PASSAIC VALLEY SEWERAGE COMMISSION

FINANCIAL STATEMENTS

December 31, 2017

PASSAIC VALLEY SEWERAGE COMMISSION

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December 31, 2017

MERCADIEN, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT

To the Commissioners of
Passaic Valley Sewerage Commission

Report on the Financial Statements

We have audited the accompanying modified cash basis financial statements of the Passaic Valley Sewerage Commission (the "Commission"), which comprise the statement of assets, liabilities and reserves as of December 31, 2017, and the related statement of revenues, expenditures and changes in reserves for the year then ended, and the related notes to financial statements, which comprise the Commission'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 the modified cash basis of accounting as described in Note A; 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 opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

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Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles

As described on Note A of the financial statements, these financial statements are prepared on the modified cash basis, which is a basis of accounting other than accounting principles generally accepted in the United States of America.

The effects on the financial statements of the variances between the modified cash basis of accounting described in Note A and accounting principles generally accepted in the United States of America ("U.S. GAAP"), although not reasonably determinable, are presumed to be material.

Adverse Opinion on U.S. Generally Accepted Accounting Principles

In our opinion, because of the significance of the matter discussed in the "Basis for Adverse Opinion on U.S. GAAP" paragraph, the financial statements referred to above do not present fairly, in accordance with accounting principles generally accepted in the United States of America, the financial position of the Commission as of December 31, 2017, and the results of operations and changes in financial position for the year then ended.

Opinion on Modified Cash Basis of Accounting

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Commission as of December 31, 2017, and the results of operations and changes in financial position for the year then ended in accordance with the modified cash basis of accounting, as described in Note A.

Wm A Broudy

Warren A. Broudy, CPA, CGFM, PSA, CGMA
Registered Municipal Accountant License No. 554

MERCADIEN, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

July 9, 2018

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF ASSETS, LIABILITIES AND RESERVES
December 31, 2017

	General Fund	Bond Reserve Fund	Insurance Trust Fund	Repair, Replacement & Improvement Fund	Capital Fund	Bond Financed Projects Fund	Wastewater Treatment Trust Fund	Doremus Site Remediation Escrow Fund	Total
Assets									
Cash and cash equivalents	$ 74,496,912	$ 3,571,308	$ 5,094,277	$ 2,053,668	$ 7,371,864	$ 26,099,346	$ -	$ 418,951	$ 119,106,326
Investments	29,994,531	16,410,897							46,405,428
Receivables									
Interfund receivables				9,366,760	2,723,693	141,553	8,958,697		21,190,703
Accounts receivable, net of allowance $454,891	5,306,444			359,164,523			30,834,796		395,305,763
Inventory	8,658,971								8,658,971
Property, plant and equipment									
Construction and acquisition cost				80,091,198					80,091,198
Buildings	252,159,560								252,159,560
Machinery and equipment	97,786,994								97,786,994
Improvements other than building	47,029,058				5,616,239	165,136,778	143,845,293		361,627,368
Projects authorized and in process	-			21,360,276	1,029,150	6,385,688	11,389,159		40,164,273
Other assets									
Amounts to be provided for bond and loan retirement	-					147,850,000	91,409,266		239,259,266
Total Assets	$ 515,432,470	$ 19,982,205	$ 5,094,277	$ 472,036,425	$ 16,740,946	$ 345,613,365	$ 286,437,211	$ 418,951	$ 1,661,755,850
Liabilities									
Loans payable-current	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,490,769	$ -	$ 10,490,769
Bonds payable-current						13,245,000			13,245,000
Notes Payable							15,249,456		15,249,456
Accounts payable	2,495,550				12,200				2,507,750
Accrued expenses	11,797,637			1,053,327	75,895		465,504		13,392,363
Payroll deductions	825,682								825,682
Escrow deposits	334,191							416,826	751,017
Interfund payable	9,067,548			8,949,310		308,599	2,865,246		21,190,703
Total Current Liabilities	24,520,608	-	-	10,002,637	88,095	13,553,599	29,070,975	416,826	77,652,740
Loans payable-noncurrent	-	-	-	-	-	-	80,918,497	-	80,918,497
Bonds payable-noncurrent	-	-	-	-	-	134,605,000	-	-	134,605,000
Total noncurrent liabilities	-	-	-	-	-	134,605,000	80,918,497	-	215,523,497
Total Liabilities	24,520,608	-	-	10,002,637	88,095	148,158,599	109,989,472	416,826	293,176,237
Reserves									
Insurance trust	-	-	5,094,277	-	-	-	-	-	5,094,277
Investment in inventory	8,658,971	-	-	-	-	-	-	-	8,658,971
Investment in fixed assets	396,975,612	-	-	-	-	-	-	-	396,975,612
Construction and acquisition	-	-	-	80,091,198	5,616,239	165,136,778	143,845,293	-	394,689,508
Projects authorized	-	-	-	21,360,276	1,029,150	6,385,688	11,389,159	-	40,164,273
Debt service	-	19,982,205	-	-	-	-	-	-	19,982,205
Appropriated projects	-	-	-	360,582,314	10,007,462	25,932,300	21,213,287	2,125	417,737,488
Rate stabilization	85,277,279	-	-	-	-	-	-	-	85,277,279
Total Reserves	490,911,862	19,982,205	5,094,277	462,033,788	16,652,851	197,454,766	176,447,739	2,125	1,368,579,613
Total Liabilities and Reserves	$ 515,432,470	$ 19,982,205	$ 5,094,277	$ 472,036,425	$ 16,740,946	$ 345,613,365	$ 286,437,211	$ 418,951	$ 1,661,755,850

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN RESERVES
Year Ended December 31, 2017

	General Fund	Bond Reserve Fund	Insurance Trust Fund	Repair, Replacement & Improvement Fund	Capital Fund	Bond Financed Projects Fund	Wastewater Treatment Trust Fund	Doremus Site Remediation Escrow Fund	Total
Revenues									
User charges billed	$ 134,319,161	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 134,319,161
Sludge fees	31,188,969							-	31,188,969
Investment gain (loss), net	531,288	6,222				182,440		-	719,950
Miscellaneous	14,568,512		6,000	1,461,173				-	16,035,685
Total	180,607,930	6,222	6,000	1,461,173	-	182,440	-	-	182,263,765
Expenditures									
Salaries	48,946,393							-	48,946,393
Payroll taxes	3,547,970							-	3,547,970
Employee benefits	14,550,470							-	14,550,470
Pension contribution	5,258,968							-	5,258,968
Supplies and postage	1,793,654							-	1,793,654
Replacement parts	7,110,224							-	7,110,224
Materials	5,522,546							-	5,522,546
Utilities	20,502,380							-	20,502,380
Rentals	206,886							-	206,886
Insurance	1,254,632							-	1,254,632
Equipment	5,408,124							-	5,408,124
Outside services	7,024,614			275,827	284,942			-	7,585,383
Professional fees	875,526							-	875,526
Permitting	873,422							-	873,422
Sludge disposal	6,079,890							-	6,079,890
Sundry	799,434							-	799,434
Advertising	60,537							-	60,537
Real estate taxes (in lieu)	1,106,849							-	1,106,849
Bad debt expense	99,047							-	99,047
Project expenditures				21,218,322	1,029,150	6,385,688	11,389,158	-	40,022,318
Bond issuance costs									-
Contingency	385,382							-	385,382
Subtotal	131,406,948	-	-	21,494,149	1,314,092	6,385,688	11,389,158	-	171,990,035
Bond debt service									
Principal	22,914,170							-	22,914,170
Interest	8,136,903							-	8,136,903
Total expenditures	162,458,021	-	-	21,494,149	1,314,092	6,385,688	11,389,158	-	203,041,108
Excess of revenues over (under) expenditures	18,149,909	6,222	6,000	(20,032,976)	(1,314,092)	(6,203,248)	(11,389,158)	-	(20,777,343)
Other Financing Sources/(Uses)									-
Payment to refunding escrow agent	-	-	-	-	-		(1,320,822)	-	(1,320,822)
Interfund transfers	(15,100,000)	8,728	-	7,600,000	7,500,000	(8,728)	-	-	-
Excess of revenues over (under) expenditures and other financing sources/uses	3,049,909	14,950	6,000	(12,432,976)	6,185,908	(6,211,976)	(12,709,980)	-	(22,098,165)
								-	
Reserves, beginning of year	82,227,370	19,967,255	5,088,277	373,015,290	3,821,554	32,144,276	33,923,267	2,125	550,189,414
Reserves, end of year	85,277,279	19,982,205	5,094,277	360,582,314	10,007,462	25,932,300	21,213,287	2,125	528,091,249
Investment in inventory	8,658,971	-	-	-	-	-	-	-	8,658,971
Investment in construction and acquisition	-	-	-	80,091,198	5,616,239	165,136,778	143,845,293	-	394,689,508
Investment in projects authorized	-	-	-	21,360,276	1,029,150	6,385,688	11,389,159	-	40,164,273
Investment in fixed assets	396,975,612	-	-	-	-	-	-	-	396,975,612
Total reserves	$ 490,911,862	$ 19,982,205	$ 5,094,277	$ 462,033,788	$ 16,652,851	$ 197,454,766	$ 176,447,739	$ 2,125	$ 1,368,579,613

See notes to financial statements.

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Organization

In 1902, by a special Act of the New Jersey State Legislature, the Passaic Valley Sewerage Commission (the "Commission") was formed as an Agency of the State of New Jersey to reduce pollution of the Passaic River and its tributaries. The Commission is one of the oldest and largest, in terms of operational capability, regional sewerage commissions in the United States and is directed by a Board of Commissioners ("Commissioners") appointed by the Governor and confirmed by the State of New Jersey Senate.

In order to protect and preserve local streams and rivers from water pollution, the Commission operates one of the United States largest treatment plants for the wastewaters of northern New Jersey. With many expansions and upgrading to secondary treatment, the facility has been striving since the beginning of its operations in 1924 to improve local water quality in accordance with federal and state water quality legislation.

Reporting Entity

The Commission establishes funds to account for significant activities within its jurisdiction. Specific funds are maintained at the direction of the Commission and are included in the financial statements.

Fund Accounting

The funds of the Commission are maintained in accordance with the principles of fund accounting to ensure observance of limitations and restrictions on the resources available. The principles of fund accounting require that resources be classified for accounting and reporting purposes into funds or account groups in accordance with activities or objectives specified for the resources. Each fund is a separate accounting entity with a self-balancing set of accounts. An account group, on the other hand, is a financial reporting device designed to provide accountability for certain assets and liabilities that are not recorded in the funds because they do not directly affect net expendable available financial resources.

The following are the various funds of the Commission:

<u>General Fund</u>

The General Fund accounts for the cost of providing sewerage collection and treatment services to its member municipalities. Services provided are financed primarily through user charges.

<u>Bond Reserve Fund</u>

In addition to the annual debt service payments made by the General Fund, the Commission has further secured the payment of its serial and term bonds by covenanting and establishing a Bond Reserve Fund. The amount maintained in this fund is equal to the maximum annual interest and principal payments required in any future year through the year 2036, the maturity date of the Series I Bonds.

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Accounting (Continued)

Insurance Trust Fund

The Insurance Trust Fund represents amounts set aside for possible damages resulting from liability claims.

Repair, Replacement and Improvement Fund

The Repair, Replacement and Improvement Fund represents amounts set aside for non-operating expenditures for equipment, accessories and appurtenances of the sewerage treatment plant, as well as expenditures related to Federal Emergency Management Agency ("FEMA") funding.

Capital Fund

The Capital Fund represents expenditures for permanent improvements to the sewerage treatment plant.

Bond Financed Projects Fund

The Bond Financed Projects Fund was established to account for the construction and/or acquisition of certain capital assets, principally financed by the proceeds of Revenue Bonds issued by the Passaic Valley Sewerage Commission. As of December 31, 2017, the series F, G, H and I bonds remain outstanding in the aggregate principal amount of $147,850,000, the liability of which is presented in the Bond Financed Projects Fund.

Wastewater Treatment Trust Fund

The Wastewater Treatment Trust Fund was established for the purpose of funding the rehabilitation, renovation and improvement of the existing treatment facilities of the Commission. Funding was provided by the State of New Jersey, the New Jersey Wastewater Treatment Trust Fund, and the New Jersey Environmental Infrastructure Trust.

Doremus Site Remediation Escrow Fund

The Doremus Site Remediation Escrow Fund was established to set aside funds for future environmental remediation of property adjacent to a site acquired by the Commission.

Basis of Accounting

The accounting policies of the Commission conform to a modified cash basis, which constitute a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America ("U.S. GAAP"). These principles and practices are designed primarily for determining compliance with legal and budgetary restrictions as a means of reporting on the stewardship of public officials with respect to public funds.

Had the Commission's financial statements been prepared under U.S. GAAP,

- federal and state grant revenues would have been recognized when expended,
- fixed asset expenditures made during each year would be capitalized and depreciation expense would be recorded,
- pension plan benefit expense and resultant net pension liability would be recognized on the accrual basis,
- principal payments on debt would not be recorded as an expenditure,
- the recording of certain reserves and related assets would not be recorded,
- Investments would be stated at fair value, and
- There would be no investment in inventory reserve.

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Cash and Cash Equivalents

The Commission considers all highly liquid investments, with maturities of ninety days or less from the date of purchase, to be cash equivalents.

Investments

Investments, including certificate of deposits not issued and held by a bank, are stated at cost in the statement of assets, liabilities and reserves. All interest is reported in the statement of revenues, expenditures and changes in reserves as an increase in reserves.

Revenue Recognition

User charges are recognized when billed based on an annual rate, which is in accordance with the Act that created the Commission. This Act provides that each of the contracting municipalities or other users of the system reimburse the Commission annually for its proportionate share of the cost and expense of maintenance, repair and operation, including debt service, of the system.

Grant revenues are recognized when awarded and FEMA revenue is recognized when the project funding is obligated by the federal government and spent by the Commission.

Sludge fee revenue is recognized when waste is discharged at the facility and billed based on a contracted rate.

Use of Estimates

The financial statements are prepared on a modified cash basis of accounting, which is a comprehensive basis of accounting other than U.S. GAAP which requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Accounts Receivable

Accounts receivable consists primarily of user charges and sludge fees. The Commission charges an allowance for estimated uncollectible amounts based on past experience and an analysis of accounts receivable collectability. Accounts deemed uncollectible are charged to the allowance in the years they are deemed uncollectible.

Inventory

Inventory is made up of parts and supplies for the repair and maintenance of the facility. The Commission values its inventories at cost, using the first-in, first-out method.

Fixed Assets

The Commission records capital additions in the year of acquisition. The balance of fixed assets recorded in the general fund reflects the original construction costs of the system; no depreciation expense is recorded.

Compensated Absences

Employees of the Commission are entitled to paid vacation, sick days and personal days off, depending on length of service and other factors. The Commission has recorded the liability for accumulated vacation pay, sick leave and compensatory absences for all employees in accrued expenses.

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Serial Bonds Payable

Debt service payments are made by the General Fund. Serial Bonds payable are carried in the Bond Financed Projects Funds. Therefore, as payments are made to reduce debt, an adjustment is made in the corresponding fund.

Reserves

Reserves generally represent fund equity restricted for the stated purposes. Authorized project reserves represent fund equity that has been pledged to future project costs. Reserve for the Insurance Trust Fund represents amounts set aside for possible damages resulting from liability claims.

The Reserve for Rate Stabilization, which is included in the General Fund, was established in 1996 by the Commissioners to enable the Commission to stabilize user charges to its member municipalities in future years. Funds from the Reserve for Rate Stabilization are expended as needed and represent a revenue source to offset monies needed to meet the current year's budget. Increases and decreases to this Reserve for Rate Stabilization are affected by companies leaving and entering the sewerage treatment system during a measurement year in addition to any unexpended funds and revenues from the General Fund remaining at year end.

Subsequent Event

In January 2018, the Commission closed on several short-term construction loan program ("CLP") financings with the New Jersey Environmental Infrastructure Trust. The CLP financing program provides short-term, no-interest loans to eligible participants. Upon substantial completion of the projects, the short-term loans will be refunded and permanently financed through long-term loans issued by the New Jersey Environmental Infrastructure Financing Program. The projects financed are as follows:

Project Number	Project Description	Amount
S340689-30	Sump Pump & Generator	$ 2,478,251
S340689-32	Newark Bay Outfall Decholination	7,772,364
S340689-38	Rehabilitation of Final Clarifiers	19,618,381
S340689-39	HTPSR Gravity Line Coating	3,776,639
S340689-40	Electrical Switchgear and MCCs	13,217,254
S345200-02	Asset Management Plan	649,880
		$ 47,512,769

B. CASH AND CASH EQUIVALENTS

The carrying amount of the Commission's cash and cash equivalents consisted mainly of demand and money market accounts. The difference between the bank balance and the book balance is due primarily to the timing of deposits and outstanding checks.

Cash and cash equivalents are substantially restricted under the terms of the Commission's bond resolutions for the payment of bond principal and interest expense and the extension of project loans. The bond resolutions limit investments to direct obligations of the United States of America or other obligations in which payments and interest are unconditionally guaranteed by the United States of America.

Deposits

Custodial Credit Risk- This is the risk that in the event of a bank failure, the Commission will not be able to recover the value of its deposits that are in the possession of an outside party. The deposits in the JP Morgan bank accounts were covered by the Federal Deposit Insurance Company, as well as a collateral pledge from JP Morgan, which was greater than the deposit balance at December 31, 2017. The Bank of New York money market funds are invested in the Goldman Sachs Financial Square Treasury Obligation Fund, which is comprised of treasury securities backed by the U.S. Government and a Federal Home Loan Bank Discount Note.

Concentration of Credit Risk – This is the risk associated with the amount of investments the Commission has with any one issuer that exceeds five percent or more of its total investments. Investments issued or explicitly guaranteed by the U.S. government are excluded from this requirement.

Credit Risk – This is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. In general, the Commission does not have an investment policy regarding credit risk, however, the Commission had no investments that were subject to credit risks as of December 31, 2017.

Interest Rate Risk – This is the risk that changes in interest rates will adversely affect the fair value of an investment. The Commission does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from interest rate fluctuations. However, its practice is to hold investments to maturity.

The amounts deposited in these accounts at December 31, 2017, are as follows:

	2017	
	Book Balance	Bank Balance
JP Morgan Bank	$ 54,278,098	$ 54,960,717
ConnectOne Bank	5,011,671	5,011,671
Lakeland Bank	20	20
Santander Bank	30,145,883	30,145,883
Bank of New York	29,670,654	29,670,654
	$ 119,106,326	$ 119,788,945

C. INVESTMENTS

Investments at December 31, 2017, are as follows:

	Cost
Certificate of deposit	$ 10,000,000
U.S. Treasury Bond	16,410,897
U.S. Treasury Notes	19,994,531
	$ 46,405,428

D. FORWARD DELIVERY AGREEMENT

On September 11, 1996, the Commission entered into a Forward Delivery Agreement (the "Agreement") with First Union Bank, now Wells Fargo Bank (the "Bank") related to the Series D Bonds, subsequently refunded by Series F Bonds. The Agreement stipulated that certain proceeds from the bond issuance would be deposited with the Bank in a debt service reserve fund (the "Fund"). The Commission was paid an upfront fee in exchange for interest earnings on the Fund until the year 2022. Under the terms of the Agreement, the Commission is precluded from prematurely redeeming, defeasing or refunding the Series G, F or E Bonds unless it has sufficient funds to repurchase the Bank's interest in the Agreement at the fair value at the date of termination. As of December 31, 2017, the termination value of the Agreement was $1,718,918.

E. AMOUNTS TO BE PROVIDED FOR LOAN AND BOND RETIREMENT

The Commission has established a mechanism to record future amounts to be provided by member municipalities to fund retirement of loan and serial bond principal. These amounts are presented in the statement of assets, liabilities and reserves and correspond to the outstanding balances payable for serial bonds and loans.

F. BONDS PAYABLE, LOANS PAYABLE AND NOTES PAYABLE

Pursuant to an amendment to Title 58, Chapter 14 of the New Jersey Revised Statutes, the Commission was granted the authority to issue bonds. The Authority also has various loans through the New Jersey Environmental Infrastructure Trust financing program. Both the bonds and loans are issued to fund various capital improvements.

Year, Series/Title	Original Issue Amount	Interest Rate Range	Maturity Dates	Outstanding December 31, 2016	Additions	Reductions	Outstanding December 31, 2017	Due within One Year
Bonds								
2003, Series F	205,205,000	2.50%-5.00%	2032	$ 37,060,000	$ -	$ -	$ 37,060,000	$ -
2010, Series G	29,950,000	5.62%-5.75%	2022	29,950,000	-	-	29,950,000	3,210,000
2016, Series H	74,795,000	3.00%-5.00%	2025	62,920,000	-	11,645,000	51,275,000	9,010,000
2016, Series I	30,540,000	2.25%-5.00%	2036	30,540,000	-	975,000	29,565,000	1,025,000
Total bonds payable				160,470,000	-	12,620,000	147,850,000	13,245,000
Loans								
1998 Trust and Fund Loan	8,865,000	4.00%-4.50%	2018	647,234	-	340,000	307,234	307,234
1999 Trust and Fund Loan	128,925,000	4.75%-5.70%	2019	5,149,700	-	1,663,860	3,485,840	1,716,499
2006 Trust and Fund Loan	38,894,500	4.00%-5.00%	2026	20,580,526	-	2,231,806	18,348,720	2,256,974
2007 Trust and Fund Loan	24,926,867	3.40%-5.00%	2022	4,183,018	-	1,485,321	2,697,697	1,336,743
2010A ARRA Trust and Fund Loan	12,542,621	3.00%-5.00%	2029	9,394,949	-	822,534	8,572,415	666,534
2010 A Trust and Fund Loan	31,981,707	3.00%-5.00%	2029	23,702,066	-	3,072,693	20,629,373	1,725,928
2010 B Trust and Fund Loan	19,662,500	5.00%	2030	12,492,305	-	990,972	11,501,333	1,010,972
2014 Trust and Fund Loan	26,791,177	3.00%-5.00%	2032	24,455,254	-	1,487,329	22,967,925	1,330,478
2016 Trust and Fund Loan	2,975,000	3.00%-5.00%	2036	2,975,000	-	76,271	2,898,729	139,407
Total loans payable				103,580,052	-	12,170,786	91,409,266	10,490,769
Total bonds and loans payable				$ 264,050,052	$ -	$ 24,790,786	$ 239,259,266	$ 23,735,769

F. BONDS PAYABLE, LOANS PAYABLE AND NOTES PAYABLE (CONTINUED)

Summary of Future Maturities

Future maturities of bonds and loans payable are as follows:

	Principal	Interest	Total
2018	$ 23,735,769	$ 7,598,814	$ 31,334,583
2019	23,350,073	6,740,995	30,091,068
2020	22,217,377	5,858,321	28,075,698
2021	23,101,298	4,979,372	28,080,670
2022	23,788,746	4,036,004	27,824,750
2023-2027	63,218,036	11,694,018	74,912,054
2028-2032	49,779,585	4,526,820	54,306,405
2033-2036	10,068,382	641,213	10,709,595
	$ 239,259,266	$ 46,075,557	$ 285,334,823

The Commission has a note payable through the New Jersey Environmental Infrastructure construction loan program in the amount of $15,249,456 as of December 31, 2017. The note will be repaid upon the issuance of future bonds.

G. SELF-INSURANCE

The Commission has established a reserve for self-insurance for general liability coverage to pay for claims up to their retention amount of $500,000. At December 31, 2017, the reserve balance was $5,094,277. There was $6,000 in legal proceedings increasing the reserve for self-insurance for the year ended December 31, 2017.

H. PENSION PLAN

Description and Benefits

The Commission contributes to a cost-sharing multiple-employer defined benefit pension plan administered by Public Employees' Retirement System ("PERS") of New Jersey, which is part of the Division of Pensions in the Department of the Treasury, State of New Jersey. The state-administered funds were established by an Act of the State Legislature that assigns the authority to establish and amend benefit provisions to the plan's board of trustees. PERS issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to PERS and is also available on the State of New Jersey website.

H. PENSION PLAN (CONTINUED)

Plan Description and Benefits

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

The following represents the membership tiers for PERS:

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

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

Contributions

The local employers' contribution amounts are based on an actuarially determined rate, which includes the normal cost and unfunded accrued liability. Chapter 19, P.L. 2009 provided an option for local employers of PERS to contribute 50% of the normal and accrued liability contribution amounts certified for payments due in State fiscal year 2009. Such employers will be credited with the full payment and any such amounts will not be included in their unfunded liability. The actuaries will determine the unfunded liability of those retirement systems, by employer, for the reduced normal and accrued liability contributions provided under this law. This unfunded liability will be paid by the employer in level annual payments over a period of 15 years beginning with the payments due in the fiscal year ended June 30, 2012, and will be adjusted by the rate of return on the actuarial value of assets. The Commission did not elect to defer any payments pursuant to Chapter 19, P.L. 2009.

H. PENSION PLAN (CONTINUED)

Schedule of Commission's Contributions

PERS - Last 10 Fiscal Years

	2017	2016	2015	2014
Contractually required contribution	$ 5,254,877.00	$ 4,888,391.00	$ 4,631,152.00	$ 4,326,850.00
Contributions in relation to the contractually required contribution	5,254,877.00	4,888,391.00	4,631,152.00	4,326,850.00
Commission's covered employee payroll	44,856,931.00	45,676,296.95	43,074,009.00	40,658,469.73
Contributions as a % of covered employee payroll	11.71%	10.70%	10.75%	10.64%

Pension Liabilities and Expense

At December 31, 2017, the Commission had a liability of $135,289,942 for its proportionate share of the net pension liability in PERS. The net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. This liability is not required to be recorded based on the Commission's basis of accounting. The Commission's proportion of the net pension liability was based on a projection of the Commission's long-term share of contributions to the pension plan relative to the projected contributions of all participating members of the plan, actuarial determined. At December 31, 2017, the Commission's proportion was 0.5811822663%.

Schedule of Commission's Proportionate Share of Net Pension Liability

PERS - Last 10 Fiscal Years

	2017	2016	2015	2014
Commission's proportion of the net pension liability	0.5811822663%	0.55307035060%	0.53441689360%	0.5271575730%
Commission's proportionate share of net pension liability	$ 135,289,942.00	$163,803,574.00	$119,965,884.00	$103,497,093.00
Commission's covered-employee payroll	44,856,931.00	45,676,296.95	43,074,009.00	40,658,469.73
Commission's proportionate share of net pension liability as a % of payroll	301.60%	358.62%	278.51%	254.55%
Total pension liability	260,674,003.32	273,629,886.49	230,384,878.48	205,968,216.08
Plan fiduciary net position	125,384,061.41	109,826,312.04	110,418,994.95	107,269,900.64
Plan fiduciary net position as a % of total pension liability	48.10%	40.14%	47.93%	52.08%

In accordance with the Governmental Accounting Standards Board, the Commission is required to present ten years of detail in the above Schedule of Commission's Contributions and Schedule of Commission's Proportionate Share of Net Pension Liability, however, only three years of data are available at this time.

Actuarial Assumptions

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

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

H. PENSION PLAN (CONTINUED)

Components of Net Pension Liability

The components of the collective net pension liability of the participating employers as of June 30, 2017, were as follows:

	Local
Total pension liability	$ 44,852,367,051
Plan fiduciary net position	21,573,965,463
Net pension liability	$ 23,278,401,588

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

The actuarial assumptions used in the July 1, 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.

In accordance with State statute, the long-term expected rate of return on plan investments (7.00% at June 30, 2017) is determined by the State Treasurer, after consultation with the Directors of the Division of Investment and Division of Pensions and Benefits, the board of trustees and the actuaries. The long-term expected rate of return was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in PERS's target asset allocation as of June 30, 2017, are summarized in the following table:

H. PENSION PLAN (CONTINUED)

2017		
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Absolute return/risk mitigation	5.00%	5.51%
Cash equivalents	5.50%	1.00%
U.S. Treasuries	3.00%	1.87%
Investment grade credit	10.00%	3.78%
Public 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 estate	2.50%	11.83%
Equity related to 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%

Discount Rate

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.

H. PENSION PLAN (CONTINUED)

Sensitivity of the Collective Net Pension Liability to Changes in the Discount Rate

The following presents the collective net pension liability of all participating employers as of June 30, 2017, calculated using the discount rate as disclosed above as well as what the collective net pension liability would be if it was calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current rate:

	At 1% decrease (4.00%)	At current discount rate (5.00%)	At 1% increase (6.00%)
Local	28,878,437,027	23,278,401,588	18,612,878,069

Amounts reported as deferred outflows of resources and deferred inflows of resources (excluding employer specific amounts) related to pensions will be recognized in pension expense as follows:

	Local
Year ending June 30:	
2018	$ 547,996,144
2019	826,939,464
2020	501,083,041
2021	(666,441,734)
2022	(485,747,054)
Total	$ 723,829,861

Changes in Proportion

The previous amounts do not include employer specific deferred outflows of resources and deferred inflows of resources related to changes in proportion. These amounts should be recognized (amortized) by each employer over the average of the expected remaining service lives of all plan members, which is 5.48, 5.57, 5.72 and 6.44 years for the 2017, 2016, 2015 and 2014 amounts, respectively.

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS

The Commission participates in a cost sharing multiple-employer defined post-retirement benefit plan (the “Plan”), which is administered by the State of New Jersey. The Plan provides continued health care benefits to employees retiring after twenty-five years of service. Benefits, contributions, funding and the manner of administration are determined by the State of New Jersey Legislature. The Division of Pensions and Benefits charges the Commission for its contributions. The total number of retired participants eligible for benefits was 236, 236, 221 and 218 at December 31, 2017, 2016, 2015 and 2014, respectively.

The Commission's contribution to the Plan for the years ended December 31, 2017, 2016, 2015 and 2014 was $4,406,645, $3,931,605, $3,637,107 and $3,513,470, respectively.

Please refer to the State website, www.state.nj.us for more information regarding the Plan. The Plan’s financial report may be obtained by writing to the State of New Jersey, Department of Treasury, Division of Pensions and Benefits, P.O. Box 295, Trenton, New Jersey 08625-0295.

J. CONCENTRATION OF RISK AND UNCERTAINTIES

For the year ended December 31, 2017, the Commission received approximately 45% of its total user charges from two customers, City of Newark 29% and City of Jersey City 16%.

K. UTILITY PURCHASE COMMITMENT

The Commission has entered into two futures contracts for electricity and natural gas in order to hedge energy costs. The contracts are for a term of thirty-six months, beginning January 2018, and will expire December 31, 2020.

L. COLLECTIVE BARGAINING AGREEMENTS

The Commission is a party in four (4) separate collective bargaining agreements covering various employees at the Commission. They are as follows:

- Local 1158 I.B.E.W.- Blue Collar covering January 1, 2014 – December 31, 2017
- Local 1158 I.B.E.W.- White Collar covering January 1, 2015 – December 31, 2017
- Supervisors Group – PVSC covering January 1, 2016 – December 31, 2017
- Professional Group- PVSC covering January 1, 2015 – December 31, 2017

The Commission has entered negotiations for contract renewals with each of its bargaining units during 2017, which are continuing into 2018. A memorandum of understanding was approved with each of the I.B.E.W. groups above during May 2018.

M. LITIGATION

The Commission is involved in various litigation and claims arising out of its operations. While the ultimate results of these matters cannot be predicted with certainty, management of the Commission expects that the ultimate resolution of these matters will not have a material adverse effect on their financial position or results of operations.

N. FEMA FUNDING

The Commission is involved in discussions with FEMA to determine eligible recovery costs for substantial damage incurred by the Commission during the Superstorm Sandy event in October of 2012. During 2017, the Commission received $14,836,479 in reimbursements from the State of New Jersey for recovery costs under FEMA, which were included in federal/state grants and loans receivable in the repair, replacement and improvement fund. All costs not covered by insurance or FEMA will be self-funded.

O. ROUNDING

Some amounts in the financial statements may have dollar differences due to rounding.