



**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**FINANCIAL STATEMENTS  
WITH SUPPLEMENTARY INFORMATION**

**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**AND**

**INDEPENDENT AUDITORS' REPORT**

# MIDDLESEX COUNTY UTILITIES AUTHORITY

## TABLE OF CONTENTS

	<u>Page</u>
<b>Independent Auditors' Report</b>	1
<b>Required Supplementary Information – Part I</b>	
Management's Discussion and Analysis (MD&A)	4
<b>Basic Financial Statements and Supplementary Information</b>	
Statement of Net Position – December 31, 2018	12
Statement of Net Position – December 31, 2017	14
Statement of Revenues and Expenses – Year Ended December 31, 2018	16
Statement of Revenues and Expenses – Year Ended December 31, 2017	17
Statement of Changes in Net Position	18
Statement of Cash Flows – Year Ended December 31, 2018	19
Statement of Cash Flows – Year Ended December 31, 2017	21
Notes to Basic Financial Statements	23
<b>Required Supplementary Information – Part II</b>	
Schedule of Changes in Net OPEB Liability	61
Schedule of Authority OPEB Contributions	62
Schedule of the Authority's Proportionate Share of the Net Pension Liability – Public Employee's Retirement System and Notes to Required Supplementary Information	63
Schedule of Authority Contributions – Public Employee's Retirement System	64
<b>Supplementary Information</b>	
Schedule of Cash, Cash Equivalents and Investments – Wastewater Division	65
Schedule of Changes in Unrestricted Cash and Cash Equivalents – Wastewater Division	66
Schedule of Changes in Unrestricted Cash and Cash Equivalents – Solid Waste Division	67
Schedule of Changes in Restricted Cash, Cash Equivalents and Investments – Wastewater Division	68
Schedule of Changes in Restricted Cash, Cash Equivalents and Investments – Solid Waste Division	77
Schedule of Capital Assets	83
Schedule of Accumulated Depreciation – Wastewater Division	84
Schedule of Accumulated Depreciation – Solid Waste Division	85
Schedule of Construction in Progress	86
Schedule of Revenue Serial Bonds Payable	87

# MIDDLESEX COUNTY UTILITIES AUTHORITY

## TABLE OF CONTENTS

	<u>Page</u>
<b>Supplementary Information (continued)</b>	
Schedule of Operating Revenues and Costs Funded by Operating Revenues Compared to Budget – Wastewater Division	88
Schedule of Operating Revenues and Costs Funded by Operating Revenues Compared to Budget – Solid Waste Division	94
Schedule of Loadings and Charges – Wastewater Division	96
<b>Other Information</b>	
Schedule of Rates – Wastewater Division	97
Roster of Officials	98
General Comments and Recommendations	99
<b>Single Audit Section</b>	
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>	100
Report on Compliance for Each Major Federal and State Program and Report on Internal Control Over Compliance Required by the Uniform Guidance and New Jersey OMB Circular 15-08	102
Schedule of Expenditures of Federal Awards – Supplementary Information	104
Schedule of Expenditures of State Financial Assistance – Supplementary Information	105
Notes to the Schedule of Expenditures of Federal Awards and State Financial Assistance	106
Schedule of Findings and Questioned Costs	108
Summary Schedule of Prior Year Audit Findings	112

## INDEPENDENT AUDITORS' REPORT

The Board of Commissioners of  
Middlesex County Utilities Authority  
Sayreville, New Jersey

### Report on the Financial Statements

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

### *Management's Responsibility for the Financial Statements*

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.

### *Auditors' Responsibility*

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' 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 Authority'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 Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

## ***Opinion***

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

## ***Change in Accounting Principle***

As discussed in Note 3 to the basic financial statements, in 2018, the Authority adopted new accounting guidance, Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, which represents a change in accounting principle. 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 management's discussion and analysis, schedule of changes in net OPEB liability, schedule of Authority OPEB contributions, schedule of the Authority's proportionate share of the net pension liability-PERS and schedule of Authority contributions-PERS, as identified in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### ***Other Information***

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The accompanying supplementary information, on pages 12 through 22 and pages 65 through 96, and the schedules of expenditures of federal awards and state financial assistance as required by Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and New Jersey OMB 15-08, *Single Audit Policy for Recipients of Federal Grants, State Grants and State Aid*, respectively, and the other information such as the schedule of rates, roster of officials and general comments and recommendations are presented for purposes of additional analysis and are not a required part of the basic financial statements. The consolidating information is presented for purposes of additional analysis of the consolidated financial statements rather than present the financial position, changes in financial position and cash flows of the individual Divisions.

The supplementary information identified above is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information, on pages 12 through 22 and pages 65 through 96, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The schedule of rates, roster of officials and general comments and recommendations have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated August 5, 2019 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

  
WISS & COMPANY, LLP

Livingston, New Jersey  
August 5, 2019

## MIDDLESEX COUNTY UTILITIES AUTHORITY

### REQUIRED SUPPLEMENTARY INFORMATION MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Middlesex County Utilities Authority's ("Authority") financial condition and activities for the years ended December 31, 2018 and 2017.

This information should be read in conjunction with the basic financial statements and accompanying notes to the basic financial statements, which immediately follow this section.

Management's Discussion and Analysis ("MD&A") is Required Supplementary Information specified in the Governmental Accounting Standards Board's ("GASB") Statement No. 34, *Basic Financial Statements-Management's Discussion and Analysis for Local Governments*. Certain comparative information between the current fiscal year and the prior two fiscal years are presented in the MD&A as required by GASB Statement No. 34.

#### **Overview of the Financial Statements**

The Middlesex County Utilities Authority is a body politic and corporate and an instrumentality of the State of New Jersey and operates two divisions. The Wastewater Division is supported by user fees from its participants which consisted of 23 municipalities and 5 commercial industries during the year ended December 31, 2018. The Wastewater Division supplies secondary wastewater treatment to Middlesex County and parts of Union and Somerset Counties. The Solid Waste Division is supported by tipping fees from waste generated and disposed of in Middlesex County.

The financial statements report information using full accrual accounting methods. The Authority is subject to GAAP (generally accepting accounting principles) as promulgated by GASB; hence the depreciation and amortization schedules are an integral part of the financial statements enumerated below.

The **Statements of Net Position** present the financial position of the Authority on a full accrual historical cost basis. The statements of net position present information on all of the Authority's assets, deferred inflows and outflows of resources, and liabilities, with the difference reported as net position. Over time, increases and decreases in net position are one indicator of whether the financial position of the Authority is improving or deteriorating.

The **Statements of Revenues and Expenses and the Statement of Changes in Net Position** present the results of the business activities over the course of 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 the change occurs, regardless of the timing of the related cash flows.

The **Statements of Cash Flows** present changes in cash and cash equivalents, resulting from operational, capital and non-capital financing, and investing activities. These statements present cash receipt and cash disbursement information, without consideration of the earnings event, when an obligation arises, or depreciation of capital assets.

# MIDDLESEX COUNTY UTILITIES AUTHORITY

## REQUIRED SUPPLEMENTARY INFORMATION MANAGEMENT'S DISCUSSION AND ANALYSIS

The **Notes to the Basic Financial Statements** provide required disclosures and other information that are essential to a full understanding of material data provided in the financial statements. The notes present information about the Authority's accounting policies, significant account balances, and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.

**Supplementary Information** comparing the budget to actual expenses, as well as important cash, cash equivalent and investment and debt coverage data, is provided.

The basic financial statements were prepared by the Authority's staff from the detailed books and records of the Authority. The basic financial statements were audited by the independent external audit process.

### Financial Condition

#### Statements of Net Position

The Authority's total assets and deferred outflows of resources increased by \$59,447,224 mainly due to an increase in grants receivable, a receivable from the New Jersey Environmental Infrastructure Trust ("NJEIT"), and an overall increase in capital assets due to an increase in construction in progress due to the construction of wastewater facilities and pump stations. This was offset by a decrease in cash held with bond trustee. Total liabilities and deferred inflows of resources increased by \$7,542,353, mainly due to an increase in accounts payable and accrued expenses, an increase in NJEIT State Assistance Infrastructure Loans and an increase in other post employment benefits (OPEB) deferrals due to implementation of GASB 75. This was offset by a decrease in the net pension liability and liability for other post-employment benefits. Assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$317,342,793. This compares to 2017 where assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$265,437,922 (as restated).

The Authority's Net Position of \$317,342,793 is comprised of the following:

1. Net investment in capital assets of \$442,264,757, as shown below, includes land, construction in progress, property plant and equipment, net of accumulated depreciation, and net of long-term debt related to the purchase or construction of capital assets. Net investment in capital assets increased by \$51,798,797 from the prior year.

	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Total</b>
Capital Assets - Net	\$ 508,461,820	\$ 69,014,116	\$ 577,475,936
Cash held with bond trustee	990,269	-	990,269
	<u>509,452,089</u>	<u>69,014,116</u>	<u>578,466,205</u>
Less:			
Bonds payable, including unamortized bond premiums	117,308,174	16,863,083	134,171,257
Deferred gain on defeasance of debt	1,769,018	261,173	2,030,191
	<u>119,077,192</u>	<u>17,124,256</u>	<u>136,201,448</u>
Net Investment in Capital Assets	<u>\$ 390,374,897</u>	<u>\$ 51,889,860</u>	<u>\$ 442,264,757</u>

## MIDDLESEX COUNTY UTILITIES AUTHORITY

### REQUIRED SUPPLEMENTARY INFORMATION MANAGEMENT'S DISCUSSION AND ANALYSIS

2. Wastewater Division net position of \$12,287,938, restricted for future debt service, remained consistent with the prior year as there were no changes in the bond reserve requirements.
3. Solid Waste Division net position of \$20,632,543, restricted for environmental self-insurance, increased by \$193,798 from the prior year due to interest earned on the restricted funds.
4. Wastewater Division net position of \$200,000 is designated for operations.
5. Wastewater Division net position of \$3,110,330 designated for future reconstruction and replacement increased \$1,026,136 from the prior year is mostly attributable to a budget designation of \$1,000,000. Solid Waste Division net position of \$2,096,045 designated for future reconstruction and replacement increased \$817,220 from the prior year is mostly attributable to a budget designation of \$800,000.
6. Wastewater Division net position of \$1,146 designated for construction remained the same as the prior year.
7. Wastewater Division net position of \$2,254,651 designated for liability insurance increased by \$11,095 from the prior year due to interest income earned in 2018. Solid Waste Division net position of \$2,806,061 designated for liability insurance increased by \$26,339 from the prior year due to interest earned in 2018.
8. Wastewater Division net position of \$292,467 designated for auto insurance increased by \$2,745 from the prior year due to interest income earned in 2018. Solid Waste Division net position of \$194,459 designated for auto insurance increased by \$1,825 from the prior year due to interest income earned in 2018.
9. Wastewater Division net position of \$120,365 designated for unemployment claims increased by \$1,130 from the prior year due to interest earned in 2018.
10. Solid Waste Division net position of \$19,536,494 designated for land acquisition and improvements increased by \$382,557 from the prior year. This increase is mostly attributable to a budget designation of \$400,000.
11. Solid Waste Division net position of \$2,016,323 designated for future contingencies increased by \$18,926 as a result of interest earned in 2018.
12. Solid Waste Division net position of \$2,034,190 designated for public liability insurance increased by \$19,094 as a result of interest earned in 2018.
13. Wastewater Division unrestricted, undesignated net position (deficit) of (\$175,646,763) represents the portion available to maintain the Wastewater Division's continuing obligations to the contractual customers of its service area, its creditors and for its current liabilities. Solid Waste Division unrestricted, undesignated net position (deficit) of (\$16,858,213) represents the portion available to maintain the Solid Waste Division's continuing obligations to the contractual customers of its service area, its creditors and for its current liabilities.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**REQUIRED SUPPLEMENTARY INFORMATION  
MANAGEMENT'S DISCUSSION AND ANALYSIS**

14. Unrestricted undesignated net position decreased by \$2,394,791 mainly due to the implementation of GASB 75 and the related increases in deferred outflows of resources stemming from the OPEB liability. In addition, there was an increase in deferred outflows of resources stemming from the net pension liability. This was offset by a decrease in the net pension liability and liability for other post-employment benefits.

Condensed Statements of Net Position

	<b>December 31, 2018</b>			
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Eliminations</b>	<b>Total</b>
Total unrestricted current assets	\$ 36,945,688	\$ 22,852,074	\$ (110,542)	\$ 59,687,220
Total restricted current assets	63,461,748	113,976,428	(15,695,629)	161,742,547
Total restricted non current assets	2,200,000	-	-	2,200,000
Deferred outflows of resources	11,182,891	1,973,451	-	13,156,342
Capital assets, net	<u>508,461,820</u>	<u>69,014,116</u>	-	<u>577,475,936</u>
Total assets and deferred outflows of resources	<u>\$ 622,252,147</u>	<u>\$ 207,816,069</u>	<u>\$ (15,806,171)</u>	<u>\$ 814,262,045</u>
Total current liabilities payable from unrestricted assets	\$ 20,269,527	\$ 4,741,880	\$ (254,311)	\$ 24,757,096
Total current liabilities payable from restricted assets	24,127,563	8,213,423	-	32,340,986
Long term liabilities payable from restricted assets	313,312,757	104,996,846	(15,551,860)	402,757,743
Deferred inflows of resources	<u>31,547,269</u>	<u>5,516,158</u>	-	<u>37,063,427</u>
Total liabilities and deferred inflows of resources	<u>389,257,116</u>	<u>123,468,307</u>	<u>(15,806,171)</u>	<u>496,919,252</u>
Total Net Position	<u>\$ 232,995,031</u>	<u>\$ 84,347,762</u>	<u>\$ -</u>	<u>\$ 317,342,793</u>

	<b>December 31, 2017 (as restated)</b>			
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Eliminations</b>	<b>Total</b>
Total unrestricted current assets	\$ 26,190,289	\$ 13,867,175	\$ (142,807)	\$ 39,914,657
Total restricted current assets	58,057,131	112,017,633	(17,031,861)	153,042,903
Deferred outflows of resources	14,304,707	2,524,362	-	16,829,069
Capital assets, net	<u>471,991,921</u>	<u>73,036,271</u>	-	<u>545,028,192</u>
Total assets and deferred outflows of resources	<u>\$ 570,544,048</u>	<u>\$ 201,445,441</u>	<u>\$ (17,174,668)</u>	<u>\$ 754,814,821</u>
Total current liabilities payable from unrestricted assets	\$ 14,963,296	\$ 2,783,291	\$ (527,778)	\$ 17,218,809
Total current liabilities payable from restricted assets	18,307,257	8,126,895	-	26,434,152
Long term liabilities payable from unrestricted assets	523,153	-	-	523,153
Long term liabilities payable from restricted assets	334,534,461	115,928,734	(16,646,890)	433,816,305
Deferred inflows of resources	<u>9,588,842</u>	<u>1,795,638</u>	-	<u>11,384,480</u>
Total liabilities and deferred inflows of resources	<u>377,917,009</u>	<u>128,634,558</u>	<u>(17,174,668)</u>	<u>489,376,899</u>
Total Net Position	<u>\$ 192,627,039</u>	<u>\$ 72,810,883</u>	<u>\$ -</u>	<u>\$ 265,437,922</u>

## MIDDLESEX COUNTY UTILITIES AUTHORITY

### REQUIRED SUPPLEMENTARY INFORMATION MANAGEMENT'S DISCUSSION AND ANALYSIS

Total unrestricted current assets increased as a result of increases in the grant receivable.

Total restricted current assets increased due to reimbursements of infrastructure project costs due from the New Jersey Environmental Infrastructure Trust, offset by a decrease in cash held with bond trustee.

Total restricted non current assets increased as a result of the purchase of certificates of deposit.

Total deferred outflows of resources decreased as a result of decreases in the pension deferrals as determined by the State of New Jersey, Division of Pensions and Benefits and decreases in the OPEB deferrals as determined by the Authority's actuary.

Capital assets, net increased as a result of capital asset acquisitions exceeding depreciation expense.

Total current liabilities payable from unrestricted assets has increased, mainly due to an increase in accounts payable and accrued expenses.

Total current liabilities payable from restricted assets increased slightly due to a decrease in the current portion of bonds payable as a result of refunding savings on various bond refundings by the NJEIT and current year payments of principle.

Long term liabilities payable have decreased mainly as a result of principal payments on bonds, decrease in the net pension liability and a decrease in the liability for other post employment benefits.

#### Condensed Statements of Revenues, Expenses and Changes in Fund Net Position

Wastewater Division 2018 operating revenues increased from 2017 levels, mainly due to an increase in annual charges from customer municipalities. Total Wastewater Division operating expenses increased from 2017, mainly due to central treatment plant expenses as well as extensive pipeline repairs in 2018.

Solid Waste Division 2018 operating revenues increased from 2017 levels, mainly due to an increase in tonnage received. Total Solid Waste Division operating expenses increased in 2018, mainly due to an increase in landfill expenses.

Total operating revenues less total operating expenses resulted in 2018 operating income of \$15,048,414 for the Wastewater Division, which is an increase from operating income in 2017 of \$4,481,015. This increase is mostly the result of increases in annual charges exceeding the increase in expenses.

Total operating revenues less total operating expenses resulted in 2018 operating income of \$9,764,150 for the Solid Waste Division, which is an increase from the Solid Waste Division operating income in 2017 of \$2,816,881. This increase is mostly the result of an increase in tipping fees and soil program income offset by an increase in landfill expense.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**REQUIRED SUPPLEMENTARY INFORMATION  
MANAGEMENT'S DISCUSSION AND ANALYSIS**

Total Net Position as of December 31, 2018 increased \$51,904,871 from 2017's Total Net Position (as restated), as is depicted below.

	<b>Year ended December 31, 2018</b>			
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Eliminations</b>	<b>Total</b>
Total operating revenues	\$ 97,973,134	\$ 45,683,811	\$ (2,047,513)	\$ 141,609,432
Total operating expenses	82,924,720	35,919,661	(2,047,513)	116,796,868
Operating income	15,048,414	9,764,150	-	24,812,564
Nonoperating revenues (expenses) - net	25,319,578	2,047,948	-	27,367,526
Net (decrease) in the fair value of investments	-	(275,219)	-	(275,219)
Change in net position	40,367,992	11,536,879	-	51,904,871
Total net position - beginning, as restated	192,627,039	72,810,883	-	265,437,922
Total net position - ending	<u>\$ 232,995,031</u>	<u>\$ 84,347,762</u>	<u>\$ -</u>	<u>\$ 317,342,793</u>
	<b>Year ended December 31, 2017 (as restated)</b>			
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Eliminations</b>	<b>Total</b>
Total operating revenues	\$ 93,139,932	\$ 41,463,428	\$ (2,259,609)	\$ 132,343,751
Total operating expenses	82,572,533	34,516,159	(2,259,609)	114,829,083
Operating income	10,567,399	6,947,269	-	17,514,668
Nonoperating revenues (expenses) - net	8,913,880	105,767	-	9,019,647
Capital Contribution	1,358,572	-	-	1,358,572
Net (decrease) in the fair value of investments	-	(638,549)	-	(638,549)
Change in net position	20,839,851	6,414,487	-	27,254,338
Total net position - beginning, as restated	171,787,188	66,396,396	-	238,183,584
Total net position - ending	<u>\$ 192,627,039</u>	<u>\$ 72,810,883</u>	<u>\$ -</u>	<u>\$ 265,437,922</u>

**Capital Assets**

At the end of the fiscal years ended December 31, 2018 and 2017, the Wastewater Division had \$508,461,820 and \$471,991,921 respectively, invested in land, construction in progress, buildings and improvements, other improvements, machinery and equipment, furniture and fixtures, and landfill gas collection facility and equipment, net of accumulated depreciation and amortization. The increase in net capital assets is due to current year capital asset additions exceeding current year depreciation expense.

At the end of the fiscal years ended December 31, 2018 and 2017, the Solid Waste Division had \$69,014,116 and \$73,036,271, respectively, invested in land, construction in progress, buildings and improvements, landfill and landfill expansion, other improvements, machinery and equipment, net of accumulated depreciation and amortization. The decrease in net capital assets is due to the current year's depreciation expense exceeding current year's capital asset additions.

## MIDDLESEX COUNTY UTILITIES AUTHORITY

### REQUIRED SUPPLEMENTARY INFORMATION MANAGEMENT'S DISCUSSION AND ANALYSIS

Amortization for the landfill itself is based on estimated "air space" remaining before the landfill has to be closed and capped.

See Note 6 to the financial statements for additional information.

#### **Debt Administration**

As of December 31, 2018, the Wastewater Division had \$117,308,174 of outstanding debt, including unamortized premiums on bonds. As of December 31, 2017, the Wastewater Division had \$134,354,170 of outstanding debt, including unamortized premiums on bonds. Bond principal payments of \$16,602,895 were made in accordance with the amortization schedules.

As of December 31, 2018, the Solid Waste Division had \$16,863,083 of outstanding debt, including unamortized premiums on bonds. As of December 31, 2017, the Solid Waste Division had \$24,747,728 of outstanding debt, including unamortized premiums on bonds. Bond principal payments of \$7,811,298 were made in accordance with the amortization schedules.

See Note 9 to the financial statements for additional information.

#### **Other Financial Information**

##### **Wastewater Division:**

- Funding from the Federal Emergency Management Agency ("FEMA") will help to offset the costs associated with clean-up, repairs and replacement of assets damaged or destroyed by Hurricane Sandy. Mitigation of incurred damage will likely be ongoing for several years. FEMA has approved several significant project worksheets, including grant proceeds of approximately \$66,830,000 to help fund the replacement costs for the Sayreville Pumping Station and grant proceeds of approximately \$19,500,000 to help fund replacement costs for the Edison Pumping Station.
- It is anticipated that construction of the Edison Pumping Station will be complete in October 2019. Completion of the Sayreville Pumping Station project is expected in March 2020.

##### **Solid Waste Division:**

- Tipping fees increased 5.7%, mainly due to an increase in tonnage of waste received.
- Soil program revenue increased 44.2% due to an increase in the amount of soil delivered to the landfill in 2018.
- Excluding depreciation and amortization, operating income was \$15,772,843 and \$12,818,873 for 2018 and 2017, respectively. This represents an increase of \$2,953,970, or 23.04%, which is mainly the result of an increase in tonnage accepted and soil revenue from year to year.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**REQUIRED SUPPLEMENTARY INFORMATION  
MANAGEMENT'S DISCUSSION AND ANALYSIS**

**Financial Contact**

The Authority's financial statements are designed to present users (citizens, taxpayers, investors and creditors) with a general overview of the Authority's finances and to demonstrate the Authority's accountability for its resources. If you have questions about this report or need additional information, contact the Authority's Treasurer/Comptroller at Middlesex County Utilities Authority, P.O. Box 159, 2571 Main Street, Sayreville, New Jersey 08872.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF NET POSITION  
DECEMBER 31, 2018

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>ASSETS AND DEFERRED OUTFLOW OF RESOURCES</b>				
<b>Unrestricted Current Assets</b>				
Cash and cash equivalents	\$ 9,611,293	\$ 21,005,488	\$ -	\$ 30,616,781
Annual charges receivable	7,081,258	-	-	7,081,258
Accounts receivable	-	1,846,586	-	1,846,586
Grants receivable	19,016,452	-	-	19,016,452
Due from Solid Waste Division	110,542	-	(110,542)	-
Other charges receivable	673,537	-	-	673,537
Prepaid expenses	450,695	-	-	450,695
Interest receivable	1,911	-	-	1,911
Total unrestricted current assets	<u>36,945,688</u>	<u>22,852,074</u>	<u>(110,542)</u>	<u>59,687,220</u>
<b>Restricted Current Assets</b>				
Cash and cash equivalents	8,101,525	41,730,360	-	49,831,885
Investments	27,637,562	56,450,997	-	84,088,559
Note receivable, Wastewater Division	-	11,953,000	(11,953,000)	-
Due from Wastewater Division	-	3,598,860	(3,598,860)	-
Trust accounts	120,110	-	-	120,110
Interest receivable	112,788	99,442	-	212,230
Interest receivable - Wastewater Division	-	143,769	(143,769)	-
Due from NJEIT	26,499,494	-	-	26,499,494
Cash held with bond trustee	990,269	-	-	990,269
Total restricted current assets	<u>63,461,748</u>	<u>113,976,428</u>	<u>(15,695,629)</u>	<u>161,742,547</u>
<b>Restricted Non Current Assets</b>				
Investments	<u>2,200,000</u>	<u>-</u>	<u>-</u>	<u>2,200,000</u>
Total restricted non current assets	<u>2,200,000</u>	<u>-</u>	<u>-</u>	<u>2,200,000</u>
<b>Deferred Outflows of Resources</b>				
Pension deferrals	8,202,438	1,447,489	-	9,649,927
Other post employment benefits deferrals	2,980,453	525,962	-	3,506,415
Total deferred outflows of resources	<u>11,182,891</u>	<u>1,973,451</u>	<u>-</u>	<u>13,156,342</u>
<b>Capital Assets</b>				
Depreciable assets	780,041,739	259,679,099	-	1,039,720,838
Less: accumulated depreciation and amortization	<u>(383,363,340)</u>	<u>(253,054,860)</u>	<u>-</u>	<u>(636,418,200)</u>
	396,678,399	6,624,239	-	403,302,638
Non-depreciable assets:				
Land	8,401,828	55,366,747	-	63,768,575
Construction in progress	103,381,593	7,023,130	-	110,404,723
Capital assets, net	<u>508,461,820</u>	<u>69,014,116</u>	<u>-</u>	<u>577,475,936</u>
Total assets and deferred outflows of resources	<u>\$ 622,252,147</u>	<u>\$ 207,816,069</u>	<u>\$ (15,806,171)</u>	<u>\$ 814,262,045</u>

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF NET POSITION  
DECEMBER 31, 2018

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION</b>				
<b>Current Liabilities Payable from Unrestricted Assets</b>				
Accounts payable - operations and payroll	\$ 17,288,519	\$ 2,848,079	\$ -	\$ 20,136,598
Accrued expenses	1,439,136	831,077	-	2,270,213
Due to Wastewater Division	-	110,542	(110,542)	-
Refunds due participants	874,950	-	-	874,950
Unearned service revenue	-	952,182	-	952,182
Interest payable - Solid Waste Division	143,769	-	(143,769)	-
Other liability	523,153	-	-	523,153
Total current liabilities payable from unrestricted assets	20,269,527	4,741,880	(254,311)	24,757,096
<b>Current Liabilities Payable from Restricted Assets</b>				
Contractors' retainages	160,551	-	-	160,551
Bonds payable - current portions	23,013,624	8,050,977	-	31,064,601
Liabilities for early retirement incentives - current portions	106,980	-	-	106,980
Accrued interest payable on bonds and notes	846,408	162,446	-	1,008,854
Total current liabilities payable from restricted assets	24,127,563	8,213,423	-	32,340,986
<b>Long-Term Liabilities Payable from Restricted Assets</b>				
Bonds payable, net	94,294,550	8,812,106	-	103,106,656
Net pension liability	32,697,537	5,770,153	-	38,467,690
Accrued closure and post-closure care liabilities	-	66,135,287	-	66,135,287
Note payable, Solid Waste Division	11,953,000	-	(11,953,000)	-
Due to Solid Waste Division	3,598,860	-	(3,598,860)	-
Liability for other post employment benefits	127,638,661	22,524,470	-	150,163,131
NJEIT State Assistance Infrastructure Loans	40,691,843	-	-	40,691,843
Liabilities for early retirement incentives	1,686,896	-	-	1,686,896
Funds held in escrow	149,130	1,479,756	-	1,628,886
Reserve for workers' compensation insurance claims	482,170	275,074	-	757,244
CPS/MCUA trust account	120,110	-	-	120,110
Total long-term liabilities payable from restricted assets	313,312,757	104,996,846	(15,551,860)	402,757,743
Total liabilities	357,709,847	117,952,149	(15,806,171)	459,855,825
<b>Deferred Inflows of Resources</b>				
Pension deferrals	10,930,238	1,928,865	-	12,859,103
Other post employment benefits deferrals	18,848,013	3,326,120	-	22,174,133
Deferred gain on defeasance of debt	1,769,018	261,173	-	2,030,191
Total deferred inflows of resources	31,547,269	5,516,158	-	37,063,427
<b>Net Position</b>				
Net investment in capital assets	390,374,897	51,889,860	-	442,264,757
Restricted:				
Restricted for future debt service	12,287,938	-	-	12,287,938
Restricted for environmental self-insurance	-	20,632,543	-	20,632,543
Total Restricted	12,287,938	20,632,543	-	32,920,481
Unrestricted - designated:				
Designated for operations	200,000	-	-	200,000
Designated for future reconstruction and replacement	3,110,330	2,096,045	-	5,206,375
Designated for construction	1,146	-	-	1,146
Designated for liability insurance	2,254,651	2,806,061	-	5,060,712
Designated for auto insurance	292,467	194,459	-	486,926
Designated for unemployment claims	120,365	-	-	120,365
Designated for land acquisition and improvements	-	19,536,494	-	19,536,494
Designated for future contingencies	-	2,016,323	-	2,016,323
Designated for public liability insurance	-	2,034,190	-	2,034,190
Unrestricted undesignated (deficit)	(175,646,763)	(16,858,213)	-	(192,504,976)
Total net position	(169,667,804)	11,825,359	-	(157,842,445)
Total liabilities, deferred inflows of resources and net position	\$ 622,252,147	\$ 207,816,069	\$ (15,806,171)	\$ 814,262,045

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF NET POSITION  
DECEMBER 31, 2017

(as restated)

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>ASSETS AND DEFERRED OUTFLOW OF RESOURCES</b>				
<b>Unrestricted Current Assets</b>				
Cash and cash equivalents	\$ 10,850,355	\$ 12,571,546	\$ -	\$ 23,421,901
Annual charges receivable	3,529,496	-	-	3,529,496
Accounts receivable	-	1,295,629	-	1,295,629
Grant receivable	9,809,587	-	-	9,809,587
Due from Solid Waste Division	142,807	-	(142,807)	-
Other charges receivable	1,440,144	-	-	1,440,144
Prepaid expenses	417,485	-	-	417,485
Interest receivable	415	-	-	415
Total unrestricted current assets	<u>26,190,289</u>	<u>13,867,175</u>	<u>(142,807)</u>	<u>39,914,657</u>
<b>Restricted Current Assets</b>				
Cash and cash equivalents	9,634,717	37,810,461	-	47,445,178
Investments	28,804,490	56,936,593	-	85,741,083
Note receivable, Wastewater Division	-	12,332,000	(12,332,000)	-
Due from Wastewater Division	-	4,314,890	(4,314,890)	-
Trust accounts	119,430	-	-	119,430
Interest receivable	13,053	238,718	-	251,771
Interest receivable - Wastewater Division	-	384,971	(384,971)	-
Due from NJEIT	12,494,135	-	-	12,494,135
Cash held with bond trustee	6,991,306	-	-	6,991,306
Total restricted current assets	<u>58,057,131</u>	<u>112,017,633</u>	<u>(17,031,861)</u>	<u>153,042,903</u>
<b>Deferred Outflows of Resources</b>				
Pension deferrals	10,579,141	1,866,909	-	12,446,050
Other post employment benefits deferrals	3,725,566	657,453	-	4,383,019
Total deferred outflows of resources	<u>14,304,707</u>	<u>2,524,362</u>	<u>-</u>	<u>16,829,069</u>
<b>Capital Assets</b>				
Depreciable assets	770,958,452	258,139,161	-	1,029,097,613
Less: accumulated depreciation and amortization	(359,876,158)	(247,046,167)	-	(606,922,325)
	411,082,294	11,092,994	-	422,175,288
Non-depreciable assets:				
Land	8,401,828	55,366,747	-	63,768,575
Construction in progress	52,507,799	6,576,530	-	59,084,329
Capital assets, net	<u>471,991,921</u>	<u>73,036,271</u>	<u>-</u>	<u>545,028,192</u>
Total assets and deferred outflow of resources	<u>\$ 570,544,048</u>	<u>\$ 201,445,441</u>	<u>\$ (17,174,668)</u>	<u>\$ 754,814,821</u>

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF NET POSITION  
DECEMBER 31, 2017

(as restated)

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION</b>				
<b>Current Liabilities Payable from Unrestricted Assets</b>				
Accounts payable - operations and payroll	\$ 10,317,776	\$ 1,610,019	\$ -	\$ 11,927,795
Accrued expenses	1,078,127	186,742	-	1,264,869
Due to Wastewater Division	-	142,807	(142,807)	-
Refunds due participants	1,089,807	-	-	1,089,807
Unearned service revenue	-	843,723	-	843,723
Interest payable - Solid Waste Division	384,971	-	(384,971)	-
Other liability - current portion	2,092,615	-	-	2,092,615
Total current liabilities payable from unrestricted assets	14,963,296	2,783,291	(527,778)	17,218,809
<b>Current Liabilities Payable from Restricted Assets</b>				
Contractors' retainages	159,203	-	-	159,203
Bonds payable - current portions	17,045,997	7,884,645	-	24,930,642
Liabilities for early retirement incentives - current portions	86,883	-	-	86,883
Accrued interest payable on bonds and notes	1,015,174	242,250	-	1,257,424
Total current liabilities payable from restricted assets	18,307,257	8,126,895	-	26,434,152
<b>Long-Term Liabilities Payable from Unrestricted Assets</b>				
Other liability	523,153	-	-	523,153
Total long-term liabilities payable from unrestricted assets	523,153	-	-	523,153
<b>Long-Term Liabilities Payable from Restricted Assets</b>				
Bonds payable, net	117,308,173	16,863,083	-	134,171,256
Net pension liability	37,827,086	6,675,368	-	44,502,454
Accrued closure and post-closure care liabilities	-	65,258,173	-	65,258,173
Note payable, Solid Waste Division	12,332,000	-	(12,332,000)	-
Due to Solid Waste Division	4,314,890	-	(4,314,890)	-
Liability for other post employment benefits	143,221,725	25,274,422	-	168,496,147
NJEIT State Assistance Infrastructure Loan	17,276,119	-	-	17,276,119
Liabilities for early retirement incentives	1,799,427	-	-	1,799,427
Funds held in escrow	148,995	1,574,334	-	1,723,329
Reserve for workers' compensation insurance claims	186,616	283,354	-	469,970
CPS/MCUA trust account	119,430	-	-	119,430
Total long-term liabilities payable from restricted assets	334,534,461	115,928,734	(16,646,890)	433,816,305
Total liabilities	368,328,167	126,838,920	(17,174,668)	477,992,419
<b>Deferred Inflows of Resources</b>				
Pension deferrals	7,592,915	1,339,926	-	8,932,841
Deferred gain on defeasance of debt	1,995,927	455,712	-	2,451,639
Total deferred inflows of resources	9,588,842	1,795,638	-	11,384,480
<b>Net Position</b>				
Net investment in capital assets	342,633,130	47,832,830	-	390,465,960
Restricted:				
Restricted for future debt service	12,287,938	-	-	12,287,938
Restricted for environmental self-insurance	-	20,438,745	-	20,438,745
Total Restricted	12,287,938	20,438,745	-	32,726,683
Unrestricted - designated:				
Designated for operations	200,000	-	-	200,000
Designated for future reconstruction and replacement	2,084,194	1,278,825	-	3,363,019
Designated for construction	1,146	-	-	1,146
Designated for liability insurance	2,243,556	2,779,722	-	5,023,278
Designated for auto insurance	289,722	192,634	-	482,356
Designated for unemployment claims	119,235	-	-	119,235
Designated for land acquisition and improvements	-	19,153,937	-	19,153,937
Designated for future contingencies	-	1,997,397	-	1,997,397
Designated for public liability insurance	-	2,015,096	-	2,015,096
Unrestricted undesignated (deficit)	(167,231,882)	(22,878,303)	-	(190,110,185)
Total net position	(162,294,029)	4,539,308	-	(157,754,721)
Total net position	192,627,039	72,810,883	-	265,437,922
Total liabilities, deferred inflows of resources and net position	\$ 570,544,048	\$ 201,445,441	\$ (17,174,668)	\$ 754,814,821

See accompanying notes to basic financial statements.

## MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF REVENUES AND EXPENSES  
YEAR ENDED DECEMBER 31, 2018

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Operating Revenues</b>				
Annual charges	\$ 90,366,119	\$ -	\$ -	\$ 90,366,119
Tipping fees	-	38,524,927	-	38,524,927
Soil program income	-	6,010,167	-	6,010,167
Treatment of septic tank waste	384,560	-	-	384,560
Service fees, review of plans, etc.	3,550	-	-	3,550
Permit fees, industrial pretreatment	24,400	-	-	24,400
Service fee income	-	1,121,757	-	1,121,757
Management fees	1,660,020	-	(1,660,020)	-
Sampling and lab fees	25,884	-	-	25,884
Analytical services	22,959	-	-	22,959
Groundwater discharge fees	934,307	-	-	934,307
Sale of synthetic soil	387,493	-	(387,493)	-
Penalty assessments	21,000	-	-	21,000
Praxair - sale of oxygen	893,143	-	-	893,143
Praxair - sale of nitrogen	836,201	-	-	836,201
Praxair - water usage	35,770	-	-	35,770
Praxair - fixed gas	851,068	-	-	851,068
PSE&G - REC credit income	523,814	-	-	523,814
Effluent reuse sales	741,038	-	-	741,038
Sale of plans and specifications	9,350	-	-	9,350
Miscellaneous income	252,458	26,960	-	279,418
Total operating revenues	97,973,134	45,683,811	(2,047,513)	141,609,432
<b>Operating Expenses</b>				
Salaries and wages	14,202,598	2,920,275	-	17,122,873
Administration	18,908,969	9,909,643	(1,660,020)	27,158,592
Landfill	-	16,524,253	(387,493)	16,136,760
Central treatment plant	22,510,948	-	-	22,510,948
Sayreville pumping station	1,479,163	-	-	1,479,163
Edison pumping station	310,340	-	-	310,340
Bound Brook pumping station	41,698	-	-	41,698
Green Brook pumping station	110,275	-	-	110,275
South Amboy pumping station	135,348	-	-	135,348
Lines, meters and small pumping stations	1,458,603	-	-	1,458,603
WWT - administrative fee	272,565	131,235	-	403,800
DEP fees	7,031	-	-	7,031
Closure reserve fees	-	425,562	-	425,562
Depreciation	23,487,182	6,008,693	-	29,495,875
Total operating expenses	82,924,720	35,919,661	(2,047,513)	116,796,868
Operating income	15,048,414	9,764,150	-	24,812,564
<b>Nonoperating Revenues (Expenses)</b>				
Interest on investments and deposits	97,748	800,025	(339,130)	558,643
Interest on investments (reconstruction and replacement)	26,136	-	-	26,136
Interest on investments (other restricted accounts)	333,580	-	-	333,580
Amortization of gain on defeasance	226,907	194,539	-	421,446
Amortization of original issue premium on bonds	443,101	73,347	-	516,448
Hurricane loss	(7,588)	-	-	(7,588)
Interest on bonds and notes	(2,716,709)	(519,963)	-	(3,236,672)
Other interest expense	(137,901)	-	-	(137,901)
Related party interest	(339,130)	-	339,130	-
FEMA grant revenue	27,393,434	-	-	27,393,434
Renewable Energy Incentive Program rebate	-	1,500,000	-	1,500,000
Total nonoperating revenues (expenses), net	25,319,578	2,047,948	-	27,367,526
Change in net position prior to net (decrease) in fair value of investments	40,367,992	11,812,098	-	52,180,090
Net (decrease) in the fair value of investments	-	(275,219)	-	(275,219)
Change in net position	\$ 40,367,992	\$ 11,536,879	\$ -	\$ 51,904,871

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF REVENUES AND EXPENSES  
YEAR ENDED DECEMBER 31, 2017

(as restated)

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Operating Revenues</b>				
Annual charges	\$ 85,355,645	\$ -	\$ -	\$ 85,355,645
Tipping fees	-	36,442,591	-	36,442,591
Soil program income	-	4,168,010	-	4,168,010
Treatment of septic tank waste	215,415	-	-	215,415
Service fees, review of plans, etc.	2,000	-	-	2,000
Permit fees, industrial pretreatment	19,050	-	-	19,050
Service fee income	-	795,723	-	795,723
Management fees	1,635,000	-	(1,635,000)	-
Sampling and lab fees	19,496	-	-	19,496
Analytical services	17,459	-	-	17,459
Groundwater discharge fees	979,768	-	-	979,768
Sale of synthetic soil	624,609	-	(624,609)	-
Penalty assessments	7,600	-	-	7,600
Praxair - sale of oxygen	877,649	-	-	877,649
Praxair - sale of nitrogen	831,786	-	-	831,786
Praxair - water usage	32,780	-	-	32,780
Praxair - fixed gas	826,284	-	-	826,284
PSE&G - REC credit income	526,244	-	-	526,244
Effluent reuse sales	793,275	-	-	793,275
Sale of plans and specifications	4,400	-	-	4,400
Miscellaneous income	371,472	57,104	-	428,576
Total operating revenues	<u>93,139,932</u>	<u>41,463,428</u>	<u>(2,259,609)</u>	<u>132,343,751</u>
<b>Operating Expenses</b>				
Salaries and wages	13,373,487	2,746,062	-	16,119,549
Administration	22,509,221	9,843,676	(1,635,000)	30,717,897
Landfill	-	15,653,550	(624,609)	15,028,941
Central treatment plant	20,876,135	-	-	20,876,135
Sayreville pumping station	1,012,452	-	-	1,012,452
Edison pumping station	327,005	-	-	327,005
Bound Brook pumping station	38,101	-	-	38,101
Green Brook pumping station	104,934	-	-	104,934
South Amboy pumping station	107,173	-	-	107,173
Lines, meters and small pumping stations	399,027	-	-	399,027
WWT - administrative fee	272,565	131,235	-	403,800
DEP fees	14,062	-	-	14,062
Closure reserve fees	-	270,032	-	270,032
Depreciation	23,538,371	5,871,604	-	29,409,975
Total operating expenses	<u>82,572,533</u>	<u>34,516,159</u>	<u>(2,259,609)</u>	<u>114,829,083</u>
Operating income	<u>10,567,399</u>	<u>6,947,269</u>	<u>-</u>	<u>17,514,668</u>
<b>Nonoperating Revenues (Expenses)</b>				
Interest on investments and deposits	49,834	457,627	(352,730)	154,731
Interest on investments (reconstruction and replacement)	5,744	-	-	5,744
Interest on investments (other restricted accounts)	52,913	-	-	52,913
Amortization of gain on defeasance	226,907	194,538	-	421,445
Amortization of original issue premium on bonds	443,101	73,347	-	516,448
Hurricane loss	(25,885)	-	-	(25,885)
Interest on bonds and notes	(3,188,176)	(619,745)	-	(3,807,921)
Other interest expense	(236,338)	-	-	(236,338)
Related party interest	(352,730)	-	352,730	-
FEMA grant revenue	11,938,510	-	-	11,938,510
Total nonoperating revenues (expenses), net	<u>8,913,880</u>	<u>105,767</u>	<u>-</u>	<u>9,019,647</u>
Change in net position prior to net (decrease) in fair value of investments	19,481,279	7,053,036	-	26,534,315
Capital contribution	1,358,572	-	-	1,358,572
Net (decrease) in the fair value of investments	-	(638,549)	-	(638,549)
Change in net position	<u>\$ 20,839,851</u>	<u>\$ 6,414,487</u>	<u>\$ -</u>	<u>\$ 27,254,338</u>

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF CHANGES IN NET POSITION  
YEARS ENDED DECEMBER 31, 2018 AND 2017

	Wastewater Division			Solid Waste Division			Total		
	Net Investment in Capital Assets	Restricted for Future Debt Service	Unrestricted	Wastewater Division Net Position	Net Investment in Capital Assets	Restricted		Unrestricted	Solid Waste Division Net Position
<b>Balance, December 31, 2016, (as restated)</b>	\$ 324,249,516	\$ 12,287,938	\$ (164,750,266)	\$ 171,787,188	\$ 44,349,420	\$ 20,396,007	\$ 1,650,969	\$ 66,396,396	\$ 238,183,584
Change in net position, as restated	(17,923,577)	-	38,763,428	20,839,851	(5,603,719)	42,738	11,975,468	6,414,487	27,254,338
Depreciation charged to capital contributions	(3,586,214)	-	3,586,214	-	-	-	-	-	-
Interfund transfers	39,893,405	-	(39,893,405)	-	9,087,129	-	(9,087,129)	-	-
<b>Balance, December 31, 2017 (as restated)</b>	342,633,130	12,287,938	(162,294,029)	192,627,039	47,832,830	20,438,745	4,539,308	72,810,883	265,437,922
Change in net position	(19,230,963)	-	59,598,955	40,367,992	(5,740,807)	193,798	17,083,888	11,536,879	51,904,871
Depreciation charged to capital contributions	(3,586,214)	-	3,586,214	-	-	-	-	-	-
Interfund transfers	70,558,944	-	(70,558,944)	-	9,797,837	-	(9,797,837)	-	-
<b>Balance, December 31, 2018</b>	<u>\$ 390,374,897</u>	<u>\$ 12,287,938</u>	<u>\$ (169,667,804)</u>	<u>\$ 232,995,031</u>	<u>\$ 51,889,860</u>	<u>\$ 20,632,543</u>	<u>\$ 11,825,359</u>	<u>\$ 84,347,762</u>	<u>\$ 317,342,793</u>

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF CASH FLOWS  
YEAR ENDED DECEMBER 31, 2018

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Cash Flows from Operating Activities</b>				
Cash received from customers and miscellaneous income from vendors	\$ 94,940,047	45,146,735	\$ -	\$ 140,086,782
Cash payments for goods and services	(35,134,782)	(23,428,661)	-	(58,563,443)
Cash payments to employees	(14,172,178)	(2,920,275)	-	(17,092,453)
Net cash provided by operating activities	45,633,087	18,797,799	-	64,430,886
<b>Cash Flows from NonCapital Financing Activities</b>				
Payments of early retirement incentive liabilities	(92,434)	-	-	(92,434)
Advances from Wastewater Division to Solid Waste Division - unrestricted	32,265	(32,265)	-	-
Net cash (used in) noncapital financing activities	(60,169)	(32,265)	-	(92,434)
<b>Cash Flows from Capital and Related Financing Activities</b>				
Acquisition of property, plant and equipment and construction in progress	(59,957,081)	(1,986,538)	-	(61,943,619)
Cash paid for interest on bonds and related party debt	(3,603,708)	(599,767)	(241,202)	(4,444,677)
Cash received from FEMA	18,186,569	-	-	18,186,569
Cash payments for goods and services - Hurricane	(7,588)	-	-	(7,588)
Note repayments from Wastewater Division to Solid Waste Division - restricted	(716,030)	-	716,030	-
Repayment from Wastewater Division to Solid Waste Division - restricted	(379,000)	379,000	-	-
Cash received from NJEIT	9,410,363	-	-	9,410,363
Payments of bonds payable	(16,602,895)	(7,811,298)	-	(24,414,193)
Cash received from Renewable Energy Incentive Program	-	1,500,000	-	1,500,000
Net cash (used in) provided by capital and related financing activities	(53,669,370)	(8,518,603)	474,828	(61,713,145)
<b>Cash Flows from Investing Activities</b>				
Cash received from interest	356,233	1,180,503	241,202	1,777,938
Redemption of investments	24,138,490	4,789,332	-	28,927,822
Purchase of investments	(25,171,562)	(4,578,955)	-	(29,750,517)
Note repayments from Wastewater Division to Solid Waste Division	-	716,030	(716,030)	-
Cash received from bond trustee	6,001,037	-	-	6,001,037
Net cash provided by (used in) investing activities	5,324,198	2,106,910	(474,828)	6,956,280
(Decrease) increase in cash and cash equivalents	(2,772,254)	12,353,841	-	9,581,587
<b>Cash and Cash Equivalents, Beginning of Year</b>	20,485,072	50,382,007	-	70,867,079
<b>Cash and Cash Equivalents, End of Year</b>	\$ 17,712,818	62,735,848	\$ -	\$ 80,448,666
<b>Summary of Cash and Cash Equivalents, End of Year</b>				
Unrestricted cash and cash equivalents	\$ 9,611,293	\$ 21,005,488	\$ -	\$ 30,616,781
Restricted cash and cash equivalents	8,101,525	41,730,360	-	49,831,885
	\$ 17,712,818	\$ 62,735,848	\$ -	\$ 80,448,666
<b>Non-cash Financing and Investing activities</b>				
NJEIT State Assistance Infrastructure Loan	\$ 23,415,724	\$ -	\$ -	\$ 23,415,724

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF CASH FLOWS  
YEAR ENDED DECEMBER 31, 2018

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Reconciliation of Operating Income to Net Cash Provided by Operating Activities</b>				
Operating income	\$ 15,048,414	\$ 9,764,150	\$ -	\$ 24,812,564
Adjustments to reconcile operating income to net cash provided by operating activities:				
Depreciation	23,487,182	6,008,693	-	29,495,875
Non-cash portion of change in net pension liability and related deferrals	1,405,827	248,087	-	1,653,914
Non-cash portion of change in other post employment benefits deferrals	19,593,126	3,457,611	-	23,050,737
Changes in operating assets and liabilities:				
(Increase) decrease in receivables and other assets:				
Unrestricted accounts	(2,818,365)	(550,957)	-	(3,369,322)
Restricted accounts	(680)	-	-	(680)
Increase (decrease) in liabilities:				
Payable from unrestricted assets	4,202,930	1,845,911	-	6,048,841
Payable from restricted assets	1,348	877,114	-	878,462
Funds held in escrow	135	(94,578)	-	(94,443)
Other liabilities	(15,286,830)	(2,758,232)	-	(18,045,062)
Net cash provided by operating activities	<u>\$ 45,633,087</u>	<u>\$ 18,797,799</u>	<u>\$ -</u>	<u>\$ 64,430,886</u>

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF CASH FLOWS  
YEAR ENDED DECEMBER 31, 2017  
(as restated)

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Cash Flows from Operating Activities</b>				
Cash received from customers and miscellaneous income from vendors	\$ 91,443,965	\$ 41,692,665	\$ -	\$ 133,136,630
Cash payments for goods and services	(35,412,688)	(22,611,096)	-	(58,023,784)
Cash payments to employees	(13,086,417)	(2,746,062)	-	(15,832,479)
Net cash provided by operating activities	42,944,860	16,335,507	-	59,280,367
<b>Cash Flows from NonCapital Financing Activities</b>				
Payments of early retirement incentive liabilities	(79,149)	-	-	(79,149)
Advances from Solid Waste Division to Wastewater Division - unrestricted	(64,395)	64,395	-	-
Advances from Wastewater Division to Solid Waste Division - unrestricted	(7,343)	7,343	-	-
Net cash (used in) provided by noncapital financing activities	(150,887)	71,738	-	(79,149)
<b>Cash Flows from Capital and Related Financing Activities</b>				
Acquisition of property, plant and equipment and construction in progress	(32,269,428)	(1,470,642)	-	(33,740,070)
Cash paid for interest on bonds and related party debt	(3,520,755)	(704,316)	352,760	(3,872,311)
Capital contributions	1,358,572	-	-	1,358,572
Cash received from FEMA	8,384,546	-	-	8,384,546
Cash payments for goods and services - Hurricane	(25,885)	-	-	(25,885)
Payments of note	(10,000,000)	-	-	(10,000,000)
Note repayments from Wastewater Division to Solid Waste Division - restricted	(685,110)	-	685,110	-
Cash received from NJEIT	4,781,985	-	-	4,781,985
Payments of bonds payable	(17,277,225)	(7,616,488)	-	(24,893,713)
Net cash (used in) provided by capital and related financing activities	(49,253,300)	(9,791,446)	1,037,870	(58,006,876)
<b>Cash Flows from Investing Activities</b>				
Cash received from interest	99,825	24,565	(352,760)	(228,370)
Redemption of investments	15,976,776	26,363,120	-	42,339,896
Purchase of investments	(25,461,490)	(27,882,672)	-	(53,344,162)
Note repayments from Wastewater Division to Solid Waste Division	-	685,110	(685,110)	-
Cash received from bond trustee	8,102,802	-	-	8,102,802
Net cash (used in) investing activities	(1,282,087)	(809,877)	(1,037,870)	(3,129,834)
(Decrease) increase in cash and cash equivalents	(7,741,414)	5,805,922	-	(1,935,492)
<b>Cash and Cash Equivalents, Beginning of Year</b>	28,226,486	44,576,085	-	72,802,571
<b>Cash and Cash Equivalents, End of Year</b>	<u>\$ 20,485,072</u>	<u>\$ 50,382,007</u>	<u>\$ -</u>	<u>\$ 70,867,079</u>
<b>Summary of Cash and Cash Equivalents, End of Year</b>				
Unrestricted cash and cash equivalents	\$ 10,850,355	\$ 12,571,546	\$ -	\$ 23,421,901
Restricted cash and cash equivalents	9,634,717	37,810,461	-	47,445,178
	<u>\$ 20,485,072</u>	<u>\$ 50,382,007</u>	<u>\$ -</u>	<u>\$ 70,867,079</u>
<b>Non-cash Financing and Investing activities</b>				
NJEIT State Assistance Infrastructure Loan	\$ 9,536,044	\$ -	\$ -	\$ 9,536,044
Bond refunding savings	\$ 570,000	\$ 224,000	\$ -	\$ 794,000

See accompanying notes to basic financial statements.

MIDDLESEX COUNTY UTILITIES AUTHORITY

STATEMENT OF CASH FLOWS  
 YEAR ENDED DECEMBER 31, 2017  
 (as restated)

	Supplementary Information			Consolidated
	Wastewater Division	Solid Waste Division	Eliminations	Total
<b>Reconciliation of Operating Income to Net Cash Provided by Operating Activities</b>	\$ (1,216,868)	\$ (179,682)		
Operating income	\$ 10,567,399	\$ 6,947,269	\$ -	\$ 17,514,668
Adjustments to reconcile operating income to net cash provided by operating activities:				
Depreciation	23,538,371	5,871,604	-	29,409,975
Non-cash portion of change in net pension liability and related deferrals	1,573,244	277,429	-	1,850,673
Non-cash portion of change in other post employment benefits deferrals	(3,725,566)	(657,453)		(4,383,019)
Changes in operating assets and liabilities:				
(Increase) decrease in receivables and other assets:				
Unrestricted accounts	260,827	148,738	-	409,565
Restricted accounts	(241)	-	-	(241)
Increase (decrease) in liabilities:				
Payable from unrestricted assets	731,127	37,989	-	769,116
Payable from restricted assets	192,312	1,659,826	-	1,852,138
Funds held in escrow	(1,296,890)	175,962	-	(1,120,928)
Other liabilities	11,104,277	1,874,143	-	12,978,420
Net cash provided by operating activities	<u>\$ 42,944,860</u>	<u>\$ 16,335,507</u>	<u>\$ -</u>	<u>\$ 59,280,367</u>

See accompanying notes to basic financial statements.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 1 – Organization:**

The Middlesex County Utilities Authority (the "Authority") is a public body, politic and corporate of the State of New Jersey. As a public body under existing statute, the Authority is exempt from both federal and state income taxes.

The Authority has two divisions: the Solid Waste Division and the Wastewater Division. The two divisions are operated as separate enterprises with the assets, deferred outflows and inflows of resources, liabilities, net position, revenues and expenses and cash flows of each segregated from the other. Certain common expenses are allocated between the divisions.

***The Solid Waste Division*** - The Solid Waste Division commenced landfill operations on January 1, 1988, and is responsible for the implementation of the principal elements of the County's Solid Waste Management Plan.

***The Wastewater Division*** - The Wastewater Division is authorized and empowered to construct, maintain and operate sewage and sludge treatment facilities and to issue revenue bonds payable from the annual charges collected from the Wastewater Division's participants. Such sewer revenue bonds are collateralized solely by revenues derived from the operation of the Wastewater Division and have no lien or claim upon any of the assets or revenues of the Solid Waste Division.

**Note 2 – Summary of Significant Accounting Policies:**

***General Statement*** – The accounting and reporting policies of the Authority included in the accompanying basic financial statements conform to accounting principles generally accepted in the United States of America as applicable to local governments. Accounting principles generally accepted in the United States of America for local governments include those principles prescribed by the Governmental Accounting Standards Board (the "GASB").

***Basis of Presentation*** – The financial statements of the Authority have been prepared on the accrual basis in conformity with accounting principles generally accepted in the United States of America applicable to proprietary funds as defined by GASB.

***Estimates and Uncertainties*** – 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, deferred outflows and inflows of resources, 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, as determined at a later date, could differ from those estimates.

***Operating Revenues and Expenses*** – Operating revenues for the Wastewater Division result from providing wastewater treatment services which are principally derived from billings to customers. Operating expenses for these operations include all costs related to providing the services. All other Wastewater Division revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 2 – Summary of Significant Accounting Policies (continued):**

Operating revenues for the Solid Waste Division result from providing landfill operations which are principally derived from fees generated when customers unload solid waste at the landfill. Operating expenses for these operations include all costs related to providing the services. All other Solid Waste Division revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

**Cash Equivalents** – Cash equivalents include certificates of deposit and amounts held in select escrow accounts at brokerages. The Authority considers investments with original maturities of three months or less at the date of purchase to be cash equivalents. For purposes of the statement of cash flows, the Authority considers all currency demand deposits and money market accounts with banks or other financial institutions to be cash equivalents.

**Restricted Assets** – Restricted assets consist of funds provided from issuance of bonds and/or revenues and are restricted for specific purposes under the resolution authorizing the issuance of the bonds or the respective Division’s budget. Restricted assets were as follows:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<b><u>Wastewater Division:</u></b>		
Restricted Funds	\$ 64,551,369	\$ 50,946,395
Trust accounts	120,110	119,430
Cash held with bond trustee	990,269	6,991,306
	65,661,748	58,057,131
 <b><u>Solid Waste Division:</u></b>		
Acquisition or construction of property, plant and equipment and related improvements	\$ 19,426,637	\$ 18,226,860
Landfill closure and post-closure	65,097,755	64,495,860
Future contingencies	27,972,280	27,720,578
Funds held in escrow	1,479,756	1,574,335
	113,976,428	112,017,633
 Total	 \$ 179,638,176	 \$ 170,074,764

**Investments** – Wastewater Division investments consist of certificates of deposit, which are purchased with the intent to hold to maturity, and U.S. Government obligations which are purchased with the intent to hold to maturity. Solid Waste Division investments consist of U.S. Government obligations which are purchased with the intent to hold to maturity. All investments are stated at fair value.

**Accounts Receivable and Annual Charges Receivable** – The Authority carries its annual charges receivable and accounts receivable at cost less an allowance for doubtful accounts. Generally, the Authority does not require collateral to support its receivables. On a periodic basis, the Authority evaluates its annual charges receivable and accounts receivable and establishes an allowance for doubtful accounts based on history of past write-offs, collections and current credit conditions. Charges are written off as uncollectible when management determines that a sufficient period of time has elapsed without receiving payment and the customers do not exhibit the ability to meet their obligations. No allowance for doubtful accounts was required at December 31, 2018 or 2017.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 2 – Summary of Significant Accounting Policies (continued):**

**Refunds Due Participants** – Certain Wastewater Division customers choose to receive refunds on overpayments of estimated charges rather than taking credits against future invoices. These amounts are determined and agreed to on an annual basis.

**Unearned Service Revenue** – Receipts received from Solid Waste Division customers for service fees prior to being earned are recorded as unearned service revenue.

**Capital Assets** – Property, plant and equipment are stated at cost or estimated historical cost. For the Wastewater Division, system construction costs are charged to construction in progress until such time that the specific segments of the system are completed and put into operation. For the Solid Waste Division, landfill improvements are amortized based on the units of airspace used during the year.

Depreciation is computed on a straight-line basis over the following estimated useful lives:

	<b>Years</b>
Building and improvements	20-75
Improvements other than buildings:	
Sewer mains and interceptors	75
Pump stations	40
Other improvements	15 - 40
Landfill gas collection facility	20
Machinery and equipment	10 - 20
Vehicles	5
Furniture and fixtures	3 - 20

**Insurance Reserves** – The Authority self-insures for a portion of the losses that could arise during the normal course of operations, such as losses from general liability, collision losses and workers' compensation claims. The Authority's policy is to set up funded reserves for claims that may arise and to purchase commercial insurance to cover the liability for claims in excess of self-insured amounts.

**Long-Term Obligations** – Bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method which approximates the effective interest method. Bonds payable are reported net of the applicable bond premium. At December 31, 2018 and 2017, the balance of unamortized original issue premium was as follows:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
Wastewater Division	\$ 1,604,431	\$ 2,047,532
Solid Waste Division	285,546	358,893
	\$ 1,889,977	\$ 2,406,425

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 2 – Summary of Significant Accounting Policies (continued):**

Amortization expense for the years ended December 31, 2018 and 2017 was as follows:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
Wastewater Division	\$ 443,101	\$ 443,101
Solid Waste Division	73,347	73,347
	\$ 516,448	\$ 516,448

**Accrued Closure and Post-Closure Care Liabilities (Solid Waste Division)** – Landfill site closure and post-closure care liabilities are accrued based on estimates of closure and post-closure costs to be incurred and units of airspace filled during the period.

**Deferred Outflows / Inflows of Resources** – In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial element represents a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense / expenditure) until then. Currently, the Authority has two items that qualify for reporting in this category, deferred amounts related to pensions and other post employment benefits.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial element represents an acquisition of net position that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has three items that qualify for reporting in this category, deferred amounts related to pensions and other post employment benefits and deferred gain on defeasance of debt.

**Recent Pronouncements** – In June, 2015 the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”). The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local government employers about financial support for OPEB that is provided by other entities. The Authority implemented GASB No. 75 during 2018, which resulted in the recording of additional expenses, deferred outflows of resources, deferred inflows of resources and additional note disclosures.

In March, 2017, GASB issued Statement No. 85, *Omnibus 2017*. This Statement establishes accounting and financial reporting requirements for blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits). The requirements of this Statement are effective for periods beginning after June 15, 2017. The Authority has adopted GASB Statement No. 85 during the year ended December 31, 2018.

GASB issued Statement No. 84, *Fiduciary Activities* in January 2017. This Statement establishes standards of accounting and financial reporting for fiduciary activities. The requirements of this Statement are effective for periods beginning after December 15, 2018. Management has not yet determined the impact of the statement on the financial statements.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 2 – Summary of Significant Accounting Policies (continued):**

**Postemployment Benefits Other Than Pensions (OPEB)** - For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Middlesex County Joint Health Insurance Fund (MCJHIF) and additions to/deductions from MCJHIF’s fiduciary net position have been determined on the same basis as they are reported by MCJHIF.

**Subsequent Events** - Management has reviewed and evaluated all events and transactions from December 31, 2018 through August 5, 2019, the date that the financial statements were available for issuance. The effects of those events and transactions that provide additional pertinent information about conditions that existed at the statement of net position date have been recognized in the accompanying financial statements.

In May 2019, the Authority issued bonds to replace the loan payable to New Jersey Environmental Infrastructure Trust (“NJEIT”) for the Edison Pump Station. See Note 8 for additional details.

**Note 3 - Change in Accounting Principle**

Effective in the fiscal year ended December 31, 2018, the Authority implemented Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*.

The Authority adjusted its December 31, 2017 net position as a result of retrospective adjustments for the implementation of the accounting principle (GASB Statement No. 75) as follows:

	2017 Balance per prior year Audited Financial Statements	Implementation of accounting principle	2017 Balance per Financial Statements (as restated)
<u>Wastewater Division</u>			
Deferred Outflow of Resources - OPEB	\$ -	\$ 3,725,566	\$ 3,725,566
Liability for other post employment benefits	61,756,678	81,465,047	143,221,725
Administration expense	21,292,353	1,216,868	22,509,221
Net Position	270,366,520	(77,739,481)	192,627,039
<u>Solid Waste Division</u>			
Deferred Outflow of Resources - OPEB	\$ -	\$ 657,453	\$ 657,453
Liability for other post employment benefits	11,300,046	13,974,376	25,274,422
Administration expense	9,663,994	179,682	9,843,676
Net Position	86,127,806	(13,316,923)	72,810,883

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 3 – Change in Accounting Principle (continued):**

The Authority adjusted its December 31, 2016 net position as a result of retrospective adjustments for the implementation of the accounting principle (GASB Statement No. 75) as follows:

	Wastewater Division	Solid Waste Division	Total
Balance, December 31, 2016 prior to restatement	\$ 248,309,801	\$ 79,533,637	\$ 327,843,438
Restatement for OPEB liability and related expense	<u>(76,522,613)</u>	<u>(13,137,241)</u>	<u>(89,659,854)</u>
Balance, December 31, 2016 as restated	<u>\$ 171,787,188</u>	<u>\$ 66,396,396</u>	<u>\$ 238,183,584</u>

**Note 4 – Cash and Cash Equivalents:**

The components of cash and cash equivalents are as follows:

	<u>Unrestricted</u>	<u>Restricted</u>	<u>Total</u>
<b><u>December 31, 2018</u></b>			
Wastewater Division:			
Cash on deposit	\$ 5,987,293	\$ 8,101,525	\$ 14,088,818
Cash equivalents	<u>3,624,000</u>	<u>-</u>	<u>3,624,000</u>
	<u>9,611,293</u>	<u>8,101,525</u>	<u>17,712,818</u>
Solid Waste Division:			
Cash on deposit	21,005,488	37,896,700	58,902,188
Cash equivalents	<u>-</u>	<u>3,833,660</u>	<u>3,833,660</u>
	<u>21,005,488</u>	<u>41,730,360</u>	<u>62,735,848</u>
Total	<u>\$ 30,616,781</u>	<u>\$ 49,831,885</u>	<u>\$ 80,448,666</u>
<b><u>December 31, 2017</u></b>			
Wastewater Division:			
Cash on deposit	\$ 3,285,355	\$ 9,634,717	\$ 12,920,072
Cash equivalents	<u>7,565,000</u>	<u>-</u>	<u>7,565,000</u>
	<u>10,850,355</u>	<u>9,634,717</u>	<u>20,485,072</u>
Solid Waste Division:			
Cash on deposit	12,571,546	34,719,232	47,290,778
Cash equivalents	<u>-</u>	<u>3,091,229</u>	<u>3,091,229</u>
	<u>12,571,546</u>	<u>37,810,461</u>	<u>50,382,007</u>
Total	<u>\$ 23,421,901</u>	<u>\$ 47,445,178</u>	<u>\$ 70,867,079</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 4 – Cash and Cash Equivalents (continued):**

New Jersey statutes and the Authority's General Bond Resolution permit the deposit of public funds only in banks that meet the requirements of the Governmental Unit Deposit Protection Act ("GUDPA") or the State of New Jersey Cash Management Fund. GUDPA requires that banks which accept public funds be a public depository. A "public depository" is defined as a state bank, a national bank, or a savings bank or association, which is located in the State of New Jersey, the deposits of which are insured by the Federal Deposit Insurance Corporation ("FDIC"). A local unit may make deposits in, or purchase certificates of deposit from, banks which are located in New Jersey and which meet the requirements of GUDPA.

All bank deposits as of the statement of net position date are held in each respective Division's name by commercial banking institutions. At December 31, 2018 and 2017, the carrying amount of the each Division's deposits, bank balances and FDIC insured amounts were as follows:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<u>Carrying amount of cash and cash equivalents:</u>		
Wastewater Division	\$ 17,712,818	\$ 20,485,072
Solid Waste Division	62,735,848	50,382,007
	\$ 80,448,666	\$ 70,867,079

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<u>Bank balances:</u>		
Wastewater Division	\$ 20,250,683	\$ 23,495,341
Solid Waste Division	61,519,292	47,292,703
	\$ 81,769,975	\$ 70,788,044
<u>Insured by FDIC:</u>		
Wastewater Division	\$ 250,000	\$ 250,000
Solid Waste Division	523,993	273,696
	\$ 773,993	\$ 523,696

Balances above the FDIC amount were insured through the GUDPA, N.J.S.A. 17:9-14 et seq., which insures all New Jersey governmental units' deposits in excess of Federal deposit insurance maximums.

*Custodial Credit Risk:* Pursuant to Governmental Accounting Standards Board Statement No. 40, *Deposits and Investment Risk Disclosures* ("GASB 40"), the Authority's accounts are profiled in order to determine exposure, if any, to Custodial Credit Risk (risk that in the event of a failure of the counterparty, the Authority would not be able to recover the value of its deposits on investments.) Deposits are considered to be exposed to Custodial Credit Risk if they are: uncollateralized (securities not pledged to the depositor), collateralized with securities held by the pledging financial institution, or collateralized with securities held by the financial institution's trust department or agent but not in the government's name. At December 31, 2018 and 2017, all of the Authority's deposits were collateralized by securities held by FDIC and the GUDPA collateral pool and, accordingly, are not exposed to Custodial Credit Risk.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 5 – Investments:**

The Authority's investment policy permits the investing of monies in the following types of investments:

- a) Any direct and general obligation of the United States of America.
- b) Negotiable or non-negotiable certificates of deposit issued by any bank, savings and loan association, or national banking association if qualified to serve as a depository for public funds under the provisions of the Governmental Unit Deposit Protection Act, N.J.S.A. 17:9-41 et seq.
- c) Deposits in the State of New Jersey Cash Management Fund.

The Authority's investments which are held in each Division's name on the records of the various financial institutions, are recorded at fair value and include the following:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<u>Wastewater Division</u>		
Certificates of deposit	\$ 20,087,000	\$ 18,930,000
United States Government Obligations:		
US Treasury Bills	9,750,562	9,874,490
	\$ 29,837,562	\$ 28,804,490
<u>Solid Waste Division</u>		
Certificates of deposit	\$ 1,097,920	\$ -
United States Government Obligations:		
FNMA and FHLMC Obligations	20,345,282	19,495,780
US Treasury Notes	35,007,795	37,440,813
	\$ 56,450,997	\$ 56,936,593
<b>Total</b>	<b>\$ 86,288,559</b>	<b>\$ 85,741,083</b>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 5 – Investments (continued):**

The amortized cost of the Wastewater Division’s investment securities and their approximate fair values at December 31, 2018 and 2017 were as follows:

<b>Securities and certificates of deposit to be held to maturity:</b>	<b>Amortized Cost</b>	<b>Unrealized Gains</b>	<b>Unrealized Losses</b>	<b>Fair Value</b>
<b><u>December 31, 2018</u></b>				
Certificates of Deposit	\$ 20,087,000			\$ 20,087,000
United States Government Obligations:				
US Treasury Bills	9,750,562			9,750,562
	<u>\$ 29,837,562</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 29,837,562</u>
<b><u>December 31, 2017</u></b>				
Certificates of Deposit	\$ 18,930,000			\$ 18,930,000
United States Government Obligations:				
US Treasury Bills	9,874,490			9,874,490
	<u>\$ 28,804,490</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 28,804,490</u>

The amortized cost of the Solid Waste Division’s investment securities and their approximate fair values at December 31, 2018 and 2017 were as follows:

<b>Securities and certificates of deposit to be held to maturity:</b>	<b>Amortized Cost</b>	<b>Unrealized Gains</b>	<b>Unrealized Losses</b>	<b>Fair Value</b>
<b><u>December 31, 2018</u></b>				
Certificates of Deposit	\$ 1,099,450	\$ -	\$ (1,530)	\$ 1,097,920
United States Government Obligations:				
FNMA and FHLMC Obligations	20,829,222	3,751	(487,691)	20,345,282
US Treasury Notes	35,559,856	20,519	(572,580)	35,007,795
	<u>\$ 57,488,528</u>	<u>\$ 24,270</u>	<u>\$ (1,061,801)</u>	<u>\$ 56,450,997</u>
<b><u>December 31, 2017</u></b>				
United States Government Obligations:				
FNMA and FHLMC Obligations	\$ 37,819,055	\$ 45,493	\$ (423,735)	\$ 37,440,813
US Treasury Notes	19,879,850	-	(384,070)	19,495,780
	<u>\$ 57,698,905</u>	<u>\$ 45,493</u>	<u>\$ (807,805)</u>	<u>\$ 56,936,593</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 5 – Investments (continued):**

Investment ratings and contractual maturities of the Wastewater Division’s held-to-maturity debt securities at December 31, 2018 and 2017, are as follows:

<u>Investment Type</u>	<u>S&amp;P Ratings</u>	<u>December 31, 2018 Investment Maturities</u>			
		<u>Fair Value</u>	<u>Within 1 Year</u>	<u>1 - 5 Years</u>	<u>6 - 10 Years</u>
Certificates of Deposit	N/A	\$ 20,087,000	17,887,000	\$ 2,200,000	\$ -
United States Government Obligations:					
US Treasury Bills	N/A	9,750,562	9,750,562	-	-
		<u>\$ 29,837,562</u>	<u>\$ 27,637,562</u>	<u>\$ 2,200,000</u>	<u>\$ -</u>

  

<u>Investment Type</u>	<u>S&amp;P Ratings</u>	<u>December 31, 2017 Investment Maturities</u>			
		<u>Fair Value</u>	<u>Within 1 Year</u>	<u>1 - 5 Years</u>	<u>6 - 10 Years</u>
Certificates of Deposit	AA	\$ 18,930,000	\$ 18,930,000	\$ -	\$ -
United States Government Obligations:					
US Treasury Bills	N/A	9,874,490	9,874,490	-	-
		<u>\$ 28,804,490</u>	<u>\$ 28,804,490</u>	<u>\$ -</u>	<u>\$ -</u>

Investment ratings and contractual maturities of the Solid Waste Division’s held-to-maturity debt securities at December 31, 2018 and 2017, are as follows:

<u>Investment Type</u>	<u>S&amp;P Ratings</u>	<u>December 31, 2018 Investment Maturities</u>			
		<u>Fair Value</u>	<u>Within 1 Year</u>	<u>1 - 5 Years</u>	<u>6 - 10 Years</u>
Certificates of Deposit	N/A	\$ 1,097,920	\$ -	\$ 1,097,920	\$ -
United States Government Obligations:					
FNMA and FHLMC Obligations	AA	20,345,282	2,180,289	18,164,993	-
US Treasury Notes	N/A	35,007,795	7,340,133	27,667,662	-
		<u>\$ 56,450,997</u>	<u>\$ 9,520,422</u>	<u>\$ 46,930,575</u>	<u>\$ -</u>

  

<u>Investment Type</u>	<u>S&amp;P Ratings</u>	<u>December 31, 2017 Investment Maturities</u>			
		<u>Fair Value</u>	<u>Within 1 Year</u>	<u>1 - 5 Years</u>	<u>6 - 10 Years</u>
United States Government Obligations:					
FNMA and FHLMC Obligations	AA	\$ 19,495,780	\$ 749,183	\$ 17,720,870	\$ 1,025,727
US Treasury Notes	N/A	37,440,813	4,058,563	32,357,472	1,024,778
		<u>\$ 56,936,593</u>	<u>\$ 4,807,746</u>	<u>\$ 50,078,342</u>	<u>\$ 2,050,505</u>

Actual maturities may differ from contractual maturities because some borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

GASB 72 established a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurement.) The three levels of the fair value hierarchy under GASB 72 are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Authority has the ability to access.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 5 – Investments (continued):**

Level 2 - Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value:

- *Certificates of Deposit*: Valued at the closing price reported on the active market in which the security is traded.
- *FNMA and FHLMC Obligations*: Valued at the closing price reported on the active market in which the security is traded.
- *US Treasury Bills*: Valued at the closing price reported on the active market in which the security is traded.
- *US Treasury Notes*: Valued at the closing price reported on the active market in which the security is traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although management believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 5 – Investments (continued):**

The following table sets forth by level, within the fair value hierarchy, the Authority's assets at fair value as of December 31, 2018 and 2017:

	<i>Assets at Fair Value</i>	
	<u><i>as of December 31, 2018</i></u>	
	<u><i>Level 2</i></u>	<u><i>Total</i></u>
Wastewater Division:		
Certificates of Deposit	\$ 20,087,000	\$ 20,087,000
US Treasury Bills	9,750,562	9,750,562
Solid Waste Division:		
Certificates of Deposit	1,097,920	1,097,920
FNMA and FHLMC Obligations	20,345,282	20,345,282
US Treasury Notes	<u>35,007,795</u>	<u>35,007,795</u>
Total	<u>\$ 86,288,559</u>	<u>\$ 86,288,559</u>

	<i>Assets at Fair Value</i>	
	<u><i>as of December 31, 2017</i></u>	
	<u><i>Level 2</i></u>	<u><i>Total</i></u>
Wastewater Division:		
Certificates of Deposit	\$ 18,930,000	\$ 18,930,000
US Treasury Bills	9,874,490	9,874,490
Solid Waste Division:		
FNMA and FHLMC Obligations	19,495,780	19,495,780
US Treasury Notes	<u>37,440,813</u>	<u>37,440,813</u>
Total	<u>\$ 85,741,083</u>	<u>\$ 85,741,083</u>

*Credit Risk:* The Authority does not have an investment policy regarding the management of credit risk, because it is the Authority's policy, pursuant to its bond resolutions, to only invest in securities that are obligations of the U.S. Government or securities guaranteed by the U.S. Government and certificates of deposit. GASB 40 requires that disclosure be made as to the credit rating of all debt security investments, except for obligations of the U.S. Government or investments guaranteed by the U.S. Government.

*Interest Rate Risk:* The Authority only invests in securities of, or guaranteed by, the U.S. Government, which it generally holds until maturity, and in certificates of deposit. As such, management believes that they do not have a significant exposure to interest rate risk, therefore, the Authority does not have a policy to limit interest rate risk.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 6 – Capital Assets:**

Capital assets at December 31, 2018 and 2017 consist of the following:

	<b>December 31, 2018</b>		
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Total</b>
Depreciable:			
Landfill and landfill expansion, including initial preparatory cost	\$ -	\$ 224,165,391	\$ 224,165,391
Buildings and improvements	177,481,565	11,040,920	188,522,485
Other improvements	494,962,345	16,557,137	511,519,482
Machinery and equipment	35,902,964	7,915,651	43,818,615
Furniture and fixtures	57,091	-	57,091
Landfill gas collection facility	65,591,952	-	65,591,952
Landfill gas collection equipment	6,045,822	-	6,045,822
	<u>780,041,739</u>	<u>259,679,099</u>	<u>1,039,720,838</u>
Less: Accumulated depreciation and amortization	(383,363,340)	(253,054,860)	(636,418,200)
	<u>396,678,399</u>	<u>6,624,239</u>	<u>403,302,638</u>
Non-depreciable:			
Land	8,401,828	55,366,747	63,768,575
Construction in progress	103,381,593	7,023,130	110,404,723
	<u>\$ 508,461,820</u>	<u>\$ 69,014,116</u>	<u>\$ 577,475,936</u>
	<b>December 31, 2017</b>		
	<b>Wastewater Division</b>	<b>Solid Waste Division</b>	<b>Total</b>
Depreciable:			
Landfill and landfill expansion, including initial preparatory cost	\$ -	\$ 224,165,391	\$ 224,165,391
Buildings and improvements	177,482,470	11,000,351	188,482,821
Other improvements	491,645,644	16,481,711	508,127,355
Machinery and equipment	33,691,388	6,491,708	40,183,096
Furniture and fixtures	57,091	-	57,091
Landfill gas collection facility	62,545,648	-	62,545,648
Landfill gas collection equipment	5,536,211	-	5,536,211
	<u>770,958,452</u>	<u>258,139,161</u>	<u>1,029,097,613</u>
Less: Accumulated depreciation and amortization	(359,876,158)	(247,046,167)	(606,922,325)
	<u>411,082,294</u>	<u>11,092,994</u>	<u>422,175,288</u>
Non-depreciable:			
Land	8,401,828	55,366,747	63,768,575
Construction in progress	52,507,799	6,576,530	59,084,329
	<u>\$ 471,991,921</u>	<u>\$ 73,036,271</u>	<u>\$ 545,028,192</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 6 – Capital Assets (continued):**

Depreciation expense for the years ended December 31, 2018 and 2017 was as follows:

	December 31,	
	2018	2017
Wastewater Division	\$ 23,487,182	\$ 23,538,371
Solid Waste Division	6,008,693	5,871,604
	\$ 29,495,875	\$ 29,409,975

Changes in capital assets for the years ended December 31, 2018 and 2017 were as follows:

	January 1, 2018	Increase	Decrease	December 31, 2018
<u>Wastewater Division:</u>				
Buildings and improvements	\$ 177,482,470	\$ -	\$ 905	\$ 177,481,565
Other improvements	491,645,644	3,316,701	-	494,962,345
Machinery and equipment	33,691,388	2,211,576	-	35,902,964
Furniture and fixtures	57,091	-	-	57,091
Landfill gas collection facility	62,545,648	3,046,304	-	65,591,952
Landfill gas collection equipment	5,536,211	509,611	-	6,045,822
	770,958,452	9,084,192	905	780,041,739
Less: Accumulated depreciation	(359,876,158)	(23,487,182)	-	(383,363,340)
	411,082,294	(14,402,990)	905	396,678,399
Land	8,401,828	-	-	8,401,828
Construction in progress	52,507,799	50,873,794	-	103,381,593
	\$ 471,991,921	\$ 36,470,804	\$ 905	\$ 508,461,820
	January 1, 2018	Increase	Decrease	December 31, 2018
<u>Solid Waste Division:</u>				
Landfill and landfill expansion, including initial preparatory cost	\$ 224,165,391	\$ -	\$ -	\$ 224,165,391
Buildings and improvements	11,000,351	40,569	-	11,040,920
Other improvements	16,481,711	75,426	-	16,557,137
Machinery and equipment	6,491,708	1,423,943	-	7,915,651
	258,139,161	1,539,938	-	259,679,099
Less: Accumulated depreciation	(247,046,167)	(6,008,693)	-	(253,054,860)
	11,092,994	(4,468,755)	-	6,624,239
Land	55,366,747	-	-	55,366,747
Construction in progress	6,576,530	446,600	-	7,023,130
	\$ 73,036,271	\$ (4,022,155)	\$ -	\$ 69,014,116

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 6 – Capital Assets (continued):**

	<b>January 1, 2017</b>	<b>Increase</b>	<b>Decrease</b>	<b>December 31, 2017</b>
<u>Wastewater Division:</u>				
Buildings and improvements	\$ 177,464,974	\$ 17,496	\$ -	\$ 177,482,470
Other improvements	490,794,901	850,743	-	491,645,644
Machinery and equipment	31,606,619	2,084,769	-	33,691,388
Furniture and fixtures	57,091	-	-	57,091
Landfill gas collection facility	60,714,157	1,831,491	-	62,545,648
Landfill gas collection equipment	5,536,211	-	-	5,536,211
	<u>766,173,953</u>	<u>4,784,499</u>	<u>-</u>	<u>770,958,452</u>
Less: Accumulated depreciation	(336,337,787)	(23,538,371)	-	(359,876,158)
	<u>429,836,166</u>	<u>(18,753,872)</u>	<u>-</u>	<u>411,082,294</u>
Land	8,401,828	-	-	8,401,828
Construction in progress	25,214,744	27,293,055	-	52,507,799
	<u>\$ 463,452,738</u>	<u>\$ 8,539,183</u>	<u>\$ -</u>	<u>\$ 471,991,921</u>

	<b>January 1, 2017</b>	<b>Increase</b>	<b>Decrease</b>	<b>December 31, 2017</b>
<u>Solid Waste Division:</u>				
Landfill and landfill expansion, including initial preparatory cost	\$ 224,165,391	\$ -	\$ -	\$ 224,165,391
Buildings and improvements	11,000,351	-	-	11,000,351
Other improvements	16,408,026	73,685	-	16,481,711
Machinery and equipment	5,320,803	1,170,905	-	6,491,708
	<u>256,894,571</u>	<u>1,244,590</u>	<u>-</u>	<u>258,139,161</u>
Less: Accumulated depreciation	(241,174,563)	(5,871,604)	-	(247,046,167)
	<u>15,720,008</u>	<u>(4,627,014)</u>	<u>-</u>	<u>11,092,994</u>
Land	55,366,747	-	-	55,366,747
Construction in progress	6,350,478	226,052	-	6,576,530
	<u>\$ 77,437,233</u>	<u>\$ (4,400,962)</u>	<u>\$ -</u>	<u>\$ 73,036,271</u>

**Note 7 – Note Payable:**

On December 16, 2016, the Authority obtained a one year \$10,000,000 Series 2016 Subordinated Sewer Project Note from Amboy National Bank. The note provided funds to the Authority to continue repairs associated with damage incurred during Hurricane Sandy. The note bears interest at 1% per annum and was repaid December 15, 2017 by use of reimbursements to the Authority from the Federal Emergency Management Agency (“FEMA”) and certain available Authority cash reserves.

The following presents the changes for the year ended December 31, 2017:

	<b>January 1, 2017</b>	<b>Additions</b>	<b>Retired</b>	<b>December 31, 2017</b>
Note Payable	<u>\$ 10,000,000</u>	<u>\$ -</u>	<u>\$ 10,000,000</u>	<u>\$ -</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 8 – NJEIT Statewide Assistance Infrastructure Loans:**

During 2016, the Authority was approved for two New Jersey Environmental Infrastructure Trust (“NJEIT”) Statewide Assistance Infrastructure Loans (“SAIL”) to fund two projects being operating by the Wastewater Division. The NJEIT approved a loan for the Edison Pump Station for \$35,208,623 and a loan for the Sayreville Pump Station for \$87,953,113. The terms of these loans allow the Authority to receive funding from the NJEIT on a drawdown basis as approved project expenditures are incurred. The loans do not bear interest during the drawdown period.

The Authority has been approved for reimbursement of a portion of these projects from the Federal Emergency Management Agency (“FEMA”) in amounts up to \$19,466,721 for the Edison Pump Station and \$66,832,086 for the Sayreville Pump Station. As the eligible expenditures are reimbursed by FEMA, the Authority will use those funds to repay the NJEIT for advances on the SAILs. Once the related project is completed, the Authority plans to issue bonds to replace the remaining balance of each loan.

In May 2019, the Authority issued bonds totaling \$16,199,822 to replace the loan payable to NJEIT for the Edison Pump Station. The bonds are payable in two separate portions. The Federal portion is payable in semiannual principal amounts totaling approximately \$621,000, and does not bear interest. There is a current payment due in August 2019 for approximately \$414,000. The state portion bears interest at rates ranging from 2.00% to 5.00% per annum and is payable in annual installments that range from approximately \$140,000 to \$275,000 beginning August 2020 through August 2038.

The following presents the changes in the loan balances receivable from NJEIT for the years ended December 31, 2018 and 2017, respectively:

	<b>January 1, 2018</b>	<b>Additions</b>	<b>Retired</b>	<b>December 31, 2018</b>
NJEIT SAIL - Edison Pump Station	\$ 4,969,285	\$ 10,136,270	\$ 9,035,627	\$ 6,069,928
NJEIT SAIL - Sayreville Pump Station	7,524,850	30,152,983	17,248,267	20,429,566
	<u>\$ 12,494,135</u>	<u>\$ 40,289,253</u>	<u>\$ 26,283,894</u>	<u>\$ 26,499,494</u>

  

	<b>January 1, 2017</b>	<b>Additions</b>	<b>Retired</b>	<b>December 31, 2017</b>
NJEIT SAIL - Edison Pump Station	\$ 2,001,594	\$ 6,851,498	\$ 3,883,807	\$ 4,969,285
NJEIT SAIL - Sayreville Pump Station	5,738,481	10,735,691	8,949,322	7,524,850
	<u>\$ 7,740,075</u>	<u>\$ 17,587,189</u>	<u>\$ 12,833,129</u>	<u>\$ 12,494,135</u>

The Wastewater Division has recorded the reimbursement requests due from NJEIT on the statement of net position as Due from NJEIT.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities:**

During the years ended December 31, 2018 and 2017, the following changes occurred in long-term liabilities:

	<b>January 1, 2018</b>			<b>December 31, 2018</b>	<b>Due Within One Year</b>
	<i>(as restated)</i>	<b>Additions</b>	<b>Retired</b>		
<b>Wastewater Division:</b>					
Bonds payable	\$ 132,306,638	\$ -	\$ 16,602,895	\$ 115,703,743	\$ 22,705,831
Unamortized original issue premium	2,047,532	-	443,101	1,604,431	307,793
	<u>134,354,170</u>	<u>-</u>	<u>17,045,996</u>	<u>117,308,174</u>	<u>23,013,624</u>
Net pension liability	37,827,086	-	5,129,549	32,697,537	-
Liability for other post employment benefits	143,221,725	-	15,583,064	127,638,661	-
Liability for early retirement incentives	1,886,310	-	92,434	1,793,876	106,980
	<u>\$ 317,289,291</u>	<u>\$ -</u>	<u>\$ 37,851,043</u>	<u>\$ 279,438,248</u>	<u>\$ 23,120,604</u>
<b>Solid Waste Division:</b>					
Bonds payable	\$ 24,388,835	\$ -	\$ 7,811,298	\$ 16,577,537	\$ 7,977,630
Unamortized original issue premium	358,893	-	73,347	285,546	73,347
	<u>24,747,728</u>	<u>-</u>	<u>7,884,645</u>	<u>16,863,083</u>	<u>8,050,977</u>
Net pension liability	6,675,368	-	905,215	5,770,153	-
Liability for other post employment benefits	25,274,422	-	2,749,952	22,524,470	-
	<u>\$ 56,697,518</u>	<u>\$ -</u>	<u>\$ 11,539,812</u>	<u>\$ 45,157,706</u>	<u>\$ 8,050,977</u>
<b>January 1, 2017</b>					
	<i>(as restated)</i>	<b>Additions</b>	<b>Retired</b>	<b>December 31, 2017</b>	<b>Due Within One Year</b>
				<i>(as restated)</i>	
<b>Wastewater Division:</b>					
Bonds payable	\$ 150,153,863	\$ -	\$ 17,847,225	\$ 132,306,638	\$ 16,602,897
Unamortized original issue premium	2,490,633	-	443,101	2,047,532	443,100
	<u>152,644,496</u>	<u>-</u>	<u>18,290,326</u>	<u>134,354,170</u>	<u>17,045,997</u>
Net pension liability	47,896,621	-	10,069,535	37,827,086	-
Liability for other post employment benefits	131,799,419	11,422,306	-	143,221,725	-
Liability for early retirement incentives	1,965,459	-	79,149	1,886,310	86,883
	<u>\$ 334,305,995</u>	<u>\$ 11,422,306</u>	<u>\$ 28,439,010</u>	<u>\$ 317,289,291</u>	<u>\$ 17,132,880</u>
<b>Solid Waste Division:</b>					
Bonds payable	\$ 32,229,323	\$ -	\$ 7,840,488	\$ 24,388,835	\$ 7,811,298
Unamortized original issue premium	432,240	-	73,347	358,893	73,347
	<u>32,661,563</u>	<u>-</u>	<u>7,913,835</u>	<u>24,747,728</u>	<u>7,884,645</u>
Net pension liability	8,452,345	-	1,776,977	6,675,368	-
Liability for other post employment benefits	23,258,721	2,015,701	-	25,274,422	-
	<u>\$ 64,372,629</u>	<u>\$ 2,015,701</u>	<u>\$ 9,690,812</u>	<u>\$ 56,697,518</u>	<u>\$ 7,884,645</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities (continued):**

The following is a summary of bonds payable as of December 31, 2018 and 2017:

	<u>December 31,</u>	
	<u>2018</u>	<u>2017</u>
<u>Wastewater Division:</u>		
Issue of 2001A, N.J. EIT Bonds (a):		
Federal portion	\$ 2,668,365	\$ 3,559,456
State portion	3,503,353	4,563,413
Issue of 2005A, N.J. EIT Bonds (b)		
Federal portion	2,456,024	2,806,175
State portion	3,079,871	3,453,760
Issue of 2006, N.J. EIT Bonds (c)		
Federal portion	16,191,453	18,214,351
State portion	21,776,273	24,052,902
Issue of 2007 (d)	11,675,000	17,425,000
Issue of 2009A, N.J. EIT Bonds (e)		
Federal portion	5,285,746	5,780,615
State portion*	6,060,000	6,510,000
Issue of 2009 N.J. EIT Bonds (f)		
Federal portion - D-1	2,440,700	2,662,580
State portion - C-1**	1,948,000	2,093,000
Issue of 2009 N.J. EIT Bonds (g)		
Federal portion - D-2	6,800,493	7,418,718
State portion - C-2**	2,527,000	2,717,000
Issue of 2010 N.J. EIT Bonds (h)		
Federal portion	3,523,119	3,816,713
State portion	3,589,000	3,824,000
Issue of 2014A N.J. EIT Bonds (i)		
Federal portion	3,217,521	3,432,023
State portion	1,165,000	1,220,000
Issue of 2016A N.J. EIT Bonds (j)		
Federal portion	13,261,825	14,041,932
State portion	<u>4,535,000</u>	<u>4,715,000</u>
	115,703,743	132,306,638
Current portion	<u>22,705,831</u>	<u>16,602,897</u>
Long-term portion	<u>\$ 92,997,912</u>	<u>\$ 115,703,741</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities (continued):**

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<u>Solid Waste Division:</u>		
Issue of 2007A, N.J. EIT bonds (k):		
Federal portion	\$ 2,886,148	\$ 5,774,964
State portion	3,429,000	6,697,000
Issue of 2009A, N.J. EIT bonds (l):		
Federal portion	4,716,389	6,376,000
State portion*	5,546,000	5,540,871
	16,577,537	24,388,835
Current portion	7,977,630	7,811,298
Long-term portion	\$ 8,599,907	\$ 16,577,537

\*These bond issues were refunded by the N.J. EIT as part of the 2017A-R1 refunding series on January 17, 2017. The refunding savings is described in the respective footnote below and on the following page for each bond issue which was refunded.

\*\*These bond issues were refunded by the N.J. EIT as part of the 2017A-R2 refunding series on January 17, 2017. The refunding savings is described in the respective footnote below and on the following page for each bond issue which was refunded.

- a. Bonds payable in two separate portions. The Federal portion is payable in semiannual principal amounts totaling approximately \$890,000, and does not bear interest. The state portion bears interest at rates ranging from 4.75% to 5.00% per annum and is payable in annual installments that range from a current amount of approximately \$1,060,000 to \$1,224,000 through August 2021. Current portion as of December 31, 2018 is \$2,003,826.
- b. Bonds payable in two separate portions. The Federal portion is payable in semiannual principal amounts totaling approximately \$353,000 and does not bear interest. The state portion bears interest at rates ranging from 4.00% to 4.50% per annum and is payable in annual installments that range from a current amount of approximately \$374,000 to \$493,000 through August 2025. Current portion as of December 31, 2018 is \$743,648.
- c. Bonds payable in two separate portions. The Federal portion is payable in semiannual principal amounts totaling approximately \$2,025,000, and does not bear interest. The state portion bears interest at rates ranging from 4.00% to 5.00% per annum and is payable in annual installments that range from approximately \$2,277,000 to \$2,928,000 through August 2026. Current portion as of December 31, 2018 is \$4,389,181.
- d. Bonds payable final payment of \$11,675,000 is due on December 15, 2019. The interest rate on the remaining bonds is 5.25%.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities (continued):**

- e. Bonds payable in two separate portions. The Federal portion is payable in semiannual principal amounts totaling approximately \$495,000, and does not bear interest. The state portion bears interest at rates ranging from 3.50% to 5.00% per annum. The state portion of the bonds are payable in annual installments that range from the current amount of \$450,000, increasing annually to \$665,000 through August 2029. Amounts payable from August 2019 through August 2029 are net of a principal reduction which took effect when the Authority participated in the January 17, 2017 NJEIT refunding process. The principal reduction shall be applied to the principal payments annually starting in August 2019 and shall result in a total principal reduction of \$325,000. Current portion as of December 31, 2018 is \$943,866.
- f. Bonds payable in two separate portions. The Federal portion (D-1) is payable in semi-annual installments of \$221,882 per annum and does not bear interest. The State portion (C-1) of the bonds bears interest at rates ranging from 3.00% to 5.00% and is payable in annual installments that range from a current amount of \$145,000, increasing annually to \$214,000 through August 2029. Amounts payable from August 2019 through August 2029 are net of a principal reduction which took effect when the Authority participated in the January 17, 2017 NJEIT refunding process. The principal reduction shall be applied to the principal payments annually starting in August 2019 and shall result in a total principal reduction of \$107,000. Current portion as of December 31, 2018 is \$363,882.
- g. Bonds payable in two separate portions. The Federal portion (D-2) is payable in semi-annual installments of \$618,227 per annum and does not bear interest. The State portion (C-2) of the bonds bears interest at rates ranging from 3.00% to 5.00% and is payable in annual installments that range from a current amount of \$190,000, increasing annually to \$276,000 through August 2029. Amounts payable from August 2019 through August 2029 are net of a principal reduction which took effect when the Authority participated in the January 17, 2017 NJEIT refunding process. The principal reduction shall be applied to the principal payments annually starting in August 2019 and shall result in a total principal reduction of \$138,000. Current portion as of December 31, 2018 is \$808,227.
- h. Bonds payable in two separate portions. The Federal portion is payable in semi-annual installments of \$293,593 per annum and does not bear interest. The State portion of the bonds bears interest of 5.00% per annum and is payable in annual installments that range from \$235,000 increasing annually to \$377,000 through August 2030. Current portion as of December 31, 2018 is \$538,593.
- i. Bonds payable in two separate portions. The Federal portion is payable in semiannual installments that aggregate to \$214,501 per annum and does not bear interest. The state portion of the bonds bears interest ranging from a current amount of 3.00% to 5.00% per annum and is payable in annual installments that range from the current amount of \$55,000, increasing annually to \$95,000 through August 2033. Current portion as of December 31, 2018 is \$269,501.
- j. Bonds payable in two separate portions. The Federal portion is payable in semiannual installments that aggregate to \$780,107 per annum and does not bear interest. The state portion of the bonds bears interest ranging from a current amount of 2.00% to 5.00% per annum and is payable in annual installments that range from \$180,000 increasing annually to \$335,000 through August 2035. Current portion as of December 31, 2018 is \$970,107.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities (continued):**

- k. In 2007, the Solid Waste Division borrowed \$64,962,245 from the New Jersey Environmental Infrastructure Trust. The bonds are payable in two separate portions. The federal portion is payable in semiannual principal amounts of approximately \$2,850,000 per year without interest. The state portion bears interest at rates ranging from 4.0% to 5.0% per annum and is payable in annual installments ranging from \$3,268,000 to \$3,429,000 through August 2019. Current portion as of December 31, 2018 is \$6,315,148.
  
- l. In 2009, the Solid Waste Division borrowed \$23,537,398 in supplemental bond financing from the New Jersey Environmental Infrastructure Trust. The bonds are payable in two separate portions. The federal portion is payable in semi-annual principal amounts aggregating approximately \$824,500 per year without interest. The state portion bears interest at rates ranging from 3.5% to 5.0% per annum and is payable in annual installments ranging from \$830,000 to \$1,014,000 through August 2024. Amounts payable from August 2019 through August 2024 are net of a principal reduction which took effect when the Authority participated in the January 17, 2017 NJEIT refunding process. The principal reduction shall be applied to the principal payments annually starting in August 2019 and shall result in a total principal reduction of \$224,000. Current portion as of December 31, 2018 is \$1,662,482.

Bonds payable includes related unamortized premiums associated with those bonds. Bond premiums and gain on defeasance (deferred inflow of resources) are deferred and amortized over the life of the bonds using the straight-line method which approximates the effective interest method.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 9 – Long-Term Liabilities (continued):**

Annual repayments are due as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
<u>Wastewater Division:</u>			
Year Ending December 31,			
2019	\$ 22,705,831	\$ 2,596,915	\$ 25,302,746
2020	11,229,554	1,761,417	12,990,971
2021	11,461,510	1,532,292	12,993,802
2022	9,524,044	1,293,051	10,817,095
2023	9,709,513	1,106,575	10,816,088
2024-2028	38,257,654	2,581,276	40,838,930
2029-2033	10,595,421	359,913	10,955,334
2034-2035	2,220,216	29,850	2,250,066
	<u>\$ 115,703,743</u>	<u>\$ 11,261,289</u>	<u>\$ 126,965,032</u>
<u>Solid Waste Division:</u>			
Year Ending December 31,			
2019	\$ 7,977,630	\$ 393,290	\$ 8,370,920
2020	1,695,482	188,320	1,883,802
2021	1,734,482	153,480	1,887,962
2022	1,761,482	117,080	1,878,562
2023	1,800,482	79,600	1,880,082
2024	1,607,979	40,560	1,648,539
	<u>\$ 16,577,537</u>	<u>\$ 972,330</u>	<u>\$ 17,549,867</u>
<u>Total:</u>			
Year Ending December 31,			
2019	\$ 30,683,461	\$ 2,990,205	\$ 33,673,666
2020	12,925,036	1,949,737	14,874,773
2021	13,195,992	1,685,772	14,881,764
2022	11,285,526	1,410,131	12,695,657
2023	11,509,995	1,186,175	12,696,170
2024-2028	39,865,633	2,621,836	42,487,469
2029-2033	10,595,421	359,913	10,955,334
2034-2035	2,220,216	29,850	2,250,066
	<u>\$ 132,281,280</u>	<u>\$ 12,233,619</u>	<u>\$ 144,514,899</u>

On January 17, 2017, the NJEIT issued refunding Bond Series 2017A-R1 and 2017A-R2. The Authority bond issues which were refunded were the Solid Waste Division Issue of 2009A and the Wastewater Division Issues of 2009A and 2010. The Authority will save approximately \$1,213,097 in total debt service payments over the life of the bonds as a result of the refunding.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans:**

**Pension Plan** – The Authority participates in the Public Employee's Retirement System of New Jersey, which is administered by the Division of Pensions in the Department of Treasury, State of New Jersey. This multiple-employer defined benefit pension plan is funded annually based on the projected benefit method with aggregate level normal cost and frozen initial unfunded accrued liability. The plan, which covers public employees throughout the state, does not maintain separate records for each reporting unit and, accordingly, the actuarial data specific to the employees of the Authority who are members of the plan are not available. The contributions to the plan, excluding any contributions for early retirement incentive liabilities, for the years ended December 31, 2018, 2017 and 2016 were as follows:

	<b>December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
Wastewater Division	\$ 1,505,376	\$ 1,436,691	\$ 1,368,401
Solid Waste Division	265,655	253,534	241,482
	\$ 1,771,031	\$ 1,690,225	\$ 1,609,883

The contributions above were equal to the required contributions for each year.

**Deferred Compensation** – The Authority's deferred compensation program is offered to all Authority employees. The program was created in accordance with Sections 403(b) and 457 of the Internal Revenue Code. The program is offered by the Authority, through a program administrator, The Variable Annuity Life Insurance Company ("VALIC").

The Authority has adopted the provisions of the revision to Governmental Accounting Standards Board Statement No. 32, "Accounting for Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans" ("GASB 32"), for both the deferred compensation and the discretionary supplemental retirement plans mentioned below, and has complied with the provisions of the Small Business Job Protection Act of 1996 (the "Act"). The Act requires that amounts deferred under this plan are to be held for the exclusive benefit of participating employees and are not accessible by the Authority or its creditors.

**Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

Public Employee's Retirement System (PERS)

The Authority reported a liability of \$38,467,690 and \$44,502,454 at December 31, 2018 and 2017, respectively, for its proportionate share of the net pension liability. The December 31, 2018 net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation at July 1, 2017, which was rolled forward to June 30, 2018. The December 31, 2017 net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation at July 1, 2016, which was rolled forward to June 30, 2017. The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating entities, actuarially determined. At June 30, 2018, the Authority's proportion was 0.1953715800 percent, which was an increase of 0.0041967098 from its proportion measured as of June 30, 2017.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

For the years ended December 31, 2018 and 2017, the Authority recognized pension expense of \$2,749,852 and \$3,950,877, respectively. At December 31, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to PERS from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ 733,585	\$ 198,352
Changes of assumptions	6,338,838	12,299,922
Net difference between projected and actual earnings on pension plan investments	-	360,829
Changes in proportion and differences between Authority contributions and proportionate share of contributions	1,605,846	-
Authority contributions subsequent to the measurement date	971,658	-
	<u>\$ 9,649,927</u>	<u>\$ 12,859,103</u>

At December 31, 2017, the Authority reported deferred outflows of resources and deferred inflow of resources related to PERS from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflow of Resources</b>
Differences between expected and actual experience	\$ 1,047,879	\$ -
Changes of assumptions	8,965,711	8,932,841
Net difference between projected and actual earnings on pension plan investments	303,032	-
Changes in proportion and differences between Authority contributions and proportionate share of contributions	1,243,912	-
Authority contributions subsequent to the measurement date	885,516	-
	<u>\$ 12,446,050</u>	<u>\$ 8,932,841</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

\$971,658 and \$885,516 was reported as deferred outflows of resources related to pensions at December 31, 2018 and 2017, respectively, resulting from Authority contributions subsequent to the measurement date. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

<b>Twelve Months Ending December 31,</b>	
2019	\$ 798,381
2020	75,851
2021	(2,337,569)
2022	(2,084,531)
2023	(632,966)
	<u>\$ (4,180,834)</u>

*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:

Inflation rate	2.25%
Salary increases	
through 2026	1.65 - 4.15%
	based on age
Thereafter	2.65 - 5.15%
	based on age
Investment rate of return	7.00%

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.

The total pension liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of July 1, 2016, which was rolled forward to June 30, 2017. This actuarial valuation used the following actuarial assumptions:

Inflation rate	2.25%
Salary increases	
through 2026	1.65 - 4.15%
	based on age
Thereafter	2.65 - 5.15%
	based on age
Investment rate of return	7.00%

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

The actuarial assumptions used in the July 1, 2016 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.

*Mortality Rates*

Pre-retirement 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 plan actuary’s modified MP-2014 projection scale. Post-retirement 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 2012 to 2013 Projection Scale AA and using a generational approach based on the Conduent 2014 projection scale thereafter. Disability retirement rates used to value disabled retirees were based on RP-2000 Disabled Mortality Table (set back 3 years for males and set forward 1 year for females).

*Long-Term 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 expecting future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in PERS’s target asset allocation as of June 30, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Allocation</u>	<u>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 oriented 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%
	<u>100.00%</u>	

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

*Discount rate*

The discount rate used to measure the total pension liability was 5.66% as of June 30, 2018. This single blended discount rate was based on the 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 municipal 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.

The discount rate used to measure the total pension liability was 5.00% as of June 30, 2017. This single blended discount rate was based on the long-term expected rate of return on pension plan investments of 7.00%, and a municipal bond rate of 3.58% as of June 30, 2017 based on 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. 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 40% 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 2040. Therefore, the long-term expected rate of return on plan investments was applied to projected benefit payments through 2040 and the municipal bond rate was applied to projected benefit payments after that date in determining the total pension liability.

*Sensitivity of the Authority’s proportionate share of the net pension liability to changes in the discount rate*

The following presents the Authority’s proportionate share of the net pension liability as of December 31, 2018 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 percent) or 1-percentage-point higher (6.66 percent) than the current rate:

	<b>At 1% Decrease (4.66%)</b>	<b>At Current Discount Rate (5.66%)</b>	<b>At 1% Increase (6.66%)</b>
Authority's proportionate share of the net pension liability	\$ 48,368,688	\$ 38,467,690	\$ 30,161,386

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

The following presents the Authority’s proportionate share of the net pension liability as of December 31, 2017 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 (4.00 percent) or 1-percentage-point higher (6.00 percent) than the current rate:

	<b>At 1% Decrease (4.00%)</b>	<b>At Current Discount Rate (5.00%)</b>	<b>At 1% Increase (6.00%)</b>
Authority's proportionate share of the net pension liability	\$ 55,208,314	\$ 44,502,454	\$ 35,583,145

*Pension Plan Fiduciary Net Position*

Detailed information about the pension plan’s fiduciary net position is available in the separately issued financial report for the State of New Jersey Public Employee’s Retirement System.

*Additional Information*

Collective balances of the Local Group at the end of the current measurement period, June 30, 2018 are as follows:

Deferred outflows of resources	\$ 4,684,852,302
Deferred inflows of resources	\$ 7,646,736,226
Net pension liability	\$ 19,689,501,539
Authority's Proportion	0.1953715800%

Collective pension expense for the Local Group for the measurement period ended June 30, 2018 is \$1,099,708,157.

Collective balances of the Local Group at the end of the measurement period, June 30, 2017 are as follows:

Deferred outflows of resources	\$ 6,424,455,842
Deferred inflows of resources	\$ 5,700,625,981
Net pension liability	\$ 23,278,401,588
Authority's Proportion	0.1911748702%

Collective pension expense for the Local Group for the measurement period ended June 30, 2017 is \$1,694,305,613.

The average of the expected remaining service lives of all employees that are provided with pension through the pension plan (active and inactive employees) determined at July 1, 2017 (the beginning of the measurement period ended June 30, 2018) is 5.63 years. The average of the expected remaining service lives of all employees that are provided with pension through the pension plan (active and inactive employees) determined at July 1, 2016 (the beginning of the measurement period ended June 30, 2017) is 5.48 years.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

**Early Retirement Incentive (“ERI”) Liabilities** – In July 1994 and 1996, the Wastewater Division incurred early retirement incentive liabilities as a result of early retirements by several employees. These liabilities have the following terms:

*Early Retirement Incentive 1* – In July 1994, the Wastewater Division incurred a \$536,928 liability as a result of the early retirement of five employees. This liability is to be paid off over a twenty-seven year period from April 1, 1995 through April 1, 2021, with payments increasing by 3-6% annually. As of December 31, 2018 and 2017, the remaining balance on this liability is \$263,876 and \$333,951, respectively, with an interest rate of 7.5%.

*Early Retirement Incentive 2* - In July 1996, the Wastewater Division incurred a \$1,009,952 liability as a result of the early retirement of seven employees. This liability is to be paid off over a thirty-seven year period from April 1, 1997 through April 1, 2033, with payments increasing by 3-6% annually. As of December 31, 2018 and 2017, the remaining balance on this liability is \$1,530,000 and \$1,552,359, respectively, with an interest rate of 7.5%.

During the years ended December 31, 2018 and 2017, the following changes occurred in early retirement incentive liabilities:

	January 1, 2018	Reductions	December 31, 2018	Due Within One Year
ERI 1	\$ 333,951	\$ 70,075	\$ 263,876	\$ 78,505
ERI 2	1,552,359	22,359	1,530,000	28,475
	<u>\$ 1,886,310</u>	<u>\$ 92,434</u>	<u>\$ 1,793,876</u>	<u>\$ 106,980</u>

  

	January 1, 2017	Reductions	December 31, 2017	Due Within One Year
ERI 1	\$ 396,292	\$ 62,341	\$ 333,951	\$ 70,075
ERI 2	1,569,167	16,808	1,552,359	16,808
	<u>\$ 1,965,459</u>	<u>\$ 79,149</u>	<u>\$ 1,886,310</u>	<u>\$ 86,883</u>

**Other Post-Employment Benefits (“OPEB”) – Retiree Welfare Plan** - The Authority maintains a Retiree Welfare Plan which provides post-employment medical, prescription drug coverage, vision and dental care benefits to eligible retirees as described under the plan. The Authority sponsors and participates in a single-employer defined benefit OPEB plan. Medical benefits and prescription drug coverage are provided through plans offered by the Middlesex County Joint Health Insurance Fund (“MCJHIF”).

*Employees covered by benefit terms*

At December 31, 2018, there are ninety seven retirees and one hundred ninety eight active employees covered under the plan.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

*Net OPEB Liability*

The net OPEB liability is \$150,163,130 and \$168,496,147 at December 31, 2018 and 2017, respectively. The net OPEB liability at December 31, 2018 includes liabilities for retirees and actives of \$62,019,437 and \$88,143,693, respectively.

*Actuarial assumptions and other inputs*

The net OPEB liability of \$150,163,130 was reported in the December 31, 2018 actuarial valuation prepared by the Authority's actuary. The major actuarial assumptions, among others, were the use of a 4.10% discount rate and a computed Health Care Trend Rate ("HCTR") which ranged from 4.50% to 8.00% depending on the type of coverage and salary increases of 3.00% per year. Tables were used for mortality, morbidity and disability variables in computing the HCTR.

*Discount rate*

The discount rate for unfunded plans should be the single rate that reflects a yield or index rate for 20-year, tax exempt general obligations municipal bonds with an average rating of AA/AAa or higher (or an equivalent quality on another scale). The plan is currently unfunded. The actuary used the "20-Bond GO Index" to establish a discount rate of 3.50% at December 31, 2017 and 4.10% at December 31, 2018. The inflation rate was 2.50% per year.

*Mortality rates*

Pre-retirement mortality rates were based on the RP-2014 Headcount-Weighted Healthy Employee Male/Female Mortality Projected with Scale MP-2018. Post-retirement mortality rates were based on the RP-2014 Headcount-Weighted Healthy Annuitant Male/Female Mortality Projected with Scale MP-2018. Disabled mortality rates were based on the RP-2014 Headcount-Weighted Disabled Retiree Male/Female Mortality Projected with Scale MP-2018. The Mortality projection scales at January 1, 2017 and at December 31, 2017 were the MP 2016 and MP-2017, respectively.

*Actuarial cost method*

The actuarial cost method used to determine the plan's cost is the Entry Age Normal Cost Method. Under the entry age normal cost method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The Service Cost is the portion of this actuarial present value allocated to a valuation year. The Total Pension Liability is the portion of this actuarial present value not provided for at the valuation date by the actuarial present value of future service costs.

*Asset valuation method*

The plan is currently unfunded.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

Changes in the net OPEB liability are as follows:

	<u>Year Ended December 31,</u>	
	<u>2018</u>	<u>2017</u>
Beginning Net OPEB Liability, January 1,	\$ 168,496,147	\$ 155,058,140
Changes for the year:		
Service cost	4,858,296	4,412,459
Interest cost	6,021,833	5,939,395
Changes of assumptions	(20,926,574)	5,259,623
Actuarial demographic (gain) or loss	(5,682,385)	-
Gross benefit payments	<u>(2,604,186)</u>	<u>(2,173,470)</u>
Net changes	<u>(18,333,016)</u>	<u>13,438,007</u>
Ending Net OPEB Liability, December 31,	<u>\$ 150,163,131</u>	<u>\$ 168,496,147</u>

Changes of assumptions and other inputs reflect a change in the discount rate from 3.75% in 2016 to 3.50% in 2017 and from 3.50% in 2017 to 4.10% in 2018.

For the years ended December 31, 2018 and 2017 the Authority recognized OPEB expense of (\$2,176,999) and \$1,396,550, respectively.

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

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual demographic experience		\$ 4,735,321
Changes of assumptions	<u>\$ 3,506,415</u>	<u>17,438,812</u>
	<u>\$ 3,506,415</u>	<u>\$ 22,174,133</u>

At December 31, 2017, the Authority reported deferred outflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Changes of assumptions	<u>\$ 4,383,019</u>	<u>\$ -</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 10 – Pension and Retirement Plans (continued):**

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

<b>Twelve Months Ending December 31,</b>	
2019	\$ (3,558,222)
2020	(3,558,222)
2021	(3,558,222)
2022	(3,558,222)
2023	(4,434,830)
	<u><u>\$ (18,667,718)</u></u>

*Sensitivity of the net OPEB liability to changes in the discount rate.*

The following presents the net OPEB liability of the Authority, as well as what the Authority’s net OPEB liability would be if it were calculated using a discount rate that is 1-percentage -point lower (3.10%) or 1-percentage-point higher (4.10%) than the current discount rate:

	<b>At 1% Decrease (3.10%)</b>	<b>At Current Discount Rate (4.10%)</b>	<b>At 1% Increase (5.10%)</b>
Net OPEB liability	\$ 181,619,299	\$ 150,163,130	\$ 125,714,817

*Sensitivity of the net OPEB liability to changes in the healthcare trend rates.*

The following presents the net OPEB liability of the Authority, as well as what the Authority’s net OPEB liability would be if it were calculated using healthcare trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	<b>At 1% Decrease</b>	<b>At Current Healthcare Trend Rate</b>	<b>At 1% Increase</b>
Net OPEB liability	\$ 124,110,604	\$ 150,163,130	\$ 184,402,997

***Discretionary Supplemental Retirement Plan*** – The Authority’s discretionary supplemental retirement plan is offered to all Authority permanent employees who have accrued the number of sick leave days, as determined by the Authority, provided that such employee is credited with at least 1,000 hours of service during the plan period. The program was created in accordance with Sections 401(a) and 403(b) of the Internal Revenue Code. The program is offered by the Authority through VALIC, which acts as its agent.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 11 – Solid Waste Division Service Revenues:**

Service revenues are generated from solid waste disposal activities at the Middlesex County Landfill site. Pre-approved municipal and private haulers that collect Middlesex County solid waste are the only haulers authorized to dispose of waste at the Middlesex County Landfill site. Private haulers are required to pay their tipping fees in advance and the Solid Waste Division records these payments as unearned service revenue until such time as it receives waste from the haulers.

Solid waste is classified into three categories. Regular and contract waste consists of conventional residential, commercial or industrial waste. Special waste requires special testing or handling. Mixed waste which consists of transfer station residual waste, and waste from construction and demolition materials, is classified as I.D. 13.

The landfill rate structure per ton as adopted in the Solid Waste Division's original 2018 budget is as follows:

	<u>Contract (Tier I)</u>	<u>Contract (Tier II)</u>	<u>Regular</u>	<u>C&amp;D</u>	<u>Special</u>
Rates to cover operating costs, capital costs and reserves	\$ 51.53	\$ 54.53	\$ 58.03	\$ 68.78	\$ 85.78
Mandated taxes:					
DEP closure tax	1.00	1.00	1.00	1.00	1.00
State closure and contingency tax	0.50	0.50	0.50	0.50	0.50
State solid waste recycling tax	3.00	3.00	3.00	3.00	3.00
County tax	0.82	0.82	0.82	0.82	0.82
Host community tax	5.30	5.30	5.30	5.30	5.30
Adjoining host community tax	3.60	3.60	3.60	3.60	3.60
Total mandated taxes	<u>14.22</u>	<u>14.22</u>	<u>14.22</u>	<u>14.22</u>	<u>14.22</u>
Total 2018 rate per ton	<u>\$ 65.75</u>	<u>\$ 68.75</u>	<u>\$ 72.25</u>	<u>\$ 83.00</u>	<u>\$ 100.00</u>
2017 rates per ton	<u>\$ 64.75</u>	<u>\$ 67.75</u>	<u>\$ 71.25</u>	<u>\$ 79.00</u>	<u>\$ 100.00</u>

**Note 12 – Inter-Division Transactions:**

**Management Fee** – The operating revenues for the Wastewater Division include management fees from the Solid Waste Division which, for the years ended December 31, 2018, and 2017, amounted to \$1,660,020 and \$1,635,000, respectively.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 12 – Inter-Division Transactions (continued):**

*Note Payable* – The Solid Waste Division advanced the Wastewater Division \$15,100,000 in the form of a note which bears interest at the rate of 2.75% per annum. The note calls for principal repayments at the discretion of the Board of Commissioners and annual interest payments. There is no stated maturity date for the note. The balance of the note was \$11,953,000 and \$12,332,000 at December 31, 2018 and 2017, respectively.

*Due to Solid Waste Division (restricted)* – The Solid Waste Division loaned the Wastewater Division \$5,000,000 in August 2016. The terms of this loan require the Wastewater Division to pay any interest earned on the account where the funds are held to the Solid Waste Division. There is no stated maturity date for the note. The remaining balance due to the Solid Waste Division under this note was \$3,598,860 and \$4,314,890 at December 31, 2018 and 2017, respectively. Interest expense for the year ended December 31, 2018 and 2017 was \$40,668 and \$13,630, respectively.

The following is the activity and amounts loaned between divisions during the years ended December 31, 2018 and 2017:

	<b>January 1, 2018</b>	<b>Advances</b>	<b>Payments</b>	<b>December 31, 2018</b>
Notes Payable	\$ 16,646,890	\$ -	\$ 1,095,030	\$ 15,551,860
	<b>January 1, 2017</b>	<b>Advances</b>	<b>Payments</b>	<b>December 31, 2017</b>
Notes Payable	\$ 17,332,000	\$ -	\$ 685,110	\$ 16,646,890

Interest expense incurred on amounts due to the Solid Waste Division for the years ended December 31, 2018 and 2017 was \$339,130 and \$352,730, respectively. At December 31, 2018 and 2017, the accumulated related party interest payable was \$143,769 and \$384,971, respectively.

**Note 13 – Commitments and Contingencies:**

**Wastewater Division:**

*Litigation* – The Authority is a defendant in a number of legal proceedings. If these cases are decided against the Authority, the Authority will pay such amounts from future user fees. Except as noted in the next paragraph, the Authority expects that such amounts, if any, would not have a material adverse effect on the Authority's financial statements.

*Long-Term Contracts* – The Authority has entered into several contracts for construction of facilities, some of which extend beyond December 31, 2018. Funding for these projects has been substantially secured through the New Jersey Environmental Infrastructure Trust and amounts held by the Trust for contracts in progress is \$990,269 at December 31, 2018. During 2015, the Authority received approval from the Federal Emergency Management Agency (FEMA) on two project worksheets totaling approximately \$89.6 million for the Sayreville Pump Station Permanent Repairs and Edison Pumping Station. As a result, the Authority entered into five vendor contracts for amounts not to exceed \$108.4 million. The agreement with FEMA allows the Authority to be reimbursed for 90 percent of eligible costs incurred related to these projects.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 13 – Commitments and Contingencies (continued):**

**Wastewater Division (continued):**

*Environmental Regulations* – The Authority operates its wastewater facility subject to extensive Federal and State environmental regulations. Accordingly, the Authority is subject to the administrative directives, rules and regulations of the Federal and State regulatory agencies. Such administrative directives, rules and regulations are subject to change by acts of the Federal and State legislatures. Such changes may occur with little or no notice or inadequate funding to pay for the related costs, including the additional administrative burden, to comply with the change. The Authority's management is not aware of any violations or administrative changes that may have a material effect on the financial statements.

**Solid Waste Division:**

*Acquisition of Property Interests in Edgeboro II* – Pursuant to the County Solid Waste Management Plan, the Authority has undertaken the development and operation of an integrated solid waste management system, the principal long-term component of which is currently Edgeboro I. On May 10, 1991, the DEP issued a solid waste facility permit for Edgeboro II for five periods, the maximum allowable period under applicable law. As permitted, Edgeboro II was projected by the Authority to meet the County's landfill requirements at least through the period 2016. The Authority received a five year permit extension in September 2017.

In May 1994, after a series of condemnation hearings and negotiations, the Authority acquired an easement on certain sections "over the top" of the closed Edgeboro I and approximately 80 acres of vacant property for other public purposes.

*Host Community Benefit Agreements –*

*Township of East Brunswick:* Under the Host Community Benefit Statute, the Township of East Brunswick is entitled to host benefits in consideration for the location of an operating landfill within its borders. The benefits provided to the Township of East Brunswick, under the agreement currently in effect, are based on solid waste accepted at the landfill, at the rate of \$5.30 per ton. The required annual payment can vary from a minimum of \$3,090,000 to a maximum of \$3,296,000.

There is also an annual basic payment of \$910,000, increased by the percentage increase on tipping rate (excluding taxes) using 1988 as the base year.

*Boroughs of Sayreville and South River and the Township of Edison:* Under the adjoining Host Community Benefit Statute, the Boroughs of Sayreville and South River and the Township of Edison are entitled to host benefits in consideration of these communities being located in close proximity to the landfill. The benefits under the agreements which are expensed as incurred are based on the following per ton rates applied to the previous period's total solid waste accepted for disposal in the landfill:

- For the Borough of Sayreville: \$1.20 per ton for the years 2014 - 2023.
- For the Borough of South River: \$1.50 per ton for the years 2014 - 2023.
- For the Township of Edison: \$0.90 per ton in 2014 - 2023.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 13 – Commitments and Contingencies (continued):**

**Solid Waste Division (continued):**

***MCIA Agreement*** – On January 1, 2015, the Middlesex County Utilities Authority renewed a five-year agreement with the Middlesex County Improvement Authority (“MCIA”) allowing operation of an Interim Bulky Waste Recycling Program by the Improvement Authority. Under the renegotiated agreement, the Authority subsidizes the County of Middlesex Recycling Program in the amount of \$2,750,000 annually.

***Closure and Post-Closure Care Cost*** – In 1991, the Department of Environmental Protection ("DEP") and the Board of Public Utilities issued an order requiring Edgeboro Disposal Inc. ("EDI") to close the Edgeboro I landfill. The Solid Waste Division and EDI share responsibility for the closure and post-closure work at Edgeboro I based on an agreement executed on October 10, 1991. Under the 1991 master plan developed for the facility permitting a comprehensive environmental management of the landfill, the closure and post-closure liabilities of Edgeboro I shall be funded principally by escrowed funds established by the owners of Edgeboro I under the terms of the rates (tipping fees) approved by the then Board of Public Utilities.

Federal and State laws and regulations require the Authority to place a final cover on each utilized area of the landfill site when the respective area stops accepting waste and to perform certain maintenance and monitoring functions at each site for thirty years after closure. Although closure and post-closure care costs will be paid only near or after the date that these landfill areas stop accepting waste, the Authority reports a portion of these closure and post-closure care costs as an operating expense in each period based on landfill capacity used each year. The \$66.1 million reported as landfill closure and postclosure care liabilities at December 31, 2018 represents the cumulative amount reported to date, less withdrawals to date of \$5.58 million, based on the use of the estimated capacity of the landfill. Total costs are estimated to be approximately \$99 million.

In September 2017, the Authority obtained approval of a permit for expansion that would allow for the operating of the landfill through 2030.

The Authority has expensed \$1,276,686 and \$1,080,127 for closure and post-closure care costs for the years ended December 31, 2018 and 2017, respectively. These amounts are based on what it would cost to perform all closure and post-closure care for the Authority’s share of closure costs. Actual costs may be higher due to inflation, changes in technology, or changes in regulations.

The Authority also provides funding for closure and post-closure liabilities to meet regulatory requirements from tipping fee revenues. At December 31, 2018, cash, cash equivalents and investments with a fair value of \$63,552,758 are held for these purposes. These are reported as restricted assets on the statement of net position. The Authority expects that future inflation costs will be paid from interest earnings on these annual contributions; however, if interest earnings are inadequate or additional post-closure care requirements are determined, due to changes in technology or applicable laws or regulations, for example, these costs may need to be covered by charges to future landfill users or from future tax revenues.

***Litigation*** – The Authority is a defendant in a number of legal proceedings. If these cases are decided against the Authority, the Authority will pay such amounts from future user fees. The Authority expects such amounts, if any, will not have a material adverse effect on the Authority’s financial statements.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 13 – Commitments and Contingencies (continued):**

**Solid Waste Division (continued):**

*Environmental Regulations* – The Authority operates its landfill, subject to extensive federal and state environmental regulations. Accordingly, the Authority is subject to the administrative directives, rule and regulations of the federal and state regulatory agencies. Such administrative directives, rules and regulations are subject to change by acts of the federal and state legislatures. Such changes may occur with little or no notice or inadequate funding to pay for the related costs, including the additional administrative burden, to comply with the change. The Authority’s management is not aware of any violations or administrative changes that may have a material effect on the financial statements.

**Note 14 – Natural Disaster:**

On October 29, 2012, the New Jersey coast suffered significant damage when Hurricane Sandy struck the area. The Middlesex County Utilities Authority sustained significant damage to their wastewater facilities, including pump stations in South Amboy, Edison and Sayreville due to a storm surge and the subsequent flooding.

No insurance proceeds are expected to be recovered due to the pump stations being in an excluded flood zone, however, the Authority is working with FEMA with the expectation of recouping 90% of the sustained losses of the rebuild and repair of the facilities to bring the wastewater facility back to pre-disaster conditions.

Emergency restoration costs are expected to aggregate to \$32,000,000 and the Authority has incurred approximately \$30,309,000 since the date of the hurricane through December 31, 2018. Total replacement costs are estimated at \$125,000,000 and the Authority has incurred approximately \$66,550,748 since the date of the hurricane through December 31, 2018.

As costs are accumulated and bills paid, Project Worksheets are being submitted to FEMA for future reimbursement. Management believes that future amounts to be received from FEMA will be in excess of the remaining estimated unexpended emergency restoration costs.

**Note 15 – Restricted Net Position:**

In accordance with certain bond agreements, the Authority is required to maintain minimum balances in reserve accounts to be restricted for future debt service related to its wastewater operations. These balances are calculated based on the highest year of principal and interest payments remaining as of the end of the year. At December 31, 2018 and 2017, the amount required to be restricted for future debt service totaled \$12,287,938.

**Note 16 – Risk Management:**

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority self-insures for a portion of the losses that could arise during the normal course of operations, such as losses from general liability, collision losses and workers’ compensation claims. The Authority’s policy is to set up funded reserves for claims that may arise and to purchase commercial insurance to cover the liability for claims in excess of self-insured amounts. There have been no significant reductions in insurance coverage from the prior year and no settlements have exceeded insurance coverage over the past three years.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEARS ENDED DECEMBER 31, 2018 AND 2017**

**NOTES TO BASIC FINANCIAL STATEMENTS**

**Note 16 – Risk Management (continued):**

*Self-Insurance – Workers’ Compensation*

The Authority estimates that the liabilities for workers’ compensation claims are sufficiently covered by the reserves at December 31, 2018 and 2017. During the years ended December 31, 2018 and 2017, the following changes occurred in the workers’ compensation claims reserve:

	<b>January 1, 2018</b>	<b>Additions</b>	<b>Reductions</b>	<b>December 31, 2018</b>
Wastewater Division	\$ 186,616	\$ 478,354	\$ 182,800	\$ 482,170
Solid Waste Division	283,354	178,033	186,313	275,074
	\$ 469,970	\$ 656,387	\$ 369,113	\$ 757,244
	<b>January 1, 2017</b>	<b>Additions</b>	<b>Reductions</b>	<b>December 31, 2017</b>
Wastewater Division	\$ 504,886	\$ 300,961	\$ 619,231	\$ 186,616
Solid Waste Division	424,912	150,875	292,433	283,354
	\$ 929,798	\$ 451,836	\$ 911,664	\$ 469,970

**Note 17 – Other Liability:**

During 2016, the Authority was notified by its electric provider that certain meters were not reading correctly at the Central Treatment Plant and Sayreville Pump Station related to its wastewater operations. As a result, the Authority’s electric bills had been understated for several years. The electric provider only had the capability to go back two years to identify the billing differences, which resulted in an under-billing of \$4,185,230 for the period of July 2014 through July 2016. The Authority and the electric provider agreed that the balance will be repaid over a twenty-four month period beginning in April 2017 with no interest charged. At December 31, 2018 and 2017, this liability is recorded on the statement of net position as an “Other liability” in the amount of \$523,153 and \$2,615,768, respectively.

Middlesex County Utilities Authority  
Required Supplementary Information  
Schedule of Changes in Net OPEB Liability

Last Ten Fiscal Years\*

	2018	2017
Balance, Beginning of Year	\$ 168,496,147	\$ 155,058,140
Changes for the year:		
Service cost	4,858,296	4,412,459
Interest cost	6,021,833	5,939,395
Benefit payments	(2,604,186)	(2,173,470)
Actuarial assumption changes	(20,926,574)	5,259,623
Actuarial demographic (gain) or loss	(5,682,385)	-
Net changes	(18,333,016)	13,438,007
Balance, End of Year	\$ 150,163,131	\$ 168,496,147
Total OPEB Liability	\$ 150,163,131	\$ 168,496,147
OPEB plan's fiduciary net position	-	-
Net OPEB Liability	\$ 150,163,131	\$ 168,496,147
Plan fiduciary net position as a percentage of the net OPEB liability -	0.00%	0.00%
Covered employee payroll	\$ 14,323,213	\$ 16,077,977
Net OPEB liability as a percentage of covered employee payroll	1048.39%	1047.99%

\* This schedule is presented to illustrate the requirement to show information for ten years. However, until a full ten-year trend is compiled, governments should present information for those years for which information is available.

Notes to the Required Supplementary Information

Benefit Changes

There were none.

Changes of Assumptions

The discount rate changed from the measurement date of December 31, 2016 of 3.75% to 3.50% as of the measurement date of December 31, 2017.

The discount rate changed from the measurement date of December 31, 2017 of 3.50% to 4.10% as of the measurement date of December 31, 2018.

Middlesex County Utilities Authority  
 Required Supplementary Information  
 Schedule of Authority OPEB Contributions

Last Ten Fiscal Years

	Year Ended December 31,									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Contractually required contribution	N/A	N/A	N/A	N/A	N/A	\$ 1,338,354	1,676,985	1,948,730	\$ 2,173,470	\$ 2,604,186
Contributions in relation to the contractually required contribution	N/A	N/A	N/A	N/A	N/A	(1,338,354)	(1,676,985)	(1,948,730)	(2,173,470)	(2,604,186)
Contribution deficiency (excess)						<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

N/A - information prior to January 1, 2014 was not available.

**Middlesex County Utilities Authority**  
**Schedule of the Authority's Proportionate Share of the Net Pension Liability and Notes to Required Supplementary Information**  
**Public Employee's Retirement System**  
**Required Supplementary Information**

**Last Ten Fiscal Years**

	Years Ended December 31,									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Authority's proportion of the net pension liability (asset) - Local Group	0.1953715800%	0.1911748702%	0.1902580115%	0.1872540940%	0.1838347300%	N/A	N/A	N/A	N/A	N/A
Authority's proportionate share of the net pension liability (asset)	\$ 38,467,690	\$ 44,502,454	\$ 56,348,966	\$ 42,034,792	\$ 34,418,889	N/A	N/A	N/A	N/A	N/A
Authority's covered-employee payroll	\$ 13,590,915	\$ 13,047,089	\$ 12,925,708	\$ 12,863,805	\$ 12,459,125	\$ 12,133,871	\$ 11,759,510	\$ 11,854,935	\$ 11,644,965	\$ 10,974,397
Authority's proportionate share of the net pension liability (asset) as a percentage of its covered-employee payroll	283.04%	341.09%	435.94%	326.77%	276.25%	N/A	N/A	N/A	N/A	N/A
Plan fiduciary net position as a percentage of the total pension liability - Local Group	53.60%	48.10%	40.14%	47.93%	48.72%	N/A	N/A	N/A	N/A	N/A

\* The amounts presented for each fiscal year were determined as of the previous fiscal year-end.

N/A - Information not available.

Notes to the Required Supplementary Information

Benefit Changes

There were none.

Changes of Assumptions

The discount rate changed from the measurement date of June 30, 2016 of 3.98% to 5.00% as of the measurement date of June 30, 2017.

The discount rate changed from the measurement date of June 30, 2017 of 5.00% to 5.66% as of the measurement date of June 30, 2018.

**Middlesex County Utilities Authority  
Schedule of Authority Contributions  
Public Employee's Retirement System  
Required Supplementary Information**

**Last Ten Fiscal Years**

	2018	2017	2016	2015	Years Ended December 31,		2012	2011	2010	2009
					2014	2013				
Contractually required contribution	\$ 1,943,316	\$ 1,771,031	\$ 1,690,225	\$ 1,609,883	\$ 1,515,507	\$ 1,345,088	\$ 1,359,959	\$ 1,376,798	\$ 1,341,124	\$ 1,004,686
Contributions in relation to the contractually required contribution	(1,943,316)	(1,771,031)	(1,690,225)	(1,609,883)	(1,515,507)	(1,345,088)	(1,359,959)	(1,376,798)	(1,341,124)	(1,004,686)
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>				
Authority's covered-employee payroll	\$ 14,039,389	\$ 13,590,915	\$ 13,047,089	\$ 12,925,708	\$ 12,863,805	\$ 12,459,125	\$ 12,133,871	\$ 11,759,510	\$ 11,854,935	\$ 11,644,965
Contributions as a percentage of covered-employee payroll	13.84%	13.03%	12.95%	12.45%	11.78%	10.80%	11.21%	11.71%	11.31%	8.63%

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION  
DECEMBER 31, 2018

	Cash and Cash Equivalents	Account	Investments				Total Cash, Cash Equivalents and Investments
			Purchase Date	Maturity Date	Fair Value	Cost Basis	
<b>Revenue Fund - Unrestricted</b>							
Cash accounts (1977)	\$ 9,611,293						\$ 9,611,293
<b>Other Accounts - Restricted</b>							
Unemployment claims reserve	120,365						120,365
General liability insurance reserve	54,651	Certificates of Deposit	8/22/2018	8/22/2020	\$ 2,200,000	\$ 2,200,000	2,254,651
Collision insurance reserve	292,467						292,467
Worker's compensation insurance reserve	482,170						482,170
Future plant, reconstr. or replacement reserve	3,110,330						3,110,330
Allied retainage	55,080						55,080
Renewal and replacement (1985)	20						20
General fund (1985)	24						24
Tru-Val retainage	2,188						2,188
LBSM Construction Fund (1985)	304						304
Construction fund 1991 issue	109	Certificates of Deposit	Various	4/19/2019	13,047,000	13,047,000	13,047,109
Construction fund (2006)	843						843
Bond service (1993A)	437						437
Bond reserve (2005A)	848	Certificates of Deposit	9/17/2018	3/15/2019	3,343,000	3,343,000	3,343,848
Solid Waste Division loan reserve	71,290						71,290
WWD FSA Escrow	12,686						12,686
Bond reserve (2007)	989	Certificates of Deposit	10/16/2018	4/11/2019	74,000	74,000	74,989
		Certificates of Deposit	11/2/2018	5/2/2019	880,000	880,000	880,000
		U.S. Treasury Bills	10/11/2018	10/10/2019	5,850,337	5,850,337	5,850,337
Construction fund (2007)	59	Certificates of Deposit	9/27/2018	3/27/2019	1,000	1,000	1,059
Kenny Construction retainage	102,815						102,815
CPV Escrow	136,444						136,444
Northeast Remsco Retainage	468						468
Bond reserve (2008)	354	Certificates of Deposit	10/16/2018	4/11/2019	442,000	442,000	442,354
		Certificates of Deposit	11/2/2018	5/2/2019	100,000	100,000	100,000
		U.S. Treasury Bills	10/11/2018	10/10/2019	3,900,225	3,900,225	3,900,225
SpectraServ escrow	3,656,584						3,656,584
Total restricted accounts	8,101,525				29,837,562	29,837,562	37,939,087
Total - combined	\$ 17,712,818				\$ 29,837,562	\$ 29,837,562	\$ 47,550,380

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
UNRESTRICTED CASH AND CASH EQUIVALENTS -  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

<b>Sources</b>	<b>Operating Fund</b>
Prior year deficiencies	\$ 2,533,959
2018 annual charges	84,901,185
Septage treatment/Hauled waste fees	384,560
Service fees, plan approvals, etc.	3,550
Industrial pretreatment permit fees	24,400
Interest on investments	81,681
Groundwater discharge fees	1,053,220
Expense reimbursements	1,221,724
Management fees	1,660,020
Lab and sampling fees	48,978
Sale of synthetic soil	419,758
PSE&G rebates	95,967
Sale of plans and specifications	9,650
Penalty assessments	21,000
PSE&G REC credits	1,019,023
Grid sales	64,484
Sayreville land sale	12,000
Miscellaneous income	19,601
Effluent reuse - CPV	880,335
Sale of oxygen - Praxair	1,009,395
Sale of nitrogen - Praxair	1,338,532
Sale of water - Praxair	32,362
Total sources	96,835,384
<b>Uses</b>	
Budget expenses and accounts payable	113,322,955
Total uses	113,322,955
<b>Transfers (to) from Restricted Funds:</b>	
Total debt service funds (net)	(19,928,484)
Interest on investments	94,038
Transfers from Restricted funds	35,082,955
Transfers (to) from Restricted Funds	15,248,509
Decrease for year	(1,239,062)
Balance, beginning of year	10,850,355
Balance, end of year	\$ 9,611,293
Balance Comprised of	
Cash	\$ 5,987,293
Cash equivalents	3,624,000
	\$ 9,611,293

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
UNRESTRICTED CASH AND CASH EQUIVALENTS -  
SOLID WASTE DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

<b>Sources</b>	<b>Operating Fund</b>
Tipping fees	\$ 38,140,156
Interest income	140,265
Soil program income	6,008,187
Miscellaneous receipts	18,355
Enrollment fees	13,010
Escrow deposits	98,191
Expense reimbursement	116,186
Service fee income	1,121,757
Transfers from reserves	3,339,348
Rebate income	1,500,000
Total sources	50,495,455
<b>Uses</b>	
Vouchers paid	33,040,427
Payments made from reserve accounts	478,786
Transfers to debt service, net	8,542,300
Total uses	42,061,513
Increase for year	8,433,942
Balance, beginning of year	12,571,546
Balance, end of year	\$ 21,005,488

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	<b>2009 NJEIT Debt Service</b>	<b>LBSM Construction Fund 1985 Issue</b>	<b>Renewal and Replacement 1985 Issue</b>	<b>General Fund 1985 Issue</b>
<b>Sources</b>				
Interest income	\$ -	\$ -	\$ -	\$ -
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	1,237,246	-	-	-
Budget appropriation	-	-	-	-
<b>Total sources</b>	<b>1,237,246</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Uses</b>				
Bond principal paid	944,866	-	-	-
Bond interest paid	263,940	-	-	-
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	28,440	-	-	-
Transfers - unrestricted funds	-	-	-	-
<b>Total uses</b>	<b>1,237,246</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Increase (decrease)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Balance, beginning of year</b>	<b>-</b>	<b>304</b>	<b>20</b>	<b>24</b>
<b>Balance, end of year</b>	<b>\$ -</b>	<b>\$ 304</b>	<b>\$ 20</b>	<b>\$ 24</b>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ -	\$ 304	\$ 20	\$ 24
Investments:				
Certificates of deposit	-	-	-	-
Treasury bills	-	-	-	-
	<b>\$ -</b>	<b>\$ 304</b>	<b>\$ 20</b>	<b>\$ 24</b>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	1991 Construction Fund	2006 Construction Fund	Solid Waste Division Loan Reserve	Tru-Val Retainage
<b>Sources</b>				
Interest income	\$ 84,989	\$ -	\$ 3,853	\$ 21
Miscellaneous income	-	-	-	-
Expense reimbursement	50,471,581	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	-	-	-
Budget appropriation	-	-	1,000,000	-
Total sources	<u>50,556,570</u>	<u>-</u>	<u>1,003,853</u>	<u>21</u>
<b>Uses</b>				
Bond principal paid	-	-	379,000	-
Bond interest paid	-	-	621,000	-
Vouchers paid	16,873,530	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	-	-	-	-
Transfers - unrestricted funds	34,900,000	-	-	-
Total uses	<u>51,773,530</u>	<u>-</u>	<u>1,000,000</u>	<u>-</u>
<b>Increase (decrease)</b>	(1,216,960)	-	3,853	21
<b>Balance, beginning of year</b>	<u>14,264,069</u>	<u>843</u>	<u>67,437</u>	<u>2,167</u>
<b>Balance, end of year</b>	<u>\$ 13,047,109</u>	<u>\$ 843</u>	<u>\$ 71,290</u>	<u>\$ 2,188</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 109	\$ 843	\$ 71,290	\$ 2,188
Investments:				
Certificates of deposit	13,047,000	-	-	-
Treasury bills	-	-	-	-
	<u>\$ 13,047,109</u>	<u>\$ 843</u>	<u>\$ 71,290</u>	<u>\$ 2,188</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	Allied Retainage	Bond Service 1993A	Metra Retainage	2010 Debt Service
<b>Sources</b>				
Interest income	\$ 517	\$ -	\$ -	\$ -
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	-	-	460,844
Budget appropriation	-	-	-	-
Total sources	<u>517</u>	<u>-</u>	<u>-</u>	<u>460,844</u>
<b>Uses</b>				
Bond principal paid	-	-	-	366,882
Bond interest paid	-	-	-	84,828
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	-	-	-	9,134
Transfers - unrestricted funds	-	-	154	-
Total uses	<u>-</u>	<u>-</u>	<u>154</u>	<u>460,844</u>
<b>Increase (decrease)</b>	517	-	(154)	-
<b>Balance, beginning of year</b>	<u>54,563</u>	<u>437</u>	<u>154</u>	<u>-</u>
<b>Balance, end of year</b>	<u>\$ 55,080</u>	<u>\$ 437</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 55,080	\$ 437	\$ -	\$ -
Investments:				
Certificates of deposit	-	-	-	-
Treasury bills	-	-	-	-
	<u>\$ 55,080</u>	<u>\$ 437</u>	<u>\$ -</u>	<u>\$ -</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	<b>Bond Service 2001 Issue</b>	<b>Collision Insurance Reserve</b>	<b>Unemploy. Claims Reserve</b>	<b>Worker's Compensation Insurance Reserve</b>
<b>Sources</b>				
Interest income	\$ -	\$ 2,745	\$ 1,130	\$ 4,687
Miscellaneous income	-	-	-	123,667
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	2,193,746	-	-	-
Budget appropriation	-	-	-	350,000
Total sources	<u>2,193,746</u>	<u>2,745</u>	<u>1,130</u>	<u>478,354</u>
<b>Uses</b>				
Bond principal paid	1,951,152	-	-	-
Bond interest paid	193,979	-	-	-
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	48,615	-	-	-
Transfers - unrestricted funds	-	-	-	182,800
Total uses	<u>2,193,746</u>	<u>-</u>	<u>-</u>	<u>182,800</u>
<b>Increase (decrease)</b>	-	2,745	1,130	295,554
<b>Balance, beginning of year</b>	<u>-</u>	<u>289,722</u>	<u>119,235</u>	<u>186,616</u>
<b>Balance, end of year</b>	<u>\$ -</u>	<u>\$ 292,467</u>	<u>\$ 120,365</u>	<u>\$ 482,170</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ -	\$ 292,467	\$ 120,365	\$ 482,170
Investments:				
Certificates of deposit	-	-	-	-
Treasury bills	-	-	-	-
	<u>\$ -</u>	<u>\$ 292,467</u>	<u>\$ 120,365</u>	<u>\$ 482,170</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	<b>General Liability Insurance Reserve</b>	<b>Future Reconstruct. Replacement Reserve</b>	<b>2007 Bond Reserve</b>	<b>Bond Service 2005 Issue</b>
<b>Sources</b>				
Interest income	\$ 11,095	\$ 26,136	\$ 79,789	\$ -
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	-	-	878,220
Budget appropriation	-	1,000,000	-	-
<b>Total sources</b>	<b>11,095</b>	<b>1,026,136</b>	<b>79,789</b>	<b>878,220</b>
<b>Uses</b>				
Bond principal paid	-	-	-	724,039
Bond interest paid	-	-	-	132,670
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	-	-	-	21,511
Transfers - unrestricted funds	-	-	79,789	-
<b>Total uses</b>	<b>-</b>	<b>-</b>	<b>79,789</b>	<b>878,220</b>
<b>Increase (decrease)</b>	<b>11,095</b>	<b>1,026,136</b>	<b>-</b>	<b>-</b>
<b>Balance, beginning of year</b>	<b>2,243,556</b>	<b>2,084,194</b>	<b>6,805,326</b>	<b>-</b>
<b>Balance, end of year</b>	<b>\$ 2,254,651</b>	<b>\$ 3,110,330</b>	<b>\$ 6,805,326</b>	<b>\$ -</b>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 54,651	\$ 3,110,330	\$ 989	\$ -
Investments:				
Certificates of deposit	2,200,000	-	954,000	-
Treasury bills	-	-	5,850,337	-
	<b>\$ 2,254,651</b>	<b>\$ 3,110,330</b>	<b>\$ 6,805,326</b>	<b>\$ -</b>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	<b>Bond Reserve 2005 Issue</b>	<b>2006 NJFIT Bond Service</b>	<b>2008 Bond Reserve</b>	<b>CPV Escrow</b>
<b>Sources</b>				
Interest income	\$ 11,998	\$ -	\$ 52,456	\$ 1,281
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	5,369,443	-	-
Budget appropriation	-	-	-	-
<b>Total sources</b>	<b>11,998</b>	<b>5,369,443</b>	<b>52,456</b>	<b>1,281</b>
<b>Uses</b>				
Bond principal paid	-	4,299,528	-	-
Bond interest paid	-	951,760	-	-
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	-	118,155	-	-
Transfers - unrestricted funds	11,998	-	2,252	-
<b>Total uses</b>	<b>11,998</b>	<b>5,369,443</b>	<b>2,252</b>	<b>-</b>
<b>Increase (decrease)</b>	<b>-</b>	<b>-</b>	<b>50,204</b>	<b>1,281</b>
<b>Balance, beginning of year</b>	<b>3,343,848</b>	<b>-</b>	<b>4,392,375</b>	<b>135,163</b>
<b>Balance, end of year</b>	<b>\$ 3,343,848</b>	<b>\$ -</b>	<b>\$ 4,442,579</b>	<b>\$ 136,444</b>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 848	\$ -	\$ 354	\$ 136,444
Investments:				
Certificates of deposit	3,343,000	-	542,000	-
Treasury bills	-	-	3,900,225	-
	<b>\$ 3,343,848</b>	<b>\$ -</b>	<b>\$ 4,442,579</b>	<b>\$ 136,444</b>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	2010 Traditional Debt Service	WWD FSA Escrow	Northeast Remsco Retainage	2007 Construction Fund
<b>Sources</b>				
Interest income	\$ -	\$ 150	\$ -	\$ 2
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	13,000	-	-
Transfers – unrestricted funds	930,213	-	-	-
Budget appropriation	-	-	-	-
Total sources	<u>930,213</u>	<u>13,150</u>	<u>-</u>	<u>2</u>
<b>Uses</b>				
Bond principal paid	808,227	-	-	-
Bond interest paid	110,136	-	-	-
Vouchers paid	-	14,296	-	-
Escrow withdrawals	-	-	-	-
DEP fees	-	-	-	-
N.J. Wastewater admin. fees	11,850	-	-	-
Transfers - unrestricted funds	-	-	-	-
Total uses	<u>930,213</u>	<u>14,296</u>	<u>-</u>	<u>-</u>
<b>Increase (decrease)</b>	-	(1,146)	-	2
<b>Balance, beginning of year</b>	<u>-</u>	<u>13,832</u>	<u>468</u>	<u>1,057</u>
<b>Balance, end of year</b>	<u>\$ -</u>	<u>\$ 12,686</u>	<u>\$ 468</u>	<u>\$ 1,059</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ -	\$ 12,686	\$ 468	\$ 59
Investments:				
Certificates of deposit	-	-	-	1,000
Treasury bills	-	-	-	-
	<u>\$ -</u>	<u>\$ 12,686</u>	<u>\$ 468</u>	<u>\$ 1,059</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	2014A Bond Service	2007 Debt Service	Kenny Construction Retainage	2010B OSPS Debt Service
<b>Sources</b>				
Interest income	\$ -	\$ -	\$ 964	\$ -
Miscellaneous income	-	-	-	-
Expense reimbursement	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	326,322	6,664,813	-	728,641
Budget appropriation	-	-	-	-
Total sources	<u>326,322</u>	<u>6,664,813</u>	<u>964</u>	<u>728,641</u>
<b>Uses</b>				
Bond principal paid	269,501	5,750,000	-	528,593
Bond interest paid	45,680	914,813	-	183,953
Vouchers paid	-	-	-	-
Escrow withdrawals	-	-	-	-
DEP fees	7,031	-	-	-
N.J. Wastewater admin. fees	4,110	-	-	16,095
Transfers - unrestricted funds	-	-	-	-
Total uses	<u>326,322</u>	<u>6,664,813</u>	<u>-</u>	<u>728,641</u>
<b>Increase (decrease)</b>	-	-	964	-
<b>Balance, beginning of year</b>	<u>-</u>	<u>-</u>	<u>101,851</u>	<u>-</u>
<b>Balance, end of year</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 102,815</u>	<u>\$ -</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ -	\$ -	\$ 102,815	\$ -
Investments:				
Certificates of deposit	-	-	-	-
Treasury bills	-	-	-	-
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 102,815</u>	<u>\$ -</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	<b>2016A Bond Service</b>	<b>Spectraserv Escrow</b>	<b>Total Restricted Accounts</b>
<b>Sources</b>			
Interest income	\$ -	\$ 40,668	\$ 322,481
Miscellaneous income	-	-	123,667
Expense reimbursement	-	-	50,471,581
Escrow deposits	-	-	13,000
Transfers – unrestricted funds	1,138,996	-	19,928,484
Budget appropriation	-	-	2,350,000
Total sources	<u>1,138,996</u>	<u>40,668</u>	<u>73,209,213</u>
<b>Uses</b>			
Bond principal paid	960,107	-	16,981,895
Bond interest paid	164,234	-	3,666,993
Vouchers paid	-	-	16,887,826
Escrow withdrawals	-	716,030	716,030
DEP fees	-	-	7,031
N.J. Wastewater admin. fees	14,655	-	272,565
Transfers - unrestricted funds	-	-	35,176,993
Total uses	<u>1,138,996</u>	<u>716,030</u>	<u>73,709,333</u>
<b>Increase (decrease)</b>	-	(675,362)	(500,120)
<b>Balance, beginning of year</b>	<u>-</u>	<u>4,331,946</u>	<u>38,439,207</u>
<b>Balance, end of year</b>	<u>\$ -</u>	<u>\$ 3,656,584</u>	<u>\$ 37,939,087</u>
<b>Balance comprised of</b>			
Cash and cash equivalents	\$ -	\$ 3,656,584	\$ 8,101,525
Investments:			
Certificates of deposit	-	-	20,087,000
Treasury bills	-	-	9,750,562
	<u>\$ -</u>	<u>\$ 3,656,584</u>	<u>\$ 37,939,087</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	General Liability Insurance Fund	Collision Insurance Reserve	Workers Compensation Insurance	Land Acquisition and Improvement Reserve
<b>Sources</b>				
Interest income	\$ 26,339	\$ 1,825	\$ 3,033	\$ 33,246
Miscellaneous income	-	-	-	-
Due from Wastewater Division	-	-	-	1,000,000
Retainage deposits	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	-	-	-
Budget appropriation	-	-	175,000	-
Total sources	<u>26,339</u>	<u>1,825</u>	<u>178,033</u>	<u>1,033,246</u>
<b>Uses</b>				
Bond principal paid	-	-	-	-
Bond interest paid	-	-	-	-
Vouchers paid	-	-	-	-
Claims paid	-	-	186,313	-
Escrow withdrawals	-	-	-	-
Trustee fee	-	-	-	-
NJEIT Admin fee	-	-	-	-
Total uses	<u>-</u>	<u>-</u>	<u>186,313</u>	<u>-</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Increase (decrease)</b>	26,339	1,825	(8,280)	1,033,246
<b>Balance, beginning of year</b>	<u>2,779,722</u>	<u>192,634</u>	<u>283,354</u>	<u>3,173,811</u>
<b>Balance, end of year</b>	<u>\$ 2,806,061</u>	<u>\$ 194,459</u>	<u>\$ 275,074</u>	<u>\$ 4,207,057</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 2,806,061	\$ 194,459	\$ 275,074	\$ 4,207,057
Investments:				
Certificates of deposit	-	-	-	-
Treasury notes	-	-	-	-
Other government obligations	-	-	-	-
	<u>\$ 2,806,061</u>	<u>\$ 194,459</u>	<u>\$ 275,074</u>	<u>\$ 4,207,057</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	<b>DEP Closure Phase I</b>	<b>Environmental Self Insurance</b>	<b>Closure/ Post- Closure I</b>	<b>Closure/ Post- Closure II</b>
<b>Sources</b>				
Interest income	\$ 37,128	\$ 153,130	\$ 2,223	\$ 649,994
Miscellaneous income	-	-	44,997	23,639
Due from Wastewater Division	-	-	-	-
Retainage deposits	-	-	-	-
Escrow deposits	-	716,030	-	411,210
Transfers – unrestricted funds	-	-	-	-
Budget appropriation	-	-	-	-
Total sources	<u>37,128</u>	<u>869,160</u>	<u>47,220</u>	<u>1,084,843</u>
<b>Uses</b>				
Bond principal paid	-	-	-	-
Bond interest paid	-	-	-	-
Vouchers paid	-	-	-	-
Claims paid	-	-	-	-
Escrow withdrawals	-	-	1,021,214	-
Trustee fee	-	-	-	47,109
NJEIT Admin fee	-	-	-	-
Total uses	<u>-</u>	<u>-</u>	<u>1,021,214</u>	<u>47,109</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(175,349)</u>
<b>Increase (decrease)</b>	37,128	869,160	(973,994)	862,385
<b>Balance, beginning of year</b>	<u>3,918,286</u>	<u>16,120,429</u>	<u>3,226,366</u>	<u>37,558,201</u>
<b>Balance, end of year</b>	<u>\$ 3,955,414</u>	<u>\$ 16,989,589</u>	<u>\$ 2,252,372</u>	<u>\$ 38,420,586</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 3,955,414	\$ 16,989,589	\$ 2,252,372	\$ 2,314,871
Investments:				
Certificates of deposit	-	-	-	1,097,920
Treasury notes	-	-	-	35,007,795
Other government obligations	-	-	-	-
	<u>\$ 3,955,414</u>	<u>\$ 16,989,589</u>	<u>\$ 2,252,372</u>	<u>\$ 38,420,586</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	CJ Nesti Soil Escrow	Supplemental Fund	Public Liability Insurance Reserve	Aforce Escrow
<b>Sources</b>				
Interest income	\$ 2,865	\$ 18,926	\$ 19,094	\$ 2,868
Miscellaneous income	-	-	-	-
Due from Wastewater Division	-	-	-	-
Retainage deposits	-	-	-	-
Escrow deposits	-	-	-	-
Transfers – unrestricted funds	-	-	-	-
Budget appropriation	-	-	-	-
Total sources	<u>2,865</u>	<u>18,926</u>	<u>19,094</u>	<u>2,868</u>
<b>Uses</b>				
Bond principal paid	-	-	-	-
Bond interest paid	-	-	-	-
Vouchers paid	-	-	-	-
Claims paid	-	-	-	-
Escrow withdrawals	-	-	-	-
Trustee fee	-	-	-	-
NJEIT Admin fee	-	-	-	-
Total uses	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Increase (decrease)</b>	2,865	18,926	19,094	2,868
<b>Balance, beginning of year</b>	<u>302,332</u>	<u>1,997,397</u>	<u>2,015,096</u>	<u>302,651</u>
<b>Balance, end of year</b>	<u>\$ 305,197</u>	<u>\$ 2,016,323</u>	<u>\$ 2,034,190</u>	<u>\$ 305,519</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 305,197	\$ 2,016,323	\$ 2,034,190	\$ 305,519
Investments:				
Certificates of deposit	-	-	-	-
Treasury notes	-	-	-	-
Other government obligations	-	-	-	-
	<u>\$ 305,197</u>	<u>\$ 2,016,323</u>	<u>\$ 2,034,190</u>	<u>\$ 305,519</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	Construction Reserve	Northeast Remsco Retainage	Service Fee Escrow	Reconstruction/ Replacement Reserve
<b>Sources</b>				
Interest income	\$ 10,180	\$ 1,114	\$ 10,223	\$ 17,220
Miscellaneous income	-	-	-	-
Due from Wastewater Division	-	-	-	-
Retainage deposits	-	3,052	-	-
Escrow deposits	-	-	2,657,169	-
Transfers – unrestricted funds	-	-	-	-
Budget appropriation	-	-	-	800,000
Total sources	<u>10,180</u>	<u>4,166</u>	<u>2,667,392</u>	<u>817,220</u>
<b>Uses</b>				
Bond principal paid	-	-	-	-
Bond interest paid	-	-	-	-
Vouchers paid	-	-	2,774,792	-
Claims paid	-	-	-	-
Escrow withdrawals	-	-	-	-
Trustee fee	-	-	-	-
NJEIT Admin fee	-	-	-	-
Total uses	<u>-</u>	<u>-</u>	<u>2,774,792</u>	<u>-</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Increase (decrease)</b>	10,180	4,166	(107,400)	817,220
<b>Balance, beginning of year</b>	<u>1,074,309</u>	<u>115,265</u>	<u>545,534</u>	<u>1,278,825</u>
<b>Balance, end of year</b>	<u>\$ 1,084,489</u>	<u>\$ 119,431</u>	<u>\$ 438,134</u>	<u>\$ 2,096,045</u>
<b>Balance comprised of</b>				
Cash and cash equivalents	\$ 1,084,489	\$ 119,431	\$ 438,134	\$ 2,096,045
Investments:				
Certificates of deposit	-	-	-	-
Treasury notes	-	-	-	-
Other government obligations	-	-	-	-
	<u>\$ 1,084,489</u>	<u>\$ 119,431</u>	<u>\$ 438,134</u>	<u>\$ 2,096,045</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	2007A Debt Service	2009A Debt Service	DEP Closure Phase II Amboy
<b>Sources</b>			
Interest income	\$ -	\$ -	\$ 339,344
Miscellaneous income	-	-	-
Due from Wastewater Division	-	-	-
Retainage deposits	-	-	-
Escrow deposits	-	-	603,429
Transfers – unrestricted funds	6,591,302	1,950,998	-
Budget appropriation	-	-	-
Total sources	<u>6,591,302</u>	<u>1,950,998</u>	<u>942,773</u>
<b>Uses</b>			
Bond principal paid	6,156,816	1,654,482	-
Bond interest paid	337,586	262,181	-
Vouchers paid	-	-	-
Claims paid	-	-	-
Escrow withdrawals	-	-	-
Trustee fee	-	-	27,251
NJEIT Admin fee	96,900	34,335	-
Total uses	<u>6,591,302</u>	<u>1,950,998</u>	<u>27,251</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>(99,870)</u>
<b>Increase (decrease)</b>	-	-	815,652
<b>Balance, beginning of year</b>	<u>-</u>	<u>-</u>	<u>19,554,290</u>
<b>Balance, end of year</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 20,369,942</u>
<b>Balance comprised of</b>			
Cash and cash equivalents	\$ -	\$ -	\$ 24,660
Investments:			
Certificates of deposit	-	-	-
Treasury notes	-	-	-
Other government obligations	-	-	20,345,282
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 20,369,942</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CHANGES IN  
RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS  
SOLID WASTE DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	<b>United Energy Soil Escrow</b>	<b>SWD FSA Escrow</b>	<b>Total</b>
<b>Sources</b>			
Interest income	\$ 2,864	\$ 59	\$ 1,331,675
Miscellaneous income	-	-	68,636
Due from Wastewater Division	-	-	1,000,000
Retainage deposits	-	-	3,052
Escrow deposits	-	-	4,387,838
Transfers – unrestricted funds	-	-	8,542,300
Budget appropriation	-	-	975,000
Total sources	<u>2,864</u>	<u>59</u>	<u>16,308,501</u>
<b>Uses</b>			
Bond principal paid	-	-	7,811,298
Bond interest paid	-	-	599,767
Vouchers paid	-	-	2,774,792
Claims paid	-	-	186,313
Escrow withdrawals	-	-	1,021,214
Trustee fee	-	-	74,360
NJEIT Admin fee	-	-	131,235
Total uses	<u>-</u>	<u>-</u>	<u>12,598,979</u>
<b>Net increase (decrease) in the fair value of investments</b>	<u>-</u>	<u>-</u>	<u>(275,219)</u>
<b>Increase (decrease)</b>	2,864	59	3,434,303
<b>Balance, beginning of year</b>	<u>302,331</u>	<u>6,221</u>	<u>94,747,054</u>
<b>Balance, end of year</b>	<u>\$ 305,195</u>	<u>\$ 6,280</u>	<u>\$ 98,181,357</u>
<b>Balance comprised of</b>			
Cash and cash equivalents	\$ 305,195	\$ 6,280	\$ 41,730,360
Investments:			
Certificates of deposit	-	-	1,097,920
Treasury notes	-	-	35,007,795
Other government obligations	-	-	20,345,282
	<u>\$ 305,195</u>	<u>\$ 6,280</u>	<u>\$ 98,181,357</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CAPITAL ASSETS  
DECEMBER 31, 2018**

**Wastewater Division**

	<b>Acquired with Capital Contributions</b>	<b>Acquired with Other than Capital Contributions</b>	<b>Combined Totals</b>
Land	\$ -	\$ 8,401,828	\$ 8,401,828
Buildings and improvements	48,000,535	129,481,030	177,481,565
Improvements other than buildings	122,703,613	372,258,732	494,962,345
Machinery and equipment	-	35,902,964	35,902,964
Furniture and fixtures	-	57,091	57,091
Landfill gas collection facility	-	65,591,952	65,591,952
Landfill gas collection equipment	-	6,045,822	6,045,822
	<u>\$ 170,704,148</u>	<u>\$ 617,739,419</u>	<u>\$ 788,443,567</u>

**Solid Waste Division**

	<b>Acquired with Capital Contributions</b>	<b>Acquired with Other than Capital Contributions</b>	<b>Combined Totals</b>
Land	\$ -	\$ 55,366,747	\$ 55,366,747
Landfill and landfill expansion	-	-	-
including initial preparatory cost	-	224,165,391	224,165,391
Buildings	-	11,040,920	11,040,920
Improvements other than buildings	-	16,557,137	16,557,137
Machinery and equipment	-	7,915,651	7,915,651
	<u>\$ -</u>	<u>\$ 315,045,846</u>	<u>\$ 315,045,846</u>

Note: Excludes construction in progress.

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF ACCUMULATED DEPRECIATION  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

	Accumulated Depreciation January 1, 2018	Depreciation Expense	Accumulated Depreciation December 31, 2018
Buildings and improvements:			
Acquired with capital contributions	\$ 36,195,412	\$ 1,019,189	\$ 37,214,601
Other	62,154,622	3,613,607	65,768,229
Improvements other than buildings:			
Acquired with capital contributions	78,681,361	2,567,025	81,248,386
Other	134,942,572	10,107,644	145,050,216
Machinery and equipment	16,127,792	2,279,142	18,406,934
Furniture and fixtures	25,142	4,448	29,590
Landfill gas collection facility	29,254,242	3,396,120	32,650,362
Landfill gas collection equipment	2,495,015	500,007	2,995,022
	<u>\$ 359,876,158</u>	<u>\$ 23,487,182</u>	<u>\$ 383,363,340</u>
Analysis:			
Depreciation attributable to assets acquired with capital contributions	\$ 114,876,773	\$ 3,586,214	118,462,987
Depreciation attributable to assets acquired with other than capital contributions	244,999,385	19,900,968	264,900,353
	<u>\$ 359,876,158</u>	<u>\$ 23,487,182</u>	<u>\$ 383,363,340</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF ACCUMULATED DEPRECIATION  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

	<b>Accumulated Depreciation January 1, 2018</b>	<b>Depreciation Expense</b>	<b>Accumulated Depreciation December 31, 2018</b>
Landfill and landfill expansion including initial preparatory cost	\$ 229,708,017	\$ 4,108,093	\$ 233,816,110
Buildings	8,294,032	373,357	8,667,389
Improvements other than buildings	5,717,040	931,397	6,648,437
Machinery and equipment	<u>3,327,078</u>	<u>595,846</u>	<u>3,922,924</u>
	<u>\$ 247,046,167</u>	<u>\$ 6,008,693</u>	<u>\$ 253,054,860</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF CONSTRUCTION IN PROGRESS**

**YEAR ENDED DECEMBER 31, 2018**

	<b>Total Costs through January 1, 2018</b>	<b>Increases January - December 31, 2018</b>	<b>Decreases January - December 31, 2018</b>	<b>Total Costs through December 31, 2018</b>
<b><u>Wastewater Division</u></b>				
Final Tank Rehab	\$ 3,542,592	\$ 846,233	\$ -	\$ 4,388,825
Main Sub-Station Rehabilitation	16,200,217	4,782,094	-	20,982,311
OCS Boiler Relocation	3,600,180	1,160	-	3,601,340
Storage Building	690,203	9,152	-	699,355
Dewatering Bldg Odor Control System Rehab	2,322,548	434,558	-	2,757,106
SPS Restoration/Mitigation (FEMA)	16,711,705	30,328,922	-	47,040,627
EPS Restoration/Mitigation (FEMA)	9,130,280	10,362,826	-	19,493,106
Main Trunk Rehab II	30,927	65,209	-	96,136
Primary Tank Rehab	13,962	991,683	-	1,005,645
Dryer #5 Rotor	217,754	-	-	217,754
Process Water Screens	4,733	21,017	-	25,750
Gravity Thickener	26,268	1,033,549	-	1,059,817
Meter Chamber Upgrade Phase I	16,430	847,786	-	864,216
Meter Chamber Upgrade Phase II	-	191,677	-	191,677
Influent Screening	-	13,553	-	13,553
Outfall Repairs	-	619,392	-	619,392
Main Trunk Sewer Phase III	-	324,983	-	324,983
	<u>\$ 52,507,799</u>	<u>\$ 50,873,794</u>	<u>\$ -</u>	<u>\$ 103,381,593</u>
<b><u>Solid Waste Division</u></b>				
Landfill Gas Engine	\$ 6,576,530	\$ 446,600	\$ -	\$ 7,023,130
	<u>\$ 6,576,530</u>	<u>\$ 446,600</u>	<u>\$ -</u>	<u>\$ 7,023,130</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**SUPPLEMENTARY INFORMATION - SCHEDULE OF REVENUE SERIAL BONDS PAYABLE  
YEAR ENDED DECEMBER 31, 2018**

	Balance		Balance December 31, 2018	Analysis of Balance	
	January 1, 2018	Principal Reduction		Current Portion	Due Long-Term
<b><u>Wastewater Division</u></b>					
Issue of 2001A - N.J. EIT (Federal)	\$ 3,559,456	\$ 891,091	\$ 2,668,365	\$ 890,598	\$ 1,777,767
Issue of 2001A - N.J. EIT (State)	4,563,413	1,060,060	3,503,353	1,113,228	2,390,125
Issue of 2005A - N.J. EIT (Federal)	2,806,175	350,151	2,456,024	352,016	2,104,008
Issue of 2005A - N.J. EIT (State)	3,453,760	373,889	3,079,871	391,632	2,688,239
Issue of 2006 - N.J. EIT (Federal)	18,214,351	2,022,898	16,191,453	2,021,925	14,169,528
Issue of 2006 - N.J. EIT (State)	24,052,902	2,276,629	21,776,273	2,367,256	19,409,017
Issue of 2007	17,425,000	5,750,000	11,675,000	11,675,000	-
Issue of 2009A - N.J. EIT (Federal)	5,780,615	494,869	5,285,746	494,866	4,790,880
Issue of 2009A - N.J. EIT (State)	6,510,000	450,000	6,060,000	449,000	5,611,000
Issue of 2009 C-1 - N.J. EIT (Trust/State)	2,093,000	145,000	1,948,000	142,000	1,806,000
Issue of 2009 C-2 - N.J. EIT (Trust/State)	2,717,000	190,000	2,527,000	190,000	2,337,000
Issue of 2009 D-1 - N.J. EIT (Federal)	2,662,580	221,880	2,440,700	221,882	2,218,818
Issue of 2009 D-2 - N.J. EIT (Federal)	7,418,718	618,225	6,800,493	618,227	6,182,266
Issue of 2010B - N.J. EIT (Trust/State)	3,824,000	235,000	3,589,000	245,000	3,344,000
Issue of 2010B - N.J. EIT (Federal)	3,816,713	293,594	3,523,119	293,593	3,229,526
Issue of 2014A - N.J. EIT (Trust/State)	1,220,000	55,000	1,165,000	55,000	1,110,000
Issue of 2014A - N.J. EIT (Federal)	3,432,023	214,502	3,217,521	214,501	3,003,020
Issue of 2016A - N.J. EIT (Trust/State)	4,715,000	180,000	4,535,000	190,000	4,345,000
Issue of 2016A - N.J. EIT (Federal)	14,041,932	780,107	13,261,825	780,107	12,481,718
	<u>\$ 132,306,638</u>	<u>\$ 16,602,895</u>	<u>\$ 115,703,743</u>	<u>\$ 22,705,831</u>	<u>\$ 92,997,912</u>
<b><u>Solid Waste Division</u></b>					
Issue of 2007A - N.J. EIT (Federal)	\$ 5,774,964	\$ 2,888,816	\$ 2,886,148	\$ 2,886,148	\$ -
Issue of 2007A - N.J. EIT (State)	6,697,000	3,268,000	3,429,000	3,429,000	-
Issue of 2009A - N.J. EIT (Trust/State)	5,540,871	824,482	4,716,389	824,482	3,891,907
Issue of 2009A - N.J. EIT (Federal)	6,376,000	830,000	5,546,000	838,000	4,708,000
	<u>\$ 24,388,835</u>	<u>\$ 7,811,298</u>	<u>\$ 16,577,537</u>	<u>\$ 7,977,630</u>	<u>\$ 8,599,907</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Operating Revenues</b>			
Reconstruction/replacement reserve fund	\$ -	\$ - (1)	\$ -
Appropriated net position	12,428,000	- (1)	12,428,000
Capital reserve fund	2,180,000	- (1)	2,180,000
Loan proceeds	5,250,000	- (1)	5,250,000
Annual charges	85,764,000	90,366,119	(4,602,119)
Treatment of septic tank waste	150,000	384,560	(234,560)
Service fees, review of plans, etc.	2,000	3,550	(1,550)
Industrial pretreatment program fees	20,000	24,400	(4,400)
Miscellaneous income	180,000	252,458	(72,458)
Sale of plans and specifications	5,000	9,350	(4,350)
Interest on investments and deposits	50,000	457,464 (2)	(407,464)
Management fees	1,660,000	1,660,020	(20)
Sampling and lab fees	20,000	25,884	(5,884)
Analytical services	20,000	22,959	(2,959)
Groundwater discharge fees	800,000	934,307	(134,307)
Penalty assessments	15,000	21,000	(6,000)
Effluent reuse sales	700,000	741,038	(41,038)
Sale of synthetic soil	420,000	387,493	32,507
Praxair - sale of oxygen	886,000	893,143	(7,143)
Praxair - sale of nitrogen	855,000	836,201	18,799
Praxair - water usage	35,000	35,770	(770)
Praxair - fixed gas costs	851,000	851,068	(68)
Grants	70,391,000	27,393,434	42,997,566
Electric generation income	500,000	523,814	(23,814)
Total revenues	183,182,000	125,824,032	57,357,968
Less: Revenues to fund Bonded and Reimbursable projects			
Grants	(70,391,000)	(27,393,434)	(42,997,566)
Total operating revenues less revenues to fund bonded and reimbursable projects	112,791,000	98,430,598	14,360,402
<b>Operating Expenses</b>			
<b>Salaries and wages</b>			
Administration	2,834,000	2,727,001	106,999
Plant operation	4,630,000	4,461,166	168,834
Plant solids	-	45,344	(45,344)
Laboratory	1,742,000	1,536,518	205,482
Plant maintenance	3,933,000	3,640,825	292,175
Sayreville pump station	783,000	787,922	(4,922)
Lines, meters and small pump stations	1,118,000	971,221	146,779
Temporary help	50,000	32,601	17,399
Total salaries and wages	15,090,000	14,202,598	887,402

(1) Not an operating revenue for GAAP purposes.

(2) Includes non-budgeted interest earned on restricted funds of:

\$ 44,959

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Administration</b>			
Pension expense	\$ 1,950,000	\$ 1,505,376	\$ 444,624
Social security tax	1,155,000	1,016,210	138,790
Disability insurance	120,000	73,288	46,712
Hospitalization plan	2,598,000	2,394,328	203,672
Dental and vision plan	129,000	107,714	21,286
Retired employees/survivor benefits	1,850,000	1,976,603	(126,603)
Prescription plan	860,000	722,486	137,514
Paid sick leave	243,000	226,881	16,119
Excess worker's compensation	71,000	74,630	(3,630)
Insurance - other	996,000	977,974	18,026
Professional fees	2,917,000	2,276,117	640,883
Regulatory fees and permits	928,000	755,463	172,537
Host community benefits	1,296,000	1,296,000	-
General administrative expenses	474,000	512,347	(38,347)
Interest expense	350,000	339,130	10,870
Interest expense on early retirement incentive liabilities	-	137,901	(137,901)
Environmental studies	375,000	151,491	223,509
Total administration	<u>16,312,000</u>	<u>14,543,939</u>	<u>1,768,061</u>
<b>Central Treatment Plant</b>			
Chemicals	3,151,000	3,384,336	(233,336)
Power and light	1,530,500	2,193,402	(662,902)
Fuel oil	1,590,500	1,687,371	(96,871)
Water	100,000	98,800	1,200
Grit processing	272,000	264,165	7,835
Transportation of synthetic soil	1,752,000	2,366,981	(614,981)
Maintenance	4,124,000	4,140,443	(16,443)
Laboratory	567,000	456,590	110,410
Transportation	237,000	245,244	(8,244)
Electric generation plant	6,888,000	6,626,778	261,222
Operations	1,561,000	1,046,838	514,162
Total central treatment plant	<u>21,773,000</u>	<u>22,510,948</u>	<u>(737,948)</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Sayreville Pumping Station</b>			
Power and light	\$ 1,300,000	\$ 1,379,915	\$ (79,915)
Water	25,000	20,619	4,381
Maintenance	<u>80,000</u>	<u>78,629</u>	<u>1,371</u>
Total Sayreville Pumping Station	<u>1,405,000</u>	<u>1,479,163</u>	<u>(74,163)</u>
<b>Edison Pumping Station</b>			
Power and light	215,000	285,803	(70,803)
Water	5,000	7,703	(2,703)
Maintenance	<u>28,000</u>	<u>16,834</u>	<u>11,166</u>
Total Edison Pumping Station	<u>248,000</u>	<u>310,340</u>	<u>(62,340)</u>
<b>Bound Brook Pumping Station</b>			
Power and light	30,000	25,768	4,232
Water	1,000	1,138	(138)
Maintenance	<u>13,000</u>	<u>14,792</u>	<u>(1,792)</u>
Total Bound Brook Pumping Station	<u>44,000</u>	<u>41,698</u>	<u>2,302</u>
<b>Green Brook Pumping Station</b>			
Power and light	90,000	73,004	16,996
Water	4,000	6,485	(2,485)
Maintenance	<u>69,000</u>	<u>30,786</u>	<u>38,214</u>
Total Green Brook Pumping Station	<u>163,000</u>	<u>110,275</u>	<u>52,725</u>
<b>South Amboy Pumping Station</b>			
Power and light	90,000	80,276	9,724
Water	14,000	21,518	(7,518)
Maintenance	<u>18,000</u>	<u>33,554</u>	<u>(15,554)</u>
Total South Amboy Pumping Station	<u>122,000</u>	<u>135,348</u>	<u>(13,348)</u>
<b>Lines, Meters and Small Pumping Stations</b>			
Power and light	12,000	11,470	530
Rental of rights of way	12,000	11,780	220
Maintenance	<u>1,793,000</u>	<u>1,435,353</u>	<u>357,647</u>
Total Lines, Meters and Small Pumping Stations	<u>1,817,000</u>	<u>1,458,603</u>	<u>358,397</u>
<b>Hurricane loss</b>			
Administration	50,000	7,588	42,412
Sayreville Pumping Station	80,000	-	80,000
Edison Pumping Station	<u>-</u>	<u>-</u>	<u>-</u>
Total Hurricane Loss***	<u>130,000</u>	<u>7,588</u>	<u>122,412</u>
Less: Reimbursable projects***	<u>(130,000)</u>	<u>(7,588)</u>	<u>(122,412)</u>
Total operating expense budget	<u>56,974,000</u>	<u>54,792,912</u>	<u>2,181,088</u>

\*\*\*Reimbursable projects - Expenditures expected to be reimbursed by third parties and not funded by operating revenue.

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Capital Outlays</b>			
Administration - computer*	\$ 331,000	(1) \$ 274,412	\$ 56,588
Administration - furniture and fixtures	5,000	-	5,000
Administration - machinery & equipment	25,000	7,595	17,405
Pumping stations:			
Sayreville Pumping Station	30,000	8,981	21,019
Edison Pumping Station	5,000	-	5,000
Green Brook Pumping Station	200,000	76,610	123,390
Bound Brook Pumping Station	210,000	-	210,000
South Amboy Pumping Station	55,000	15,547	39,453
Lines, meters and small pumping stations:			
Supplemental outfall repairs	1,328,000	619,393	708,607
Machinery and equipment	50,000	10,797	39,203
Pipeline repair	3,545,000	2,824,355	720,645
Meter chamber upgrade	910,000	1,039,462	(129,462)
Main trunk sewer II*	9,854,000	65,209	9,788,791
Main trunk sewer III*	500,000	324,983	175,017
Pump station, permanent restoration / mitigation:			
Sayreville Pumping Station*	40,311,000	30,328,922	9,982,078
Edison Pumping Station*	13,346,000	10,362,826	2,983,174
Central treatment plant:			
Furniture and fixtures	25,000	-	25,000
Machinery and equipment	220,000	52,928	167,072
Oxygen facility - machinery and equipment	155,000	-	155,000
Oxygen facility - spare parts	10,000	-	10,000
Landfill gas collection facility - electric generation	4,500,000	3,555,914	944,086
Electrical substation upgrade*	5,500,000	4,621,576	878,424
Unox mixers / deck seal vent valves	500,000	616,529	(116,529)
Process water screens / engineering	530,000	21,016	508,984
Electrical equipment	50,000	-	50,000
Lab machinery and equipment	240,000	204,483	35,517
Lab computer equipment	100,000	22,518	77,482
Pumps and motors	50,000	11,675	38,325
Roof reconstruction	500,000	-	500,000
Sidewalks and roads	50,000	-	50,000
Influent screen	1,150,000	13,553	1,136,447
Primary tanks	3,296,000	991,683	2,304,317
Final tanks	3,518,000	846,232	2,671,768
Hypo tank replacement	25,000	196,764	(171,764)

(1) Includes \$150,000 of grant funded equipment

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
Storage building	\$ 5,250,000	\$ 9,152	\$ 5,240,848
DW building OCS	-	434,559	(434,559)
OCS boiler relocation	-	1,160	(1,160)
Duophase - machinery and equipment	170,000	90,995	79,005
Solar project	-	295,582	(295,582)
Maintenance annex rehab	200,000	209,400	(9,400)
RAS pipe rehab	500,000	-	500,000
Muffin Monsters	50,000	16,167	33,833
Gravity Thickener	2,769,000	1,033,549	1,735,451
Water Reuse**	600,000	-	600,000
Vehicles	662,000	592,938	69,062
Total capital outlays	101,325,000	59,797,465	41,527,535
Less: Bonded projects*	(69,661,000)	(45,703,516)	(23,957,484)
Reimbursable projects**	(600,000)	-	(600,000)
Capital outlays funded by operating revenues	31,064,000	14,093,949	16,970,051
<b>Other Costs Funded by Operating Revenues</b>			
Future plant reconstruction and replacement	500,000	500,000	-
Solid Waste Division loan reserve	500,000	500,000	-
	1,000,000	1,000,000	-
Budget subtotal	89,038,000	69,886,861	19,151,139
DEP fees	-	7,031	(7,031)
NJ- WWT - administrative fee	-	272,565	(272,565)
Total before debt service and amortization	89,038,000	70,166,457	18,871,543

\*Bonded projects - Expenditures not paid from operating revenues.

\*\*Reimbursable projects - Expenditures expected to be reimbursed by third parties and not funded by operating revenue.

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
WASTEWATER DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Principal Maturities</b>			
2001A issue	\$ 2,006,100	\$ 1,951,152	\$ 54,948
2005 - wastewater treatment	750,200	724,039	26,161
2006 EPS - wastewater treatment	4,413,000	4,299,528	113,472
2007 gas system revenue bonds	5,750,000	5,750,000	-
2009 EPS wastewater treatment	944,900	944,866	34
2010A (Traditional) - Plant upgrades	808,300	808,227	73
2010A (ARRA) - switchgear	366,900	366,882	18
2010 - OSPS	528,600	528,593	7
2014 - Main Trunk Sewer I	269,500	269,501	(1)
2015 - Main Trunk Sewer II (estimated)	520,000	-	520,000
2016 - Electric Substation Upgrade	960,100	960,107	(7)
Short-term FEMA loan	<u>3,050,000</u>	<u>-</u>	<u>3,050,000</u>
Total principal maturities	<u>20,367,600</u>	<u>16,602,895</u>	<u>3,764,705</u>
<b>Interest Expense</b>			
2001A issue	233,500	193,979	39,521
2005 - wastewater treatment	163,200	132,670	30,530
2006 EPS - wastewater treatment	1,067,900	951,760	116,140
2007 gas system revenue bonds	914,900	914,813	87
2009 EPS wastewater treatment	264,900	263,940	960
2010A (Traditional) - Plant upgrades	110,600	110,136	464
2010A (ARRA) - switchgear	85,200	84,828	372
2010 - OSPS	184,100	183,953	147
2014 NJEIT - Main Trunk Sewer I	46,000	45,680	320
2015 NJEIT - Main Trunk Sewer II (estimated)	50,000	-	50,000
2016 NJEIT - Electric Substation Upgrade (estimated)	165,100	164,234	866
Short-term FEMA loan	<u>100,000</u>	<u>-</u>	<u>100,000</u>
Total interest expense	<u>3,385,400</u>	<u>3,045,993</u>	<u>339,407</u>
Total actual costs funded by operating revenues	<u>112,791,000</u>	<u>89,815,345</u>	<u>22,975,655</u>
Excess in revenues	<u>-</u>	<u>8,615,253</u>	<u>(8,615,253)</u>
Total actual costs funded by operating revenues and excess in revenues	<u>\$ 112,791,000</u>	<u>\$ 98,430,598</u>	<u>\$ 14,360,402</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Operating Revenues</b>			
Tipping fees	\$ 37,027,000	\$ 38,524,927	\$ (1,497,927)
Unreserved net position	750,000	1,500,000 (1)	(750,000)
Interest income	10,000	800,025 (2)	(790,025)
Soil program income	2,592,000	6,010,167	(3,418,167)
Service fee income	600,000	1,121,757	(521,757)
Miscellaneous income	43,000	26,960	16,040
Net (decrease) in the fair value of investments	-	(275,219)	275,219
Total budgetary revenues	<u>\$ 41,022,000</u>	<u>\$ 47,708,617</u>	<u>\$ (6,686,617)</u>
(1) Not a revenue for GAAP purposes.			
(2) Includes non-budgeted interest earned on restricted funds.			
<b>Operating Expenses</b>			
<b>Salaries and Wages</b>			
Administration	\$ 1,076,000	\$ 957,888	\$ 118,112
Operations	2,074,000	1,957,358	116,642
Temporary help	20,000	5,029	14,971
Total salaries and wages	<u>3,170,000</u>	<u>2,920,275</u>	<u>249,725</u>
<b>Administration</b>			
Public Employee Retirement System	391,000	265,655	125,345
Social Security tax	243,000	208,745	34,255
Employee benefits	1,130,000	1,234,685	(104,685)
Insurance	315,000	307,396	7,604
Professional fees	1,268,000	1,347,361	(79,361)
Regulatory fees and permits	235,000	234,549	451
General administrative expenses	1,882,000	1,851,327	30,673
Implementing agency fee	3,626,000	3,605,444	20,556
Total administration	<u>9,090,000</u>	<u>9,055,162</u>	<u>34,838</u>
<b>Landfill Operations</b>			
Host community benefits	6,273,000	6,260,817	12,183
Utilities	54,000	38,473	15,527
Maintenance	963,000	863,491	99,509
Operations	6,263,000	6,475,267	(212,267)
Transportation	51,000	52,169	(1,169)
Mandated charges	2,740,000	2,834,036	(94,036)
Total landfill operations	<u>16,344,000</u>	<u>16,524,253</u>	<u>(180,253)</u>
Budget subtotal	28,604,000	28,499,690	104,310
NJ - WWT and DEP - administrative fee	-	131,235	(131,235)
<b>Budget total before debt service, capital outlay and reserves</b>	<u>28,604,000</u>	<u>28,630,925</u>	<u>(26,925)</u>

MIDDLESEX COUNTY UTILITIES AUTHORITY

SUPPLEMENTARY INFORMATION - SCHEDULE OF OPERATING REVENUES  
AND COSTS FUNDED BY OPERATING REVENUES COMPARED TO BUDGET  
SOLID WASTE DIVISION

YEAR ENDED DECEMBER 31, 2018

Description	Annual Budget	Actual	Unrealized (Excess Over) Under Budget
<b>Debt Service</b>			
Bond principal	\$ 8,013,400	\$ 7,811,298	\$ 202,102
Interest on bonds	582,600	599,767	(17,167)
Total debt service	<u>8,596,000</u>	<u>8,411,065</u>	<u>184,935</u>
<b>Capital Outlay</b>			
Landfill - capital	<u>3,014,000</u>	<u>1,986,538</u>	<u>1,027,462</u>
<b>Reserves</b>			
	<u>808,000</u>	<u>825,562</u>	<u>(17,562)</u>
Total actual costs funded by operating revenues	<u>\$ 41,022,000</u>	<u>\$ 39,854,090</u>	<u>\$ 1,167,910</u>
Excess in revenues	<u>-</u>	<u>7,854,527</u>	<u>(7,854,527)</u>
Total actual costs funded by operating revenues and excess in revenues	<u>\$ 41,022,000</u>	<u>\$ 47,708,617</u>	<u>\$ (6,686,617)</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
SUPPLEMENTARY INFORMATION - SCHEDULE OF LOADINGS AND CHARGES  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

	Total Annual Charges	Flow		Biochemical Oxygen Demand		Suspended Solids		Chlorine Demand	
		Million		Tons	Charges	Tons	Charges	CWT	Charges
		Gallons	Charges						
<b>Municipalities</b>									
Bound Brook	\$ 1,123,898	589.030	\$ 518,900	472.692	\$ 266,945	477.816	\$ 319,894	97.216	\$ 18,159
Carteret	2,594,617	1,667.141	1,121,914	1,283.325	707,847	1,075.181	703,088	346.150	61,768
Cranbury	515,311	134.788	188,670	213.246	121,402	294.333	199,914	28.509	5,325
East Brunswick	3,453,815	1,370.314	959,588	1,849.980	1,007,967	2,316.873	1,426,672	333.602	59,588
Edison	9,811,595	6,267.645	3,578,438	4,090.453	2,157,208	6,602.265	3,907,363	978.692	168,586
Franklin Twp.	6,219,270	3,007.244	1,838,068	3,529.643	1,874,086	4,007.993	2,406,888	573.604	100,228
Highland Park	1,417,750	773.671	625,991	532.385	299,890	709.940	470,761	113.131	21,108
Metuchen	1,192,897	652.389	556,314	448.011	253,318	543.087	362,315	112.173	20,950
Middlesex	1,547,765	818.715	653,285	626.650	351,915	783.330	518,457	129.884	24,108
Monroe Twp.	4,154,282	1,526.867	1,046,360	2,139.054	1,157,832	3,109.594	1,887,272	352.248	62,818
New Brunswick	7,198,222	4,812.360	2,801,621	3,280.348	1,748,130	4,164.759	2,497,558	873.962	150,913
North Brunswick	3,039,423	2,068.036	1,336,608	1,289.329	711,080	1,470.261	933,317	326.892	58,418
Old Bridge	5,399,183	2,023.713	1,313,069	2,653.548	1,424,561	4,318.149	2,586,276	425.746	75,277
Perth Amboy	3,750,687	2,118.815	1,363,834	2,417.199	1,302,031	1,586.708	1,001,176	475.340	83,646
Piscataway	6,032,646	3,980.104	2,357,371	2,945.749	1,576,047	3,242.333	1,964,046	780.739	135,182
PARSA	9,645,700	5,036.821	2,921,436	6,344.777	3,294,807	5,322.807	3,167,351	1,551.316	262,106
Sayreville	3,953,258	1,589.965	1,080,835	1,982.947	1,076,902	2,843.819	1,733,492	347.911	62,029
South Amboy	688,711	272.646	307,620	254.799	144,859	332.749	225,524	57.326	10,708
South Bound Brook	517,315	263.207	300,234	155.950	89,058	176.907	120,259	41.566	7,764
South Brunswick	2,999,864	1,136.751	830,131	2,032.208	1,102,440	1,586.773	1,001,213	371.560	66,080
South River	1,348,155	676.741	570,694	605.158	340,053	621.006	412,956	131.904	24,452
Spotswood	1,084,952	243.072	284,478	503.399	283,893	760.199	503,423	70.440	13,158
Woodbridge	4,683,315	2,521.681	1,578,880	1,777.422	970,351	3,385.582	2,046,898	496.321	87,186
	<u>\$ 82,372,631</u>	<u>43,551.716</u>	<u>\$ 28,134,339</u>	<u>41,428.272</u>	<u>\$ 22,262,622</u>	<u>49,732.464</u>	<u>\$ 30,396,113</u>	<u>9,016.232</u>	<u>\$ 1,579,557</u>
<b>Industries</b>									
LANXESS fka Chemtura	783,442	99.613	145,694	1,058.560	586,816	67.130	45,793	27.511	5,139
Ashland Aqualon	1,232,936	85.945	128,995	1,347.880	741,941	108.510	73,863	1,716.649	288,137
Schweitzer-Maudit	4,874,961	464.258	445,221	2,387.440	1,286,603	4,585.001	2,740,618	2,417.261	402,519
Equistar Chemicals	1,052,064	41.830	74,804	266.544	151,489	1,284.254	824,923	4.540	848
Union Carbide	50,085	22.885	46,777	0.489	280	3.615	2,475	2.960	553
	<u>\$ 7,993,488</u>	<u>714.531</u>	<u>\$ 841,491</u>	<u>5,060.913</u>	<u>\$ 2,767,129</u>	<u>6,048.510</u>	<u>\$ 3,687,672</u>	<u>4,168.921</u>	<u>\$ 697,196</u>
	<u>\$ 90,366,119</u>	<u>44,266.247</u>	<u>\$ 28,975,830</u>	<u>46,489.185</u>	<u>\$ 25,029,751</u>	<u>55,780.974</u>	<u>\$ 34,083,785</u>	<u>13,185.153</u>	<u>\$ 2,276,753</u>

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
OTHER INFORMATION - SCHEDULE OF RATES  
WASTEWATER DIVISION**

**YEAR ENDED DECEMBER 31, 2018**

**Calculations for participants are made quarterly:**

**Operations and Maintenance Rates:**

Flow	Flat rate charge per Million Gallons	\$	380.37
Biochemical Oxygen Demand	Flat rate charge per Ton		436.98
Suspended Solids	Flat rate charge per Ton		494.97
Chlorine Demand	Flat rate charge per CWT		37.18

**Debt Service Rates:**

	<u>Million Gallons Charge Per Quarter</u>		<u>Charge Per Million Gallons</u>
Flow	First 5 at	\$	1,738.65
	Next 5 at		1,143.65
	Next 30 at		841.40
	Next 60 at		402.14
	Next 100 at		210.14
	Next 200 at		173.90
	Over 400 at		153.42

	<u>Tons Per Quarter</u>		<u>Charge Per Ton</u>
Biochemical Oxygen Demand	First 30 at	\$	136.05
	Next 70 at		127.53
	Next 100 at		114.92
	Next 200 at		101.50
	Next 400 at		81.45
	Over 800 at		67.65

Suspended Solids	First 10 at	\$	189.77
	Next 70 at		183.37
	Next 170 at		154.96
	Next 450 at		87.77
	Over 700 at		83.41

	<u>Short Hundredweights Per Quarter</u>		<u>Change Per Short Hundredweight</u>
Chlorine Demand	First 30 at	\$	149.61
	Next 60 at		136.85
	Next 180 at		131.57
	Next 540 at		124.97
	Over 810 at		117.49

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**OTHER INFORMATION - ROSTER OF OFFICIALS**

**AS OF DECEMBER 31, 2018**

<b>Authority Member</b>	<b>Position</b>	<b>Term</b>	<b>Amount of Surety</b>
Ted H. Light, P.E.	Chairman	1/31/2022	None
John F. Wiley, Esq.	Vice Chairman	1/31/2023	None
Allan Jacobs, P.E., P.P.	Commissioner	1/31/2021	None
Antonio L. Cruz, Esq.	Commissioner	1/31/2019	None
Robert Diehl	Commissioner	1/31/2024	None
Joseph Juliano	Commissioner	1/31/2020	None
James M. Zullo	Commissioner	1/31/2021	None
Alise Roderer	Commissioner	1/31/2023	None
Raymond Murray	Commissioner	1/31/2021	None
Jerome Convery Esq.	Commissioner	1/31/2020	None
<b>Other Officials</b>			
Joseph Cryan	Executive Director	2/28/2019	*
J. Joaquin Gonzalez, PE, MBA	Chief Engineer	Annual	*
Paul Clark	Solid Waste Division Manager	Annual	*
Karen L. Sissick, CPA	Treasurer / Comptroller	2/28/2019	\$250,000
Judith McCabe	Secretary	2/28/2019	*
McManimon, Scotland & Baumann, LLC	General/Construction Counsel	Annual	
R3M Engineering, Inc.	Consulting Engineers - Wastewater Division	Annual	
CME Associates	Consulting Engineers - Solid Waste Division	Annual	

**Surety Company**

Fidelity and Deposit Co. of Maryland

\*Employer blanket policy for a total of \$250,000 for all employees. Comptroller's coverage is separate from the blanket coverage.

**MIDDLESEX COUNTY UTILITIES AUTHORITY  
YEAR ENDED DECEMBER 31, 2018**

**GENERAL COMMENTS AND RECOMMENDATIONS**

None for the year ended December 31, 2018.

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*

**INDEPENDENT AUDITORS' REPORT**

The Board of Commissioners of  
Middlesex County Utilities Authority  
Sayreville, 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 as prescribed by the Division of Local Government Services, Department of Community Affairs, State of New Jersey (“Division”), the financial statements of the Middlesex County Utilities Authority (“Authority”), as of and for the year ended December 31, 2018, and the related notes to the basic financial statements, which collectively comprise the Authority’s basic financial statements, and have issued our report thereon dated August 5, 2019.

**Internal Control Over Financial Reporting**

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

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Authority’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 of 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* and the audit requirements as prescribed by the Division.

### **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 Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



WISS & COMPANY, LLP

August 5, 2019  
Livingston, New Jersey

Report on Compliance For Each Major Federal and State Program and  
Report on Internal Control Over Compliance Required by the Uniform Guidance and  
New Jersey OMB Circular 15-08

**INDEPENDENT AUDITORS' REPORT**

The Board of Commissioners of  
Middlesex County Utilities Authority  
Sayreville, New Jersey

**Report on Compliance for Each Major Federal and State Program**

We have audited the Middlesex County Utilities Authority's ("Authority") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* and the *New Jersey State Aid/Grant Compliance Supplement* that could have a direct and material effect on each of the Authority's major federal and state programs for the year ended December 31, 2018. The Authority's major federal and state programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

**Management's Responsibility**

Management is responsible for compliance with federal and state statutes, regulations, and the terms and conditions of its federal and state awards applicable to its federal and state programs.

**Auditors' Responsibility**

Our responsibility is to express an opinion on compliance for each of the Authority's major federal and state programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with 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 of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and New Jersey OMB Circular 15-08, *Single Audit Policy for Recipients of Federal Grants, State Grants and State Aid*. Those standards, the Uniform Guidance and New Jersey OMB Circular 15-08 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal and state program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal and state program. However, our audit does not provide a legal determination of the Authority's compliance.

### ***Opinion on Each Major Federal and State Program***

In our opinion, the Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal and state programs for the year ended December 31, 2018.

### **Report on Internal Control Over Compliance**

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal and state program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal and state program and to test and report on internal control over compliance in accordance with the Uniform Guidance and New Jersey OMB Circular 15-08, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

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

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

### **Purpose of this Report**

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance and New Jersey OMB Circular 15-08. Accordingly, this report is not suitable for any other purposes.



WISS & COMPANY, LLP

August 5, 2019  
Livingston, New Jersey

**Middlesex County Utilities Authority**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended December 31, 2018**

Federal Funding Department	Federal CFDA Number	Federal Award Identification Number	State Account Number	Total Award	Grant Period		Expenditures for the year ended December 31, 2018
					From	To	
U.S. Department of Homeland Security Federal Emergency Management Agency Pass-Through the New Jersey Department of Law & Public Safety - New Jersey State Police: Disaster Grants - Public Assistance	97.036	N/A	066-1200-100-A92	\$ 101,820,983	10/28/2012	12/31/2018	\$ 26,387,439
United States Environmental Protection Agency Pass-Through the State of New Jersey: Capitalization Grants for Clean Water State Revolving Funds	66.458	N/A	042-4860-711-009/010	15,342,111	5/26/2016	12/31/2018	<u>4,500,777</u>
Sub-total - Pass-Through Awards							<u>\$ 30,888,216</u>
Total Federal Financial Awards							<u><u>\$ 30,888,216</u></u>

*See accompanying notes to the schedules of expenditures of federal awards and state financial assistance.*

**Middlesex County Utilities Authority**  
**Schedule of Expenditures of State Financial Assistance**  
**Year Ended December 31, 2018**

State Grantor/Program Title	Grant or State Project Number	<u>Grant Period</u>		Total Award	Balance January 1, 2018	Expenditures for the year ended December 31, 2018	Cash Received
		From	To				
New Jersey Environmental Infrastructure Trust: NJ Clean Water SRF Capitalization Grant	042-4860-711-009/010	5/26/2016	12/31/2018	\$ 5,114,037	\$ -	\$ 1,500,259	\$ 1,500,259
Statewide Assistance Infrastructure Loans:							
Sayreville Pump Station	S340699-12	12/8/2016	6/30/2020	87,953,113	7,513,572	30,164,261	17,248,267
Edison Pump Station	S340699-13	6/29/2016	6/30/2019	35,208,623	4,969,285	10,136,270	9,035,627
Total State Financial Assistance					<u>\$ 12,482,857</u>	<u>\$ 41,800,790</u>	<u>\$ 27,784,153</u>

*See accompanying notes to the schedules of expenditures of federal awards and state financial assistance.*

**SUPPLEMENTARY INFORMATION RELATING TO**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND**  
**SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE**

## MIDDLESEX COUNTY UTILITIES AUTHORITY

### NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE YEAR ENDED DECEMBER 31, 2018

#### **Note 1 – Basis of Presentation:**

The accompanying schedules of expenditures of federal awards and state financial assistance include the activity of all expenditures of federal awards and state financial assistance programs of the Middlesex County Utilities Authority (the “Authority”). The Authority is defined in Note 1 to the financial statements. All federal awards and state financial assistance received directly from federal and state agencies, as well as federal awards and state financial assistance passed through other government agencies, are included on the schedules of expenditures of federal awards and state financial assistance.

#### **Note 2 – Basis of Accounting:**

The accompanying schedules of expenditures of federal awards and state financial assistance are presented using the basis of accounting as described in Note 1 to the Authority’s financial statements. The information in these schedules are presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and New Jersey OMB Circular 15-08, *Single Audit Policy for Recipients of Federal Grants, State Grants and State Aid*. Because the schedules present only a selected portion of the operations of the Authority, it is not intended to and does not present the financial position, changes in the financial position or cash flows of the Authority.

#### **Note 3 – Relationship to Financial Statements:**

Amounts reported in the accompanying schedules agree with amounts reported in the Authority’s financial statements.

#### **Note 4 – Relationship to Federal and State Financial Reports:**

Amounts reported in the accompanying schedules of expenditures of federal awards and state financial assistance agree with the amounts reported in the related federal and state financial reports, where required.

Expenditures incurred for Disaster Grants for Public Assistance are based upon project worksheets submitted to the Federal Emergency Management Agency. Several of the project worksheets are based upon estimated amounts and may change from preliminary estimates resulting in a reduction of funds to be received or funds due back to the grantor agency.

Expenditures incurred for NJ Clean Water SRF Capitalization Grant are based upon the New Jersey Environmental Infrastructure Trust’s (NJEIT) share of expenditures incurred for these projects. When expenditures are incurred, a requisition is submitted to the NJEIT for reimbursement for their allocable share of eligible costs.

Expenditures incurred for Statewide Assistance Infrastructure Loans are based upon expenditures incurred for these projects. When expenditures are incurred, a requisition is submitted to the NJEIT for reimbursement for eligible costs.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**

**NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND  
SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE  
YEAR ENDED DECEMBER 31, 2018**

**Note 5 – Indirect Costs:**

The Authority has elected not to use the 10 percent de minimis indirect cost rate allowed under the Uniform Guidance.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**YEAR ENDED DECEMBER 31, 2018**

**Section I - Summary of Auditor's Results**

**Financial Statements**

Type of report the auditor issued on whether the financial statements  
 Audited were prepared in accordance with GAAP:

Unmodified

Internal Control over financial reporting:

Material weakness(es) identified? \_\_\_\_\_ Yes   ✓   No

Significant deficiency(ies) identified? \_\_\_\_\_ Yes   ✓   None Reported

Noncompliance material to the financial  
 statements noted? \_\_\_\_\_ Yes   ✓   No

**Federal Awards**

Internal Control over major federal programs:

Material weakness(es) identified? \_\_\_\_\_ Yes   ✓   No

Significant deficiency(ies) identified? \_\_\_\_\_ Yes   ✓   None Reported

Type of auditors' report issued on compliance for major federal  
 programs:

Unmodified

Any audit findings disclosed that are required to be reported  
 in accordance with 2 CFR 200.516(a)? \_\_\_\_\_ Yes   ✓   No

Identification of major federal programs:

**CFDA Number(s)**

**Name of Federal Program or Cluster**

97.036

Disaster Grants – Public Assistance

Dollar threshold used to distinguish between type A and B programs: \_\_\_\_\_   \$926,646  

Auditee qualified as low-risk auditee?   ✓   Yes \_\_\_\_\_ No



**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**YEAR ENDED DECEMBER 31, 2018**

**Section II – Schedule of Financial Statement Findings**

No financial statement findings noted that are required to be reported under *Government Auditing Standards*.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**YEAR ENDED DECEMBER 31, 2018**

**Section III – Federal Award and State Financial Assistance Findings and Questioned Costs**

This section identifies the significant deficiencies, material weaknesses, and instances of noncompliance, including questioned costs, related to the audit of major federal and state programs, as required by 2 CFR 200.516(a) and New Jersey State Treasury Circular OMB 15-08, respectively.

**Federal Award Programs**

No compliance or internal control findings noted that are required to be reported in accordance with 2 CFR 200.516(a).

**State Financial Assistance Programs**

No compliance or internal control findings noted that are required to be reported in accordance with New Jersey Treasury Circular OMB 15-08.

**MIDDLESEX COUNTY UTILITIES AUTHORITY**  
**SUMMARY SCHEDULE OF PRIOR YEAR AUDIT FINDINGS**  
**YEAR ENDED DECEMBER 31, 2018**

SUMMARY OF PRIOR YEAR FINDINGS

No prior year findings were noted.