</u>

Closing Comments

The Financial condition of the Township of Neptune Sewerage Authority is strong. Its facilities, staff, management, and its planning and funding options, are sufficient to assure the Authority’s ability to meet its operating responsibilities well into the future.

FINANCIAL STATEMENTS

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COMPARATIVE STATEMENTS OF NET POSITION
DECEMBER 31, 2018 and 2017**

	2018	2017
<u>ASSETS</u>		
Current Assets:		
Unrestricted Assets:		
Cash and cash equivalents	\$ 10,497,827	\$ 8,538,812
Customer accounts receivable	518,667	1,511,740
Other receivables	12,040	24,099
Prepaid expenses	41,910	5,047
Total Unrestricted Assets	11,070,444	10,079,698
Restricted Assets:		
Cash and cash equivalents	5,686,776	6,488,984
Total Restricted Assets	5,686,776	6,488,984
Total Current Assets	16,757,220	16,568,682
Deferred Outflow of Resources:		
Pension deferrals	1,107,394	1,545,276
OPEB deferrals	461,074	1,000
Unamortized deferred charges	18,114	29,811
Total Deferred Outflow of Resources	1,586,582	1,576,087
Plant, Property and Equipment, net	28,800,150	31,306,093
Total Assets	\$ 47,143,952	\$ 49,450,862

LIABILITIES AND NET POSITION

Current Liabilities (payable from unrestricted assets):		
Accounts payable	\$ 708,402	\$ 238,810
Accrued liabilities	282,817	516,869
Retainage payable	34,456	32,844
Current portion of long-term debt	615,000	1,285,000
Accrued interest payable	52,300	78,000
Total Current Liabilities (payable from unrestricted assets)	1,692,975	2,151,523

The accompanying notes are an integral part of this statement.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COMPARATIVE STATEMENTS OF NET POSITION
DECEMBER 31, 2018 and 2017

	<u>2018</u>	<u>2017</u>
Current Liabilities (payable from restricted assets):		
Security held for member municipalities	\$ 3,352,330	\$ 3,340,082
Total Current Liabilities (payable from restricted assets)	<u>3,352,330</u>	<u>3,340,082</u>
Non-Current Liabilities:		
Unrestricted Liabilities:		
Accrued employee benefits	418,512	521,328
Pension liability	4,605,732	5,386,060
Net OPEB obligation	4,840,828	5,837,691
Long-term debt (inclusive of premiums of \$79,230 and \$126,079 for 2018 and 2017, respectively)	<u>2,079,230</u>	<u>2,741,079</u>
Total Non-Current Liabilities	<u>11,944,302</u>	<u>14,486,158</u>
Deferred Inflow of Resources:		
Pension deferrals	1,672,809	1,278,456
OPEB deferrals	<u>2,529,272</u>	<u>1,019,132</u>
Total Deferred Inflow of Resources:	<u>4,202,081</u>	<u>2,297,588</u>
Total Liabilities	<u>21,191,688</u>	<u>22,275,351</u>
Net Position		
Invested in capital assets, net of related debt	<u>26,177,624</u>	<u>26,927,924</u>
Restricted Net Position:		
Bond service reserve	722,800	960,533
Renewal and replacement	<u>750,000</u>	<u>750,000</u>
Total Restricted Net Position	<u>1,472,800</u>	<u>1,710,533</u>
Unrestricted Net Position	<u>(1,698,160)</u>	<u>(1,462,946)</u>
Total Net Position	<u>25,952,264</u>	<u>27,175,511</u>
Total Liabilities and Net Position	<u>\$ 47,143,952</u>	<u>\$ 49,450,862</u>

The accompanying notes are an integral part of this statement.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COMPARATIVE STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2018 and 2017**

	2018	2017
Operating Revenues:		
Service charges of member municipalities	\$ 6,727,900	\$ 6,727,300
Miscellaneous income	19,459	9,159
Total Operating Revenues	6,747,359	6,736,459
Operating Expenses:		
Personnel costs and benefits	2,630,131	2,951,877
Administrative and general	409,719	473,912
Plant, system and maintenance	1,874,023	1,414,804
Depreciation	1,235,717	1,115,466
Total Operating Expenses	6,149,590	5,956,059
Operating Income	597,769	780,400
Non-Operating Revenue (Expenses):		
Interest income	176,021	75,547
Impairment of fixed assets	(1,898,003)	-
Interest expense	(87,337)	(121,891)
Amortization expense	(11,697)	(17,308)
Total Non-Operating Expenses	(1,821,016)	(63,652)
Net Income	(1,223,247)	716,748
Net Position, January 1	27,175,511	26,458,763
Net Position, December 31	\$ 25,952,264	\$ 27,175,511

The accompanying notes are an integral part of this statement.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COMPARATIVE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31,**

	2018	2017
Cash Flows from Operating Activities:		
Cash received from member municipalities	\$ 7,720,973	\$ 5,543,888
Cash paid to suppliers	(3,052,098)	(2,571,194)
Cash paid to employees	(1,653,583)	(1,786,383)
Other operating receipts	19,459	9,159
Net Cash Flows from Operating Activities	3,034,751	1,195,470
Cash Flows from Capital and Related Financing Activities:		
Acquisition of property, plant and equipment	(627,777)	(2,034,595)
Principal payments on bonds payable	(1,285,000)	(1,235,000)
Sale of fixed assets	-	-
Interest expense	(134,186)	(209,551)
Net Cash Provided (Used) in Capital and Related Financing Activities	(2,046,963)	(3,479,146)
Cash Flows from Investing Activities:		
Interest received on investments	169,019	70,567
Net Cash Provided by Investing Activities	169,019	70,567
Net Increase (Decrease) in Cash and Cash Equivalents	1,156,807	(2,213,109)
Cash and Cash Equivalents, Beginning of Year	15,027,796	17,240,905
Cash and Cash Equivalents, End of Year	\$ 16,184,603	\$ 15,027,796
Reconciliation to Balance Sheet:		
Unrestricted cash and cash equivalents	\$ 10,497,827	\$ 8,538,812
Restricted cash and cash equivalents	5,686,776	6,488,984
	\$ 16,184,603	\$ 15,027,796

The accompanying notes are an integral part of this statement.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COMPARATIVE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31,

	2018	2017
Reconciliation of Operating Income to Net Cash Flows from Operating Activities:		
Operating Income	\$ 597,769	\$ 780,400
Depreciation	1,235,717	1,115,466
	1,833,486	1,895,866
Change in Assets and Liabilities:		
(Increase)/decrease in receivables	993,073	(1,183,412)
(Increase)/decrease in other receivables and prepaids	(17,802)	(4,378)
(Increase)/decrease in deferred pension and OPEB outflows	(22,192)	345,421
Increase/(decrease) in accounts payable	469,592	(42,639)
Increase/(decrease) in accrued expenses and retainage	(360,956)	410,333
Increase/(decrease) in pension and OPEB liability	(1,777,191)	(1,169,186)
Increase/(decrease) in deferred pension and OPEB inflows	1,904,493	1,016,985
Increase/(decrease) in reserve for escrow	-	(35,222)
Increase/(decrease) in security held for member municipalities	12,248	(38,298)
	1,201,265	(700,396)
Net Cash Flows from Operating Activities	\$ 3,034,751	\$ 1,195,470

The accompanying notes are an integral part of this statement.

NOTES TO FINANCIAL STATEMENTS

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 1 ORGANIZATION

The Township of Neptune Sewerage Authority (“Authority”), a public body, corporate and political of the County of Monmouth, State of New Jersey, was organized and exists under the Sewerage Authority Law, constituting Chapter 138 of the Pamphlet Laws of 1946, of the State of New Jersey, and the acts amendatory thereof and supplemental thereof. The Authority was established in accordance with the provisions of the Act in order to own and operate a regional sewerage treatment system to serve the Townships of Neptune and Wall, Ocean Grove Sewerage Authority, and the Boroughs of Avon-by-the-Sea, Bradley Beach, Tinton Falls, and Neptune City. The Act authorized the Authority to issue its bonds and other obligations in an unlimited aggregate amount in order to accomplish its public purpose of promoting the relief of waters in or bordering the State of New Jersey from pollution by providing adequate sewerage treatment and disposal services to the Service Area.

The Authority provides sewerage treatment to its seven member municipalities in accordance with service agreements established with each municipality. The service agreements obligate each member to the Authority for their proportionate share of the Authority’s operating expenses, debt service and required reserve additions to the extent not met by other sources.

Reporting Entity

In accordance with Governmental Accounting Standards Board (“GASB”) Statement No. 61, *The Financial Reporting Entity Omnibus - An Amendment of GASB 14 and 34*, and GASB Statement No. 80, *Blending Requirements for Certain Component Units* the Authority’s basic financial statements include those of the Authority and any component units. Component units are legally separate organizations whose majority of officials are appointed by the primary government or the organization is fiscally dependent on the primary government and there is a potential for those organizations either to provide specific financial benefits to, or impose specific financial burdens on, the primary government.

An organization has a financial benefit or burden relationship with the primary government if any one of the following conditions exist:

1. The primary government (Authority) is legally entitled to or can otherwise access the organization's resources.
2. The primary government is legally obligated or has otherwise assumed the obligation to finance the deficits of, or provide financial support to, the organization.
3. The primary government is obligated in some manner for the debt of the organization.

Based on the application of the above criteria, this report includes all programs and activities operated by the Authority. There were no additional entities required to be included in the reporting entity under these criteria in the current fiscal year.

Based on the application of the above criteria, the Authority is a component unit of the Township of Neptune. The Authority issues separate financial statements from the Township. However, if the Township presented its financial statements in accordance with GAAP, these financial statements would be included with the Township’s on a blended basis. There were no additional entities required to be included in the reporting entity under these criteria in the current fiscal year.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

A. Basis of Presentation and Accounting

The Authority's financial statements are presented on the full accrual basis in accordance with the accounting principles generally accepted in the United States of America. The Authority applies all Government Accounting Standards Board (GASB) pronouncements as well as Financial Accounting Standards Board (FASB) statements and interpretations, and the Accounting Principles Board (APB) of the Committee on Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

All activities of the Authority are accounted for within a single proprietary (enterprise) fund.

Proprietary funds are used to account for operations that are (a) financed and operated in a manner similar to private business enterprise where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

The accounting and financial reporting treatment applied to the Authority is determined by its measurement focus. The transactions of the Authority are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the balance sheet. Total Net Position (i.e., total assets net of total liabilities) are segregated into invested capital assets, net of related debt; restricted for capital activity; restricted for debt service; and unrestricted components.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that effect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date, and reported amounts of revenues and expenses during the reporting period. Estimates are used to determine depreciation expense, the allowance for doubtful accounts and certain claims and judgment liabilities, among other accounts. Actual results may differ from those estimates.

B. Budgetary Accounting

Each year the Authority adopts a budget which is approved by the State of New Jersey, Department of Community Affairs, Division of Local Government Services. The budget may be amended by resolution of the Board of Commissioners of the Authority. The budgetary basis of accounting is utilized to determine the Authority has sufficient cash to operate and pay debt service. As such, certain items such as bond payments are included in budgetary expenses while depreciation is not included. A reconciliation from the budgetary basis to the statement of revenues, expenses and changes in net position is included in Schedule 1 of the Supplementary Information.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES (continued)

C. Cash, Cash Equivalents and Investments

New Jersey Authorities are required by N.J.S.A. 40A:5-14 to deposit public funds in a bank or trust company having its place of business in the State of New Jersey and organized under the laws of the United States or of the State of New Jersey or the New Jersey Cash Management Fund. N.J.S.A. 40A:5-15.1 provides a list of securities which may be purchased by New Jersey authorities. The Authority is required to deposit funds in public depositories protected from loss under the provisions of the Governmental Unit Deposit Protection Act ("Act"). The GUDPA Act was enacted in 1970 to protect government units from a loss of funds on deposit with a failed banking institution in New Jersey.

N.J.S.A. 17:9-42 requires government units to deposit public funds only in public depositories located in New Jersey, where the funds are secured in accordance with the Act.

Public funds are defined as the funds of any government unit. Public depositories include banks (both state and national banks), savings and loan institutions and savings banks, the deposits of which are federally insured. All public depositories pledge collateral, having a market value of five percent of the average daily balance of collected public funds, to secure the deposits of government units. If a public depository fails, the collateral it has pledged, plus the collateral of all other public depositories in the collateral pool, is available to pay the full amount of their deposits to the government units.

For the Statements of Cash Flows, the Authority combines the unrestricted cash with the restricted cash and cash equivalents. The Authority considers investments with maturities of three months or less at the time of purchase to be cash equivalents.

D. Restricted Accounts

In accordance with the Bond Resolutions and the Trust Agreement securing the 2010 and 2012 Revenue Bonds ("Bonds"), the Authority has established various cash and investment accounts with a trustee with restrictions on the use of funds. These funds, accounts and the related principal restrictions are as follows:

Construction Fund - The Construction Fund has been established for the payment of the cost of each project for which bonds have been issued under the Trust Agreement. Upon completion of the construction project, any funds remaining and not reserved for unpaid costs shall be applied to payment of costs of any portion of the system, payment of any principal or interest on the bonds, payment of any sinking fund installment, or redemption of any bonds.

Revenue Fund - All pledged revenues as defined in the Trust Agreement are required to be paid over to the Trustee upon receipt and deposited in the Revenue Fund. Transfers from the Revenue Fund shall be made on the first business day of each month in amounts needed to establish the respective fund balances as follows:

Operating Fund - to increase the amount which is on deposit in the Operating Fund to an amount equal to the Authority's net operating expenses for the current month and the next succeeding three months.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES (continued)

D. Restricted Accounts (continued)

Bond Service Fund - to equal the interest and principal falling due on the Bonds during the fiscal year.

Bond Reserve Fund - to maintain or provide an amount equal to the average annual debt service requirement as defined in the Trust Agreement in the bonds for any succeeding fiscal year.

Renewal and Replacement Fund - to equal the reasonably required reserve called for by the Trust Agreement.

General Fund - to deposit therein the balance of the pledged revenues to the extent any monies are available.

Operating Fund - to pay all reasonable and necessary costs of operating, maintaining and repairing the sewer system.

Bond Service Fund - to pay principal and interest on the bonds.

Bond Reserve Fund - to make up any deficiencies in the Bond Service Fund or any other Sinking Fund Account. In addition to transfers from the Revenue Fund, monies from the Renewal and Replacement and the General Funds may be transferred into this Fund.

Renewal and Replacement Fund - If the amount in the Bond Reserve Fund shall be less than the Bond Reserve requirement, the Trustee shall withdraw from the General Fund and then from the Renewal and Replacement Fund, and pay into the Bond Reserve Fund the amount needed to increase the amount in the Bond Reserve Fund so that it equals the Bond Reserve requirement. Monies in this Fund may be applied to the reasonable and necessary expenses of the Authority with respect to the Sewer System for major repairs, renewals, replacements or maintenance items of a type not recurring annually or at shorter intervals.

General Fund - If the amount in the Bond Reserve Fund shall be less than the Bond Reserve requirement the Trustee shall withdraw from the General Fund and pay into the Bond Reserve Fund the amount needed to increase the amount in the Bond Reserve Fund so that it equals the Bond Reserve requirement. Under the condition set forth in the Trust Agreement, the Trustee may transfer monies from the General Fund to the Revenue Fund or to the Authority to be spent for any lawful purpose.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES (continued)

E. Property, Plant and Equipment

Property, plant and equipment are stated at cost. The cost of property, plant and equipment is depreciated over its estimated useful life, by the straight-line method. Major improvements to existing plant and equipment are capitalized. Repairs and maintenance that do not extend the economic life of plant and equipment are charged to expense as incurred. Upon the sale or retirement of property, plant and equipment, the cost and related accumulated depreciation is eliminated from the accounts and any related gain or loss is reflected in the Statement of Revenues, Expenses and Changes in Net Position.

System construction costs are charged to construction in progress until such time as given segments of the system are completed and placed in operation. The assets are then transferred to the appropriate property and plant account and depreciated on a straight-line basis over the asset's estimated useful life.

The estimated useful lives of the assets are:

Treatment Plant	75 years
Force Main and Ocean Outfall	75 years
BioFor Treatment Plant	40 years
Pumping Station	10-40 years
Equipment	5-15 years
Vehicles	5 years
Office Furniture	5 years

F. Use of Estimates

The preparation of 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 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.

G. Investment Income

Investment Income on amounts held by the Authority as security for member municipalities is restricted and added to principal amounts for reinvestment. All other investment income earned is unrestricted and is utilized to defray the cost of operations and debt service.

H. Capitalized Interest

The Authority capitalizes interest on self-constructed assets during the period of construction. The amount of interest cost capitalized on qualifying assets acquired with proceeds of tax-exempt borrowings that are externally restricted to finance acquisition of specified assets is all interest cost of the borrowing less any interest earned on related interest-bearing investments acquired with such unexpended proceeds from the date of the borrowings until the assets are substantially complete and are ready for their intended use. Interest cost of tax-exempt borrowings is eligible for capitalization on other qualifying assets of the Authority when the specified qualifying assets are no longer eligible for interest capitalization. The Authority did not capitalize interest costs during the periods ended December 31, 2018 and 2017.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES (continued)

I. Inventory of Supplies

Minimal inventories of replacement parts, chemicals and supplies are maintained by the Authority and are expensed at the time the individual items are purchased.

J. Income Taxes

The Authority is exempt from federal and state income taxes as it is a public body politic and corporate of the State of New Jersey.

K. Net Position

Net position comprises the various net earnings from operating and non-operating revenues, expenses and contributions of capital. Net position is classified in the following three components: net investment in capital assets, restricted, and unrestricted. Net invested in capital assets consists of all capital assets, net of accumulated depreciation and reduced by outstanding debt that is attributable to the acquisition, construction and improvement of those assets; debt related to unspent proceeds or other restricted cash and investments is excluded from the determination. Restricted includes resources with external restrictions. Unrestricted consists of all other resources not included in the above categories.

NOTE 3 CHANGE IN METHODOLOGY IN CALCULATING THE OPEB LIABILITY

The Authority had previously been reporting its OPEB liability using an independent actuarial valuation. For the year ended December 31, 2018 it is relying on the actuarial report issued by the State of New Jersey. The prior year financial statements have been restated for comparison purposes. As a result of this change the Authority's OPEB liability for the year ended December 31, 2017 has decreased by \$7,579,552.

NOTE 4 CASH, CASH EQUIVALENTS, AND INVESTMENTS

A. Deposits

Cash and Cash Equivalents consist of the following at December 31:

	2018	2017	
Cash	\$ 133,183	\$ 272,558	
Money Market Funds	16,051,420	14,755,238	
	\$ 16,184,603	\$ 15,027,796	

As of December 31, 2018, the Authority's Cash and Cash Equivalents are insured or collateralized with securities held by the Authority or by its agent in the Authority's name.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES (continued)

A. Deposits (continued)

The carrying amount of the Authority's cash and cash equivalents at December 31, 2018 was \$16,184,603 and the bank balance was \$16,198,471. Of the bank balance, \$395,270 was covered by federal depository insurance, and the remaining \$15,801,201 was covered under the unit certificate of eligibility as required by New Jersey statutes.

Custodial Credit Risk

Custodial credit risk is the risk that in the event of a failure of a financial institution or counterparty to a transaction, the Authority will not be able to recover the value of its investment. The Authority mitigates this risk by depositing or investing with public depositories protected from loss under the provisions of the Act.

B. Investments

The Authority had no investments at December 31, 2018 and 2017.

NOTE 5 PROPERTY, PLANT AND EQUIPMENT

Property, Plant and Equipment consisted of the following at December 31:

	Balance Dec. 31, 2017	Additions	Disposals	Balance Dec. 31, 2018
Land	\$ 346,264			\$ 346,264
Plant and Improvements	54,070,611	\$ 181,150		54,251,761
Equipment and Vehicles	567,511	24,443		591,954
Construction in Progress	1,856,015	422,184	\$ 1,898,003	380,196
	56,840,401	627,777	1,898,003	55,570,174
Less: Accumulated Depreciation	25,534,308	1,235,717	-	26,770,025
Property, Plant and Equipment, Net	<u>\$ 31,306,093</u>	<u>\$ (607,940)</u>	<u>\$ 1,898,003</u>	<u>\$ 28,800,149</u>

NOTE 6 DEFERRED CHARGES

Deferred Charges relate to the issuance costs, including legal, printing and financing costs, of the 2010 and 2012 Sewer Revenue Bond Series. These charges are being amortized on the interest method over the life of the respective bonds. During 2012, the 2003A Sewer Revenue Bond Series was refunded and the deferred charges written off as part of the loss on bond refunding.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 6 DEFERRED CHARGES (continued)

Deferred Charges consist of the following at December 31:

	2018	2017
Bond Issuance Costs	\$ 29,811	\$ 47,119
Less: Accumulated Amortization	11,697	17,308
Net Deferred Charges	\$ 18,114	\$ 29,811

NOTE 7 LONG-TERM DEBT

Long-Term Debt consisted of the following at December 31:

	2018	2017
2010 Series, Sewer Revenue Refunding Bonds	\$ -	\$ 695,000
2012 Series, Sewer Revenue Refunding Bonds	2,615,000	3,205,000
Total Long-term Debt	2,615,000	3,900,000
Unamortized Bond Premium	79,230	126,079
Current Portion	(615,000)	(1,285,000)
Net Long-term Debt	\$ 2,079,230	\$ 2,741,079

2012 Sewer Revenue Refunding Bonds

The Sewer Revenue Refunding Bonds, Series 2012 were authorized for the purpose of refunding \$6,250,000 of the outstanding principle amount of the Authority's Sewer Revenue Bonds, Series 2003A, and to provide funds to pay all fees and expenses incurred with the issuance of the Bonds. The Bonds consist of \$5,930,000 in Serial Bonds which mature annually on July 1, 2012 through 2022. Interest during that period ranges from 3.000% to 4.000% payable semi-annually on January 1 and July 1.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 7 LONG-TERM DEBT (continued)

Annual Debt Service

The following table sets forth the annual debt service (budgetary basis) of the Authority for all bonds outstanding:

12 Month Period Ending <u>December 31,</u>	<u>2012 Series A</u>	<u>Total Debt Service</u>
2019	\$ 719,600	\$ 719,600
2020	720,000	720,000
2021	719,400	719,400
2022	<u>722,800</u>	<u>722,800</u>
	<u>\$ 2,881,800</u>	<u>\$ 2,881,800</u>

NOTE 7 LONG-TERM DEBT (continued)

The following table sets forth the debt service requirements for principal and interest:

12 Month Period Ending <u>Dec 31,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2019	\$ 615,000	\$ 104,600	\$ 719,600
2020	640,000	80,000	720,000
2021	665,000	54,400	719,400
2022	<u>695,000</u>	<u>27,800</u>	<u>722,800</u>
	<u>\$ 2,615,000</u>	<u>\$ 266,800</u>	<u>\$ 2,881,800</u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 7 LONG-TERM DEBT (continued)

Changes in the outstanding debt for 2018 are as follows:

<u>Issue</u>	<u>Balance Dec. 31, 2017</u>	<u>Issued</u>	<u>Paid</u>	<u>Balance Dec. 31, 2018</u>
Series 2010	\$ 695,000	\$ -	\$ 695,000	\$ -
Series 2012	3,205,000	-	590,000	2,615,000
	<u>\$ 3,900,000</u>	<u>\$ -</u>	<u>\$ 1,285,000</u>	<u>\$ 2,615,000</u>

NOTE 8 SECURITY HELD FOR MEMBER MUNICIPALITIES

Service agreements with member municipalities provide that payments shall be at 102% of the member municipality's obligation for sewer treatment services. The additional 2% shall be deposited to the credit of the municipality in a Sewer Rent Reserve Account until deposits and interest earned in investment of such amounts equals the next two quarterly payments to become due from the member municipality.

Investment accounts have been established for each of the member municipalities as directed by the individual governing bodies.

NOTE 9 COMPENSATED ABSENCES

Per the Authority's "Personnel Code", its employees are entitled to sick leave benefits and vacation time.

Sick Leave

Sick leave allowances are determined as follows:

After one year of employment, an employee will be allowed 15 days sick leave in each twelve-month period. Sick leave eligibility will be credited on the basis of one and one-quarter days for each month in which the employee is on the payroll.

Unused sick leave may be accumulated from year to year without a limit. An employee is entitled to use the accumulated sick leave with pay when needed.

Sick leave in excess of the accrued time may be granted at the discretion of the Authority when warranted by the employee's overall work record.

An employee who has used five days or less of sick time in a calendar year can elect to be compensated for up to five (5) of the remaining days and banking the remainder of the days in their accumulated sick time totals. The compensation for up to seven (7) unused days may be taken as a cash payment or as compensatory time off. If compensatory time off is chosen, this will be taken as straight time (i.e. 8 hours = 8 hours compensatory time off).

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 9 COMPENSATED ABSENCES (continued)

Sick Leave (continued)

One half of the accumulated sick leave shall be paid upon retirement, permanent disability or death. Sick leave will not be granted as credit toward early retirement.

At December 31, 2018 and 2017, the computed contingent liability for accumulated sick leave compensation is \$314,314 and \$521,328 respectively. This is presented on the comparative balance sheet as an unrestricted noncurrent liability under to caption "Accrued Employee Benefits".

Vacation Time

It is the policy of the Authority that all employees be granted time away from work for the purpose of vacation. Each employee shall take advantage of the authorized vacation period for reasons of health, rest relaxation and pleasure; and therefore, extra compensation in lieu of vacation will not be allowed. The amount of time granted shall be determined by the employee's length of service. A vacation year shall run from the anniversary date of each employee's employment date.

All vacation time earned in a given year must be used within the vacation year or be forfeited.

Employees who terminate their employment will receive vacation pay according to their accruals, provided the employee is in compliance with all requirements related to termination.

At December 31, 2018 and 2017, the computed contingent liability for accrued vacation time is \$104,198 and \$117,102, respectively. This is presented on the comparative balance sheet as an unrestricted current liability included with other accrued liabilities under the caption "Accrued Liabilities".

NOTE 10 PENSION PLAN

Description of the System

The State of New Jersey, Public Employees' Retirement System (PERS) is a cost sharing multiple-employer defined benefit pension plan administered by the State of New Jersey, Division of Pensions and Benefits (the Division). For additional information about PERS, please refer to the Division's Comprehensive Annual Financial Report (CAFR) which can be found at www.state.nj.us/treasury/pensions/annrprts.shtml.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 10 PENSION PLAN (continued)

Description of the System (continued)

The vesting and benefit provisions are set by N.J.S.A. 43:15A. PERS provides retirement, death and disability benefits. All benefits vest after ten years of service, except for medical benefits, which vest after 25 years of service or under the disability provisions of PERS. The following represents the membership tiers for PERS:

<u>Tier</u>	<u>Definition</u>
1	Members who were enrolled prior to July 1, 2007
2	Members who were eligible to enroll on or after July 1, 2007 and prior to November 2, 2008
3	Members who were eligible to enroll on or after November 2, 2008 and prior to May 22, 2010
4	Members who were eligible to enroll on or after May 22, 2010 and prior to June 28, 2011
5	Members who were eligible to enroll on or after June 28, 2011

Service retirement benefits of 1/5 5th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement benefits are available to tiers 1 and 2 members before reaching age 60, tiers 3 and 4 before age 62 with 25 or more years of service credit and tier 5 with 30 or more years of service credit before age 65. Benefits are reduced by a fraction of a percent for each month that a member retires prior to the age at which a member can receive full early retirement benefits in accordance with their respective tier. Tier 1 members can receive an unreduced benefit from age 55 to age 60 if they have at least 25 years of service. Deferred retirement is available to members who have at least 10 years of service credit and have not reached the service retirement age for the respective tier.

Membership

Membership in the PERS is mandatory for substantially all full-time employees of the State of New Jersey or any county, municipality, school Authority or public agency, provided the employee is not required to be a member of another state-administered retirement system or other state or local jurisdiction. Since PERS covers public employees throughout the State separate records are not maintained for each reporting unit; accordingly, the actuarial data for the employees of the Authority who are members of PERS are not available.

Contributions

The contribution policy for PERS is set by N.J.S.A. 15A and requires contributions by active members and contributing employers. State legislation has modified the amount that is contributed by the State. The State's pension contribution is based on an actuarially determined amount which includes the employer portion of the normal cost and an amortization of the unfunded accrued liability. Funding for noncontributory group insurance benefits is based on actual claims paid. For fiscal year 2015, the State's pension contribution was less than the actuarial determined amount. The local employers' contribution amounts are based on an actuarially determined rate which includes the normal cost and unfunded accrued liability. Chapter 19, P.L. 2009 provided an option for local employers of PERS to contribute 50% of the normal and accrued liability contribution amounts certified for payments due in State fiscal year 2009. Such

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 10 PENSION PLAN (continued)

Contributions (continued)

employers will be credited with the full payment and any such amounts will not be included in their unfunded liability. The actuaries will determine the unfunded liability of those retirement systems, by employer, for the reduced normal and accrued liability contributions provided under this law. This unfunded liability will be paid by the employer in level annual payments over a period of 15 years beginning with the payments due in the fiscal year ended June 30, 2012 and will be adjusted by the rate of return on the actuarial value of assets. Authority contributions to PERS amounted to \$214,345 and \$196,629 for 2018 and 2017, respectively. The annual employer contribution includes funding for basic retirement allowances, cost-of-living adjustments, cost of medical premiums after retirement for qualified retirees, and noncontributory death benefits.

The employee contribution rate was 7.20% effective July 1, 2016 and increased to 7.23% effective July 1, 2017. Subsequent increases after October 1, 2011 are being phased in over 7 years effective on each July 1st to bring the total pension contribution rate to 7.5% of base salary as of July 1, 2018. The Authority contribution to the plan for the past three years are as follows:

<u>Year</u>	<u>PERS</u>
2018	\$ 214,348
2017	196,629
2016	198,997

All contributions were equal to the required contributions for each of the three years, respectively.

In 2004 the Authority deferred a portion of their pension obligation as allowed. The present value of the deferral at December 31, 2018 and 2017 is \$40,075 and \$43,525, respectively. This amount is included as an accrued liability on the balance sheet. The Authority is obligated to pay, at a minimum \$6,673 per year plus an adjustment based on the rate of return of the actuarial value of the plans assets for 15 years beginning in 2012 to pay back the deferral.

NOTE 10 PENSION PLAN (continued)

Net Pension Liability and Pension Expense

At December 31, 2018 and 2017, the Authority's proportionate share of the PERS net pension liability is valued to be \$4,605,732 and \$5,386,060, respectively. The net pension liabilities were measured as of June 30, 2017 and 2016, respectively. The total pension liability used to calculate the net pension liability was

determined using update procedures to roll forward the total pension liability from an actuarial valuation as of June 30, 2016, to the measurement date of June 30, 2017. The Authority's proportion of the net pension liability was based on the Authority's actual contributions to the plan relative to the total of all participating employers' contributions for the year ended June 30, 2017. The Authority's proportion measured as of June 30, 2018, was 0.0233918165%, which was an increase of 0.000254233% from its proportion measured as of June 30, 2017 of 0.231375835%.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 10 PENSION PLAN (continued)

Net Pension Liability and Pension Expense (continued)

	<u>2018</u>	<u>2017</u>	<u>Increase/ (Decrease)</u>
Actuarial Valuation Date	July 1, 2018	July 1, 2017	
Net Pension Liability	\$ 4,605,732	\$ 5,386,060	\$ (780,328)
Authority's Proportion of the Plan's Total Net Pension Liability	0.0233918165%	0.0231375835%	0.0002542330%

For the year ended December 31, 2018 and 2017 the Authority recognized pension expense of \$285,308 and \$553,536, respectively. The Authority reported deferred outflow of resources and deferred inflow of resources related to pension from the following sources:

Year ended December 31, 2018	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 87,832	\$ 23,749
Changes of assumptions	758,948	1,472,668
Changes in proportion	260,614	133,190
Net difference between projected and actual investment earning on pension plan investments	<u>-</u>	<u>43,202</u>
	<u>\$ 1,107,394</u>	<u>\$ 1,672,809</u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 10 PENSION PLAN (continued)

Net Pension Liability and Pension Expense (continued)

Year ended December 31, 2017	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 126,823	\$ -
Changes of assumptions	1,085,105	1,081,127
Changes in proportion	296,673	197,329
Net difference between projected and actual investment earning on pension plan investments	<u>36,675</u>	<u>-</u>
	<u>\$ 1,545,276</u>	<u>\$ 1,278,456</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended December 31,

2019	\$ 52,766
2020	(15,988)
2021	(280,825)
2022	(239,270)
2023	<u>(82,098)</u>
Total	<u>\$ (565,415)</u>
	<u>December 31, 2018</u>
Deferred Outflows	\$ 1,107,394
Deferred Inflows	<u>1,672,809</u>
Net Outflows (Inflows)	<u>\$ (565,415)</u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 10 PENSION PLAN (continued)

Actuarial Assumptions

The collective total pension liability for the June 30, 2018 measurement date was determined by an actuarial valuation as of July 1, 2017, which was rolled forward to June 30, 2018. This actuarial valuation used the following actuarial assumptions:

	<u>PERS</u>
Measurement Date	6/30/18
Actuarial valuation date	7/1/17
Investment rate of return	7.00%
Salary increases	1.65 – 4.15% Based on Age
Thereafter	2.65 – 5.15% Based on Age
Inflation rate	2.25%

Preretirement mortality rates were based on the RP-2000 Employee Preretirement Mortality Table for male and female active participants. For State employees, mortality tables are set back 4 years for males and females. For local employees, mortality tables are set back 2 years for males and 7 years for females. In addition, the tables provide for future improvements in mortality from the base year of 2013 using a generational approach based on the Conduent modified 2014 projection scale. Postretirement mortality rates were based on the RP-2000 Combined Healthy Male and Female Mortality Tables (set back 1 year for males and females) for service retirements and beneficiaries of former members. In addition, the tables for service retirements and beneficiaries of former members provide for future improvements in mortality from the base year of 2012 to 2013 using Projection Scale AA and a generational approach based on the Conduent 2014 projection scale thereafter. Disability retirement rates used to value disabled retirees were based on the RP-2000 Disabled Mortality Table (set back 3 years for males and set forward 1 year for females).

The actuarial assumptions used in the July 1, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2011 to June 30, 2014. It is likely that future experience will not exactly conform to these assumptions. To the extent that actual experience deviates from these assumptions, the emerging liabilities may be higher or lower than anticipated. The more the experience deviates, the larger the impact on future financial statements.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 10 PENSION PLAN (continued)

Long-Term Expected Rate of Return

In accordance with State statute, the long-term expected rate of return on plan investments (7.00% at June 30, 2018) is determined by the State Treasurer, after consultation with the Directors of the Division of Investments and Division of Pensions and Benefits, the board of trustees and the actuaries. The long-term expected rate of return was determined using a building block method 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. Best estimates of arithmetic real rates of return for each major asset class included in PERS target asset allocation as of June 30, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Risk mitigation strategies	5.00%	5.51%
Cash equivalents	5.50%	1.00%
U.S. Treasuries	3.00%	1.87%
Investment grade credit	10.00%	3.78%
High yield	2.50%	6.82%
Global diversified credit	5.00%	7.10%
Credit orientated hedge funds	1.00%	6.60%
Debt related private equity	2.00%	10.63%
Debt related real estate	1.00%	6.61%
Private real asset	2.50%	11.83%
Equity related real estate	6.25%	9.23%
U.S. equity	30.00%	8.19%
Non-U.S. developed markets equity	11.50%	9.00%
Emerging markets equity	6.50%	11.64%
Buyouts/venture capital	8.25%	13.08%

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 10 PENSION PLAN (continued)

Discount Rate

The discount rate used to measure the total pension liability was 5.66% as of June 30, 2018. The single blended discount rate was based on long-term expected rate of return on pension plan investments of 7.00%, and a municipal bond rate of 3.87% as of June 30, 2018, based on the Bond Buyer Go 20-Bond Municipal Bond Index which includes tax-exempt general obligation municipals bonds with an average rating of AA/Aa or higher. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made based on the contribution rate in the most recent fiscal year. The State employer contributed 50% of the actuarially determined contributions and the local employers contributed 100% of their actuarially determined contributions. Based on those assumptions, the plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through June 30, 2046. Therefore, the long-term expected rate of return on plan investments was applied to projected benefit payments through June 30, 2046 and the municipal bond rate was applied to projected benefit payments after that date in determining the total pension liability.

Sensitivity to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate as disclosed above, 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-percentage-point lower (4.66%) or 1-percentage-point higher (6.66%) than the current rate:

	<u>Decrease</u> <u>(4.66%)</u>	<u>Discount</u> <u>(5.66%)</u>	<u>Increase</u> <u>(6.66%)</u>
Authority's proportionate share of the net pension liability	\$ 5,791,177	\$ 4,605,732	\$ 3,611,219

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued PERS financial statements.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”)

Plan Description

The State Health Benefit Local Government Retired Employee Plan (the Plan) is a cost-sharing multiple-employer defined benefit other postemployment benefit (OPEB) plan with a special funding situation. It covers employees of local government employers that have adopted a resolution to participate in the Plan. The plan meets the definition of an equivalent arrangement as defined in paragraph 4 of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB Statement No. 75); therefore, assets are accumulated to pay associated benefits. For additional information about the Plan, please refer to the State of New Jersey, Division of Pensions and Benefits' (the Division). Comprehensive Annual Financial Report (CAFR) which can be found at www.state.nj.us/treasury/pensions/financial-reports.shtml.

The Plan provides medical and prescription drug to retirees and their covered dependents of the employers. Under the provisions of Chapter 88, P.L. 1974 and Chapter 48, P.L. 1999, local government employers electing to provide postretirement medical coverage to their employees must file a resolution with the Division. Under Chapter 88, local employers elect to provide benefit coverage based on the eligibility rules and regulations promulgated by the State Health Benefits Commission. Chapter 48 allows local employers to establish their own age and service eligibility for employer paid health benefits coverage for retired employees. Under Chapter 48, the employer may assume the cost of postretirement medical coverage for employees and their dependents who: 1) retired on a disability pension; or 2) retired with 25 or more years of service credit in a State or locally administered retirement system and a period of service of up to 25 years with the employer at the time of retirement as established by the employer; or 3) retired and reached the age of 65 with 25 or more years of service credit in a State or locally administered retirement system and a period of service of up to 25 years with the employer at the time of retirement as established by the employer; or 4) retired and reached age 62 with at least 15 years of service with the employer. Further, the law provides that the employer paid obligations for retiree coverage may be determined by means of a collective negotiation agreement.

In accordance with Chapter 330, P.L. 1997, which is codified in N.J.S.A 52:14-17.32i, the State provides medical and prescription coverage to local police officers and firefighters, who retire with 25 years of service or on a disability from an employer who does not provide postretirement medical coverage. Local employers were required to file a resolution with the Division in order for their employees to qualify for State-paid retiree health benefits coverage under Chapter 330. The State also provides funding for retiree health benefits to survivors of local police officers and firefighters who die in the line of duty under Chapter 271, P.L.1989.

Pursuant to Chapter 78, P.L. 2011, future retirees eligible for postretirement medical coverage who have less than 20 years of creditable service on June 28, 2011 will be required to pay a percentage of the cost of their health care coverage in retirement provided they retire with 25 or more years of pension service credit. The percentage of the premium for which the retiree will be responsible will be determined based on the retiree's annual retirement benefit and level of coverage.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

Allocation Methodology

GASB Statement No. 75 requires participating employers in the Plan to recognize their proportionate share of the collective net OPEB liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense. The special funding situation's and nonspecial funding situation's net OPEB liability, deferred outflows of resources, deferred inflows of resources, and OPEB expense are based on separately calculated total OPEB liabilities. For the special funding situation, the total OPEB liabilities for the years ended June 30, 2017 and 2018 were \$8,695,413,135 and \$6,338,578,586, respectively, while for the nonspecial funding situation, the total OPEB liabilities were \$11,720,375,604 and \$9,642,524,641, respectively. The nonspecial funding situation's net OPEB liability, deferred outflows of resources, deferred inflows of resources, and OPEB expense are further allocated to employers based on the ratio of the plan members of an individual employer to the total members of the Plan's nonspecial funding situation during the measurement period July 1, 2017 through June 30, 2018. Employer and nonemployer allocation percentages have been rounded for presentation purposes; therefore, amounts presented in the schedule of OPEB amounts by employer and nonemployer may result in immaterial differences.

Special Funding Situation

Under Chapter 330, P.L. 1997, the State shall pay the premium or periodic charges for the qualified local police and firefighter retirees and dependents equal to 80 percent of the premium or periodic charge for the category of coverage elected by the qualified retiree under the State managed care plan or a health maintenance organization participating in the program providing the lowest premium or periodic charge. The State also provides funding for retiree health benefits to survivors of local police officers and firefighters who die in the line of duty under Chapter 271, P.L.1989. Therefore, these employers are considered to be in a special funding situation as defined by GASB Statement No 75 and the State is treated as a nonemployer contributing entity. Since the local participating employers do not contribute under this legislation directly to the plan, there is no net OPEB liability, deferred outflows of resources or deferred inflows of resources to report in the financial statements of the local participating employers related to this legislation. However, the notes to the financial statements of the local participating employers must disclose the portion of the nonemployer contributing entities' total proportionate share of the collective net OPEB liability that is associated with the local participating employer.

Net OPEB Liability

At December 31, 2018, the Authority reported a liability of \$4,605,732 as the Authority's proportionate share of Net OPEB liability. The Net OPEB liability was measured as of June 30, 2018. The total OPEB liability used to calculate the Net OPEB liability was determined using update procedures to roll forward the total OPEB liability from an actuarial valuation as of June 30, 2017, which was rolled forward to June 30, 2018. The Authority's proportion measured as of June 30, 2018, was 0.030899% which was an increase of 0.002305% from its proportion measured as of June 30, 2017.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

OPEB Expense

At December 31, 2018, the Authority's proportionate share of the expense, calculated by the plan as of the June 30, 2018 measurement date is \$199,894.

Deferred Outflows and Deferred Inflows of Resources, and OPEB Expense

At December 31, 2018 the State reported deferred outflows of resources and deferred inflows from resources attributable to the Authority from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net differences between expected and actual experience		\$ 982,861
Net differences between projected and actual investment earnings	\$ 2,558	
Changes of assumptions		1,227,940
Changes in proportion	458,516	318,471
	\$ 461,074	\$ 2,529,272

The Authority will amortize the above sources of deferred outflows and inflows related to the OPEB over the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan with the exception of net differences between projected and actual earnings on OPEB plan investments which will be amortized over 5 years. The average of the expected remaining service lives of all employees is 8.14 and 8.04 for the 2018 and 2017 amounts, respectively.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017**

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

Deferred Outflows and Deferred Inflows of Resources, and OPEB Expense (continued)

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB that would be recognized in future periods if the Authority was on a GAAP basis of accounting, is as follows:

Year ended December 31,

	2019	\$	(311,623)
	2020		(311,623)
	2021		(311,623)
	2022		(311,873)
	2023		(312,325)
	2024-2026		(509,131)
			(509,131)
Total		\$	(2,068,198)

December 31,
2018

Deferred Outflows	\$	461,074
Deferred Inflows		(2,529,272)
Net Outflows (Inflows)	\$	(2,068,198)

Actuarial Assumptions

The total OPEB liability as of the measurement date was determined by using an actuarial valuation as noted in the table below, with update procedures used to roll forward the total OPEB liability to the measurement date. The actuarial valuations used the following actuarial assumptions:

Inflation	2.50%
Salary Increases*:	
Through 2026	1.65 – 8.98%
Thereafter	2.65 – 9.98%

* Salary increases are based on the defined benefit plan that the member is enrolled in and his or her age

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

Deferred Outflows and Deferred Inflows of Resources, and OPEB Expense (continued)

Preretirement mortality rates were based on the RP-2006 Headcount-Weighted Healthy Employee Male/Female mortality table with fully generational mortality improvement projections from the central year using the MP-2017 scale. Postretirement mortality rates were based on the RP-2006 Headcount-Weighted Healthy Annuitant Male/Female mortality table with fully generational improvement projections from the central year using the MP-2017 scale. Disability mortality was based on the RP-2006 Headcount-Weighted Disabled Male/Female mortality table with fully generational improvement projections from the central year using the MP-2017 scale.

Certain actuarial assumptions used in the June 30, 2017 valuation were based on the results of the pension plans' experience studies for which the members are eligible for coverage under this Plan - the Police and Firemen Retirement System (PFRS) and the Public Employees' Retirement System (PERS). The PFRS and PERS experience studies were prepared for the periods July 1, 2010 to June 30, 2013 and July 1, 2011 to June 30, 2014, respectively.

100% of active members are considered to participate in the Plan upon retirement.

Health Care Trend Assumptions

For pre-Medicare preferred provider organization (PPO) and health maintenance organization (HMO) medical benefits, the trend rate is initially 5.9% and decreases to a 5.0% long-term trend rate after nine years. For self-insured post-65 PPO and HMO medical benefits, the trend rate is 4.5%. For prescription drug benefits, the initial trend rate is 10.5% decreasing to a 5.0% long-term trend rate after eight years. For the Medicare Part B reimbursement, the trend rate is 5.0%. The Medicare Advantage trend rate is 4.5% and will continue in all future years.

Discount Rate

The discount rate for June 30, 2018 and 2017 was 3.87% and 3.58%, respectively. This represents the municipal bond return rate as chosen by the State. The source is the Bond Buyer Go 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. As the long-term rate of return is less than the municipal bond rate, it is not considered in the calculation of the discount rate, rather the discount rate is set at the municipal bond rate.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

Sensitivity of Net OPEB Liability to Changes in the Discount Rate:

The following presents the Authority's proportionate share of the net OPEB liability as of June 30, 2018 and 2017, respectively, calculated using the discount rate as disclosed above as well as what the collective net OPEB liability would be if it was calculated using a discount rate that is 1-percentage point lower or 1-percentage- point higher than the current rate:

	<u>1%</u> <u>Decrease</u> <u>(2.87%)</u>	<u>June 30, 2018</u> <u>Current</u> <u>Discount Rate</u> <u>(3.87%)</u>	<u>1%</u> <u>Increase</u> <u>(4.87%)</u>
Authority's proportionate share of the net OPEB liability	<u>\$ 5,679,571</u>	<u>\$ 4,840,828</u>	<u>\$ 4,170,862</u>

	<u>1%</u> <u>Decrease</u> <u>(2.58%)</u>	<u>June 30, 2017</u> <u>Current</u> <u>Discount Rate</u> <u>(3.58%)</u>	<u>1%</u> <u>Increase</u> <u>(4.58%)</u>
Authority's proportionate share of the net OPEB liability	<u>\$ 6,885,731</u>	<u>\$ 5,837,691</u>	<u>\$ 5,006,089</u>

Sensitivity of Net OPEB Liability to Changes in the Healthcare Trend Rate:

The following presents the Authority's proportionate share of the net OPEB liability as of June 30, 2018 and 2017, respectively, calculated using the healthcare trend rate as disclosed above as well as what the net OPEB liability would be if it was calculated using a healthcare trend rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	<u>1%</u> <u>Decrease</u>	<u>June 30, 2018</u> <u>Current</u> <u>Trend Rate</u>	<u>1%</u> <u>Increase</u>
Authority's proportionate share of the net OPEB liability	<u>\$ 4,038,027</u>	<u>\$ 4,840,828</u>	<u>\$ 5,879,772</u>

	<u>1%</u> <u>Decrease</u>	<u>June 30, 2017</u> <u>Current</u> <u>Trend Rate</u>	<u>1%</u> <u>Increase</u>
Authority's proportionate share of the net OPEB liability	<u>\$ 4,851,292</u>	<u>\$ 5,837,691</u>	<u>\$ 7,122,097</u>

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 11 POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (“OPEB”) (continued)

OPEB plan fiduciary net position

Detailed information about the OPEB plan's fiduciary net position is available in a report issued separately by the New Jersey Division of Pensions and Benefits.

Schedule of the Authority's Proportionate Share of the Net OPEB Liability (Last 3 Plan Fiscal Years)

	<u>2016</u>	<u>2017</u>	<u>2018</u>
Authority's proportion of the net OPEB liability	0.030546%	0.028594%	0.030899%
Authority's proportionate share of the net OPEB liability	\$ 6,633,817	\$ 5,837,691	\$ 4,840,828
Authority's covered-employee payroll	\$ 1,718,894	\$ 1,786,383	\$ 1,653,583
Authority's proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	3.86%	3.27%	2.93%
Plan fiduciary net position as a percentage of the total OPEB liability	0.69%	1.03%	1.97%

Schedule of the Authority's Contributions (Last 3 Plan Fiscal Years)

	<u>2016</u>	<u>2017</u>	<u>2018</u>
Contractually required contribution	\$ 408,498	\$ 366,197	\$ 415,633
Contributions in relation to the contractually required contribution	<u>408,498</u>	<u>366,197</u>	<u>415,633</u>
Contribution deficiency/(excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018 and 2017

NOTE 12 RISK MANAGEMENT

Health insurance coverage for the Authority's employees is obtained through the New Jersey State Health Benefits Program ("SHBP"). SHBP provides the following basic benefit coverage to all participants: hospital, surgical, group major medical, prescription drug coverage for active and qualified retired Authority employees and their families. Worker's compensation is obtained through the Statewide Joint Insurance Fund, a public entity risk pool. General liability and property coverage is provided by Zurich American Insurance Company; general liability coverage is in the amount of \$1,000,000 per occurrence and property coverage is in the amount of \$1,000,000 combined single limit. A commercial umbrella policy from American Alternative Insurance Company increases the limits to \$10,000,000 for each occurrence and in the aggregate for general liability and property coverage.

There have been no reductions in insurance coverage from the prior year. Additionally, the amount of settlements has not exceeded insurance coverage in the past three years.

NOTE 13 IMPAIRMENT OF FIXED ASSETS

During 2018 it became apparent that a capital project relating to work on the Authority's digester number 3 was defective. The Authority has expensed the cost of the project of \$1,898,003 as the asset has no value. The Authority reserves its right to claim and recover any losses to the extent possible.

NOTE 14 CONTINGENCIES

The Authority is subject to extensive federal and state environmental regulations. The Authority's management is not aware of any violations that may have a material effect on the financial statements.

NOTE 15 LITIGATION

The Authority is party to various lawsuits, none of which the Authority believes will cause any monetary damage to the Authority.

NOTE 16 SUBSEQUENT EVENTS

Management has evaluated subsequent events through August 14, 2019, the date the financial statements were issued.

The Authority has no reportable subsequent events.

SUPPLEMENTARY INFORMATION

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY**

**SCHEDULE OF OPERATING REVENUES AND COSTS FUNDED BY
OPERATING REVENUES
Year Ended December 31, 2018
(With Comparative Actual Amounts for the Year Ended December 31, 2017)**

	2018 Budget	2018 Actual	Variance	2017 Actual
Operating Revenues:				
Service Charges	\$ 6,727,900	\$ 6,727,900		\$ 6,727,300
Interest Income	20,000	176,021	\$ 156,021	75,547
Miscellaneous Income		19,459	19,459	9,159
Total Budget	<u>\$ 6,747,900</u>	<u>\$ 6,923,380</u>	<u>\$ 175,480</u>	<u>\$ 6,812,006</u>
Operating Expenses:				
Personel Costs and Benefits:				
Administrative Salaries and Wages	\$ 150,500	\$ 153,116	\$ (2,616)	\$ 149,393
Operational Salaries and Wages	1,650,000	1,482,467	167,533	1,636,990
Pension	210,000	285,308	(75,308)	553,536
Hospitalization & Dental	446,000	491,461	(45,461)	389,996
Prescription Plan	90,000	74,974	15,026	89,015
Payroll Taxes	147,000	142,805	4,195	132,947
Total Personel Costs and Benefits	<u>2,693,500</u>	<u>2,630,131</u>	<u>63,369</u>	<u>2,951,877</u>
Administrative and General Expenses				
Insurance	191,000	189,835	1,165	199,826
Travel	4,000	944	3,056	1,017
Training	10,000	3,736	6,264	3,301
Postage	2,000	1,375	625	887
Telephone	15,000	14,751	249	13,788
Office Supplies and Equipment	27,000	21,891	5,109	23,508
Maintenance Agreements	25,000	15,983	9,017	20,202
Books and Publications	1,000	493	507	493
Advertising	2,500	3,048	(548)	2,733
Licensing Fees	65,000	50,831	14,169	60,022
Affiliation Fees	7,000	5,515	1,485	5,704
Administrative	10,400	11,510	(1,110)	10,727
Auditing and Financial Consulting	38,000	28,250	9,750	28,250
Legal and Legal Consulting	78,000	57,057	20,943	98,954
Trustee Fees	4,500	4,500	-	4,500
Total Administrative and General Expenses	<u>480,400</u>	<u>409,719</u>	<u>70,681</u>	<u>473,912</u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY**

**SCHEDULE OF OPERATING REVENUES AND COSTS FUNDED BY
OPERATING REVENUES
Year Ended December 31, 2018
(With Comparative Actual Amounts for the Year Ended December 31, 2017)**

	2018 Budget	2018 Actual	Variance	2017 Actual
Plant, System and Maintenance Expenses				
Electric	650,000	474,092	175,908	516,089
Fuel Oil	12,000	5,841	6,159	4,624
Water	8,000	7,488	512	7,279
Chemical/Odor Control	150,000	87,962	62,038	59,246
Janitorial Supplies	9,000	3,180	5,820	3,860
Equipment and Maintenance	480,000	213,633	266,367	178,269
Natural Gas	160,000	79,294	80,706	91,118
Uniforms	9,000	7,935	1,065	10,620
Lab Supplies	40,000	20,831	19,169	38,636
Lubricants	13,000	4,192	8,808	7,589
Sodium Hypochlorite	115,000	103,079	11,921	96,777
Sludge Processing	275,000	785,038	(510,038)	223,023
Ocean Outfall Inspection	40,000	24,900	15,100	28,300
Gasoline	12,000	7,436	4,564	6,636
Vehicle Maintenance	10,000	9,606	394	7,955
Engineering and Engineering Consulting	150,000	39,516	110,484	134,783
Total Plant, System and Maintenance Expenses	<u>2,133,000</u>	<u>1,874,023</u>	<u>258,977</u>	<u>1,414,804</u>
Total Operating Expenses	<u>5,306,900</u>	<u>4,913,873</u>	<u>393,027</u>	<u>4,840,593</u>
Other Costs Funded by Operating Revenues:				
Capital Outlay:				
Plant Improvements and Equipment	880,000	627,777	252,223	1,820,773
Total Capital Outlay	<u>880,000</u>	<u>627,777</u>	<u>252,223</u>	<u>1,820,773</u>
Debt Service:				
Bond Interest	156,000	130,299	25,701	180,700
Other Interest		3,888	(3,888)	4,151
Bond Principal	1,285,000	1,285,000	-	1,235,000
Total Debt Service	<u>1,441,000</u>	<u>1,419,187</u>	<u>21,813</u>	<u>1,419,851</u>
Total Other Costs Funded by Operating Revenues	<u>2,321,000</u>	<u>2,046,964</u>	<u>274,036</u>	<u>3,240,624</u>
Total Costs Funded by Operating Revenues	<u>7,627,900</u>	<u>6,960,837</u>	<u>667,063</u>	<u>8,081,217</u>
Excess (Deficit) of Revenues over Costs	<u>(880,000)</u>	<u>(37,457)</u>	<u>842,543</u>	<u>(1,269,211)</u>
Total Budget	<u>\$ 6,747,900</u>	<u>\$ 6,923,380</u>	<u>\$ 175,480</u>	<u>\$ 6,812,006</u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY**

**SCHEDULE OF OPERATING REVENUES AND COSTS FUNDED BY
OPERATING REVENUES**

Year Ended December 31, 2018

(With Comparative Actual Amounts for the Year Ended December 31, 2017)

	2018 <u>Actual</u>	2017 <u>Actual</u>
Reconciliation of Budgetary Basis to Net Income		
Excess (Deficit) of Revenues over Costs	\$ (37,457)	\$ (1,269,211)
Capitalized Plant Improvements	627,777	1,820,773
Impairment of fixed assets	(1,898,003)	-
Depreciation Expense	(1,235,717)	(1,115,466)
Amortization of Bond Premium	46,849	62,960
Amortization of Deferred Charges	(11,697)	(17,308)
Debt Service - Bond Principal	<u>1,285,000</u>	<u>1,235,000</u>
Net Income	<u><u>\$ (1,223,248)</u></u>	<u><u>\$ 716,748</u></u>

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY**

**SCHEDULE OF THE PROPORTIONATE SHARE OF
NET PENSION LIABILITY
Years Ended December 31, (Last 10 Years)***

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Proportion of the net pension liability	0.0233918165%	0.0231375835%	0.0221332915%	0.0231464044%
Proportionate share of the net pension liability	\$ 4,605,732	\$ 5,386,060	\$ 6,555,246	\$ 5,195,904
Covered - employee payroll	\$ 1,653,583	\$ 1,786,383	\$ 1,718,894	\$ 1,657,203
Proportionate Share of the net pension liability as percentage of employee payroll	278.53%	301.51%	381.36%	313.53%
Proportionate share of plan's fiduciary net position	\$ 5,319,784	\$ 4,991,694	\$ 4,395,133	\$ 4,782,414
Plan fiduciary net position as a percentage of the total pension liability	53.60%	48.10%	40.14%	47.93%

Notes to Schedule:

* - 2015 was the first year of implementation, therefore only four years are shown.

TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
NEPTUNE, NEW JERSEY

SCHEDULE OF CONTRIBUTIONS
Years Ended December 31, (Last 10 Years)*

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contribution (actuarially determined)	\$ 232,673.00	\$ 214,345.00	\$ 195,997.00	\$ 180,288.00
Contributions in relation to the actuarially determined contributions	<u>232,673.00</u>	<u>214,345.00</u>	<u>195,997.00</u>	<u>180,288.00</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
 Covered - employee payroll	 \$ 1,653,583.00	 \$ 1,786,383.00	 \$ 1,718,894.00	 \$ 1,657,203.00
 Contributions as a percentage of covered- employee payroll	 14.07%	 12.00%	 11.40%	 10.88%

Notes to Schedule:

Valuation date:	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
Inflation rate	2.25%	2.25%	3.08%	3.04%
Salary Increases	1.65 - 4.15% based on age	1.65 - 4.15% based on age	1.65 - 4.15% based on age	2.15 - 4.40% based on age
Thereafter	2.65 - 5.15% based on age	2.65 - 5.15% based on age	2.65 - 5.15% based on age	3.15 - 5.40% based on age
Investment rate of return	7.00%	7.00%	7.65%	7.90%

* - 2015 was the first year of implementation, therefore only four years are shown.

PART II
COMMENTS AND RECOMMENDATIONS

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COUNTY OF MONMOUTH**

**SCHEDULE OF FINDINGS AND RECOMMENDATIONS
Year Ended December 31, 2018**

This section identifies the significant deficiencies, material weaknesses, and instances of noncompliance related to the financial statements that are required to be reported in accordance with *Government Auditing Standards* and with audit requirements as prescribed by the Bureau of Authority Regulation, Division of Local Government Services, Department of Community Affairs, State of New Jersey.

None.

**TOWNSHIP OF NEPTUNE SEWERAGE AUTHORITY
COUNTY OF MONMOUTH**

**SUMMARY SCHEDULE OF PRIOR YEAR AUDIT FINDINGS
AND RECOMMENDATIONS AS PREPARED BY MANAGEMENT
Year Ended December 31, 2018**

This section identifies the status of prior year findings related to the financial statements that are required to be reported in accordance with *Government Auditing Standards*.

None.