

PASSAIC VALLEY SEWERAGE COMMISSION

FINANCIAL STATEMENTS

December 31, 2018

PASSAIC VALLEY SEWERAGE COMMISSION

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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"), as of and for the year ended December 31, 2018, 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

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, 2018, 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, 2018, 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.

Emphasis of Matter

As discussed in Note I to the financial statements, in 2018 the Commission implemented new accounting guidance Governmental Accounting Standards Board ("GASB") Statement No. 75 - Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Our opinion is not modified with respect to this matter.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 12, 2019, on our consideration of the Commission'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 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 Commission's internal control over financial reporting and compliance.



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

MERCADIEN, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

September 12, 2019

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF ASSETS, LIABILITIES AND RESERVES

December 31, 2018

	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	\$ 103,757,366	\$ 3,611,035	\$ 2,994,277	\$ 2,836,922	\$ 3,642,355	\$ 20,428,741	\$ -	\$ 342,551	\$ 137,613,248
Investments	-	16,411,000	-	-	-	-	-	-	16,411,000
Receivables									
Interfund receivables	268,732	-	2,000,000	2,256,413	11,711,493	141,553	-	-	16,378,191
Accounts receivable, net of allowance \$576,438	5,092,935	-	-	74,194	-	-	-	-	5,167,128
Federal/state grants and loans	-	-	-	352,269,491	-	-	66,902,258	-	419,171,749
Inventory	9,249,351	-	-	-	-	-	-	-	9,249,351
Property, plant and equipment									
Construction and acquisition cost	-	-	-	101,451,473	-	-	-	-	101,451,473
Buildings	252,159,560	-	-	-	-	-	-	-	252,159,560
Machinery and equipment	97,786,994	-	-	-	-	-	-	-	97,786,994
Improvements other than building	47,029,058	-	-	-	6,645,390	171,522,466	156,300,740	-	381,497,654
Projects authorized and in process	-	-	-	18,850,676	3,673,664	6,040,477	18,940,048	-	47,504,865
Other assets									
Amounts to be provided for bond, loan and note retirement	-	-	-	-	-	134,605,000	143,669,128	-	278,274,128
Total Assets	\$ 515,343,996	\$ 20,022,035	\$ 4,994,277	\$ 477,739,169	\$ 25,672,902	\$ 332,738,237	\$ 385,812,173	\$ 342,551	\$ 1,762,665,341
Liabilities									
Loans payable-current	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,448,208	\$ -	\$ 9,448,208
Bonds payable-current	-	-	-	-	-	13,925,000	-	-	13,925,000
Notes Payable	-	-	-	-	-	-	61,843,150	-	61,843,150
Accounts payable	4,441,580	-	-	768,101	-	-	114,476	-	5,324,157
Accrued expenses	9,209,660	-	-	-	-	-	-	-	9,209,660
Payroll deductions	1,102,943	-	-	-	-	-	-	-	1,102,943
Escrow deposits	334,191	-	-	-	-	-	-	340,426	674,617
Interfund payable	11,608,919	-	-	-	-	299,211	4,470,061	-	16,378,191
Total Current Liabilities	26,697,292	-	-	768,101	-	14,224,211	75,875,895	340,426	117,905,926
Loans payable-noncurrent	-	-	-	-	-	-	72,377,770	-	72,377,770
Bonds payable-noncurrent	-	-	-	-	-	120,680,000	-	-	120,680,000
Total noncurrent liabilities	-	-	-	-	-	120,680,000	72,377,770	-	193,057,770
Total Liabilities	26,697,292	-	-	768,101	-	134,904,211	148,253,665	340,426	310,963,695
Reserves									
Insurance trust	-	-	4,994,277	-	-	-	-	-	4,994,277
Investment in inventory	9,249,351	-	-	-	-	-	-	-	9,249,351
Investment in fixed assets	396,975,612	-	-	-	-	-	-	-	396,975,612
Construction and acquisition	-	-	-	101,451,473	6,645,390	171,522,466	156,300,740	-	435,920,070
Projects authorized	-	-	-	18,850,676	3,673,664	6,040,477	18,940,048	-	47,504,865
Debt service	-	20,022,035	-	-	-	-	-	-	20,022,035
Appropriated projects	-	-	-	356,668,919	15,353,848	20,271,083	62,317,720	2,125	454,613,694
Rate stabilization	82,421,741	-	-	-	-	-	-	-	82,421,741
Total Reserves	488,646,704	20,022,035	4,994,277	476,971,068	25,672,902	197,834,025	237,558,509	2,125	1,451,701,646
Total Liabilities and Reserves	\$ 515,343,996	\$ 20,022,035	\$ 4,994,277	\$ 477,739,169	\$ 25,672,902	\$ 332,738,237	\$ 385,812,173	\$ 342,551	\$ 1,762,665,341

See notes to financial statements.

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN RESERVES Year Ended December 31, 2018

	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	\$ 136,492,623	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,492,623
Sludge fees	33,529,041	-	-	-	-	-	-	-	33,529,041
Investment gain (loss), net	1,433,983	39,830	-	-	-	379,260	-	-	1,853,072
Miscellaneous	9,470,275	-	-	282,703	-	-	-	-	9,752,977
Federal/state grants and loans	99,274	-	-	8,692,808	-	-	47,120,403	-	55,912,485
Total	181,025,197	39,830	-	8,975,511	-	379,260	47,120,403	-	237,540,199
Expenditures									
Salaries	51,150,121	-	-	-	-	-	-	-	51,150,121
Payroll taxes	3,692,784	-	-	-	-	-	-	-	3,692,784
Employee benefits	14,466,163	-	-	-	-	-	-	-	14,466,163
Pension contribution	5,823,254	-	-	-	-	-	-	-	5,823,254
Supplies and postage	1,901,383	-	-	-	-	-	-	-	1,901,383
Replacement parts	7,589,812	-	-	298,237	-	-	-	-	7,888,049
Materials	5,503,132	-	-	-	-	-	-	-	5,503,132
Utilities	18,885,590	-	-	-	-	-	-	-	18,885,590
Rentals	449,106	-	-	-	-	-	-	-	449,106
Insurance	1,935,669	-	100,000	-	-	-	-	-	2,035,669
Equipment	6,060,087	-	-	-	20,800	-	-	-	6,080,887
Outside services	7,374,985	-	-	739,992	-	-	-	-	8,114,976
Professional fees	783,010	-	-	-	-	-	-	-	783,010
Permitting	802,524	-	-	-	-	-	-	-	802,524
Sludge disposal	6,336,618	-	-	-	-	-	-	-	6,336,618
Sundry	2,469,913	-	-	-	-	-	-	-	2,469,913
Advertising	49,059	-	-	-	-	-	-	-	49,059
Real estate taxes (in lieu)	1,150,597	-	-	-	-	-	-	-	1,150,597
Bad debt expense	121,548	-	-	-	-	-	-	-	121,548
Project expenditures	-	-	-	18,850,676	3,632,815	6,040,477	20,006,335	-	48,530,303
Bond issuance costs	-	-	-	-	-	-	356,267	-	356,267
Subtotal	136,545,354	-	100,000	19,888,905	3,653,615	6,040,477	20,362,602	-	186,590,953
Bond debt service									
Principal	23,735,770	-	-	-	-	-	-	-	23,735,770
Interest	7,599,611	-	-	-	-	-	-	-	7,599,611
Total expenditures	167,880,735	-	100,000	19,888,905	3,653,615	6,040,477	20,362,602	-	217,926,333
Excess of revenues over (under) expenditures	13,144,462	39,830	(100,000)	(10,913,394)	(3,653,615)	(5,661,217)	26,757,800	-	19,613,866
Other Financing Sources/(Uses)									
Premium on bonds	-	-	-	-	-	-	16,251	-	16,251
Interfund transfers	(16,000,000)	-	-	7,000,000	9,000,000	-	-	-	-
Excess of revenues over (under) expenditures and other financing sources/uses	(2,855,538)	39,830	(100,000)	(3,913,394)	5,346,385	(5,661,217)	26,774,051	-	19,630,117
Reserves, beginning of year, unadjusted	85,277,279	19,982,205	5,094,277	360,582,313	10,007,463	25,932,300	21,213,288	2,125	528,091,250
Prior period adjustment (Note O)	-	-	-	-	-	-	14,330,381	-	14,330,381
Reserves, beginning of year, adjusted	85,277,279	19,982,205	5,094,277	360,582,313	10,007,463	25,932,300	35,543,669	2,125	542,421,631
Reserves, end of year	82,421,741	20,022,035	4,994,277	356,668,919	15,353,848	20,271,083	62,317,720	2,125	562,051,748
Investment in inventory	9,249,351	-	-	-	-	-	-	-	9,249,351
Investment in construction and acquisition	-	-	-	101,451,473	6,645,390	171,522,466	156,300,740	-	435,920,070
Investment in projects authorized	-	-	-	18,850,676	3,673,664	6,040,477	18,940,048	-	47,504,865
Investment in fixed assets	396,975,612	-	-	-	-	-	-	-	396,975,612
Total reserves	\$ 488,646,704	\$ 20,022,035	\$ 4,994,277	\$ 476,971,068	\$ 25,672,902	\$ 197,834,025	\$ 237,558,509	\$ 2,125	\$ 1,451,701,646

See notes to financial statements.

PASSAIC VALLEY SEWERAGE COMMISSION

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:

General Fund

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.

Bond Reserve Fund

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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, 2018, the series F, G, H and I bonds remain outstanding in the aggregate principal amount of \$134,605,000, 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 Infrastructure Bank ("NJIB").

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 and OPEB expense and resultant net pension and OPEB liabilities 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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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 building and machinery and equipment balances 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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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.

Rounding

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

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, 2018. 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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

B. CASH AND CASH EQUIVALENTS (CONTINUED)

Deposits (continued)

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, 2018.

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, 2018, are as follows:

	Book Balance	Bank Balance
JP Morgan Bank	\$ 58,381,558	\$ 58,570,465
ConnectOne Bank	10,131,180	10,131,180
Lakeland Bank	5,000,000	5,000,000
SB One Bank	5,000,000	5,024,018
Santander Bank	35,060,733	35,060,733
Bank of New York	24,039,777	24,039,777
	<u>\$ 137,613,248</u>	<u>\$ 137,826,173</u>

C. INVESTMENTS

Investments at December 31, 2018 are as follows:

	Cost
U.S. Agency Notes	<u>\$ 16,411,000</u>
	<u>\$ 16,411,000</u>

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, 2018, the termination value of the Agreement was \$1,497,910.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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 Commission also has various loans through the NJIB 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, 2017	Additions	Reductions	Outstanding December 31, 2018	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	-	3,210,000	26,740,000	3,680,000
2016, Series H	74,795,000	3.00%-5.00%	2025	51,275,000	-	9,010,000	42,265,000	9,170,000
2016, Series I	30,540,000	2.25%-5.00%	2036	29,565,000	-	1,025,000	28,540,000	1,075,000
Total bonds payable				147,850,000	-	13,245,000	134,605,000	13,925,000
Loans								
1998 Trust and Fund Loan	8,865,000	4.00%-4.50%	2018	307,234	-	307,234	-	-
1999 Trust and Fund Loan	128,925,000	4.75%-5.70%	2019	3,485,840	-	1,716,498	1,769,342	1,769,342
2006 Trust and Fund Loan	38,894,500	4.00%-5.00%	2026	18,348,720	-	2,256,974	16,091,746	2,280,458
2007 Trust and Fund Loan	24,926,867	3.40%-5.00%	2022	2,697,697	-	1,336,743	1,360,954	489,954
2010A ARRA Trust and Fund Loan	12,542,621	3.00%-5.00%	2029	8,572,415	-	666,534	7,905,881	669,534
2010 A Trust and Fund Loan	31,981,707	3.00%-5.00%	2029	20,629,373	-	1,725,928	18,903,445	1,704,928
2010 B Trust and Fund Loan	19,662,500	5.00%	2030	11,501,333	-	1,010,972	10,490,361	1,025,972
2014 Trust and Fund Loan	26,791,177	3.00%-5.00%	2032	22,967,925	-	1,330,478	21,637,447	1,345,478
2016 Trust and Fund Loan	2,975,000	3.00%-5.00%	2036	2,898,729	-	139,407	2,759,322	139,407
2018 Trust and Fund Loan	907,481	4.00%-5.00%	2038	-	907,481	-	907,481	23,135
Total loans payable				91,409,266	907,481	10,490,768	81,825,979	9,448,208
Total bonds and loans payable				\$ 239,259,266	\$ 907,481	\$ 23,735,768	\$ 216,430,979	\$ 23,373,208

Summary of Future Maturities

Future maturities of bonds and loans payable are as follows:

	Principal	Interest	Total
2019	\$ 23,373,208	\$ 6,748,400	\$ 30,121,608
2020	22,262,079	5,868,121	28,130,200
2021	23,146,001	4,988,672	28,134,673
2022	23,833,449	4,044,804	27,878,253
2023	13,066,427	3,063,550	16,129,977
2024-2028	62,023,170	10,074,028	72,097,198
2029-2033	41,934,911	3,410,673	45,345,583
2034-2036	6,791,733	387,900	7,179,633
	<u>\$ 216,430,978</u>	<u>\$ 38,586,147</u>	<u>\$ 255,017,125</u>

The Commission has a temporary note payable through the New Jersey Infrastructure Bank construction loan program in the amount of \$61,843,150 as of December 31, 2018. The note will be repaid upon the issuance of future permanent bonds.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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, 2018, the reserve balance was \$4,994,277. Claims paid of \$100,000 decreased the reserve for self-insurance for the year ended December 31, 2018.

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.

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 1/55th of final average salary for each year of service credit are available to Tiers 1 and 2 members upon reaching age 60, and to Tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to Tier 4 members upon reaching age 62, and Tier 5 members upon reaching age 65. Early retirement benefits are available to Tiers 1 and 2 members before reaching age 60, Tiers 3 and 4 members with 25 or more years of service credit before age 62, and Tier 5 members 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

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

H. PENSION PLAN (CONTINUED)

Contributions (continued)

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.

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

For the year ended December 31, 2018, the Commission had a liability of \$125,827,307 for its proportionate share of the net pension liability in PERS. The 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 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 the June 30, 2018 measurement date, the Commission's proportion was 0.6390576800%, which was a 0.0578754137% increase from its proportion measured as of June 30, 2017. For the year ended December 31, 2018, the Commission recognized modified cash pension expense of \$5,823,254 in the financial statements. At December 31, 2018, the Commission had the following deferred outflows of resources and deferred inflows of resources, which are also not required to be recorded based on the Commission's basis of accounting, related to PERS from the following sources:

	Deferred Outflow s of Resources	Deferred Inflow s of Resources
Differences between expected and actual experience	\$ 2,399,546	\$ 648,806
Changes in assumptions	20,734,256	40,232,882
Net difference between projected and actual investment earnings on pension plan investments	-	1,180,265
Changes in proportion and differences between Commission contributions and proportionate share of contributions	16,756,833	614,192
Commission contributions subsequent to the measurement date	3,178,281	-
	<u>\$ 43,068,916</u>	<u>\$ 42,676,145</u>

Actuarial Assumptions

The total pension liability in the June 30, 2018 measurement was determined by an actuarial valuation as of July 1, 2017, which was rolled forward to June 30, 2018, using 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%

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

H. PENSION PLAN (CONTINUED)

Actuarial Assumptions (continued)

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.

Mortality Rates

Preretirement mortality rates were based on the RP-2000 Employee Preretirement Mortality Table for male and female active participants. For local employees, mortality tables are set back 2 years for males and 7 years for females. In addition, the tables provide for future improvements in mortality from the base year of 2013 using a generational approach based on the Conduent modified 2014 projection scale. Postretirement mortality rates were based on the RP-2000 Combined Healthy Male and Female Mortality Tables (set back 1 year for males and females) for service retirements and beneficiaries of former members. In addition, the tables for service retirements and beneficiaries of former members provide for future improvements in mortality from 2012 to 2013 using 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 the 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 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, 2018, are summarized in the following table:

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

H. PENSION PLAN (CONTINUED)

Long-Term Rate of Return (continued)

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
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>	

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

H. PENSION PLAN (CONTINUED)

Sensitivity of the Commission's Proportionate Share of Net Pension Liability to Changes in the Discount Rate

The following presents the Commission'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 Commission's proportionate share of the 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 (4.66%)	At current discount rate (5.66%)	At 1% increase (6.66%)
Commission proportionate share of net pension liability	\$ 158,213,296	\$ 125,827,307	\$ 98,657,468

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 Employees Retirement System.

Additional Information of the Local Group

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

Collective deferred outflows of resources	\$ 4,684,852,302
Collective deferred inflows of resources	\$ 7,646,736,226
Collective net pension liability	\$19,689,501,539
 Commission's Proportion	 0.6390576800%

The average of the expected remaining service lives of all plan members is 5.63, 5.48, 5.57, 5.72, and 6.44 years for 2018, 2017, 2016, 2015, and 2014, 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 plan members eligible for benefits was 802, 780, and 762 at December 31, 2018, 2017, and 2016, respectively. The number of Commission retirees enrolled was 243, 236 and 236 for the same periods ended.

The Commission's contribution to the Plan for the years ended December 31, 2018, 2017, and 2016 was \$4,185,333, \$4,406,645, and \$3,931,605, respectively.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

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.

General Information about the OPEB Plan

The Commission participates in the State Health Benefit Local Government Retired Employees Plan (the Plan) which is a cost-sharing multiple-employer defined benefit other postemployment benefit (OPEB) plan with a special funding situation. It covers employees of local government employers that have adopted a resolution to participate in the Plan. The Commission adopted a resolution to approve participation in the Plan in fiscal year 2012. The plan meets the definition of an equivalent arrangement as defined in paragraph 4 of GASB Statement No. 75, *Accounting and Financial Reporting for the Postemployment Benefits Other Than Pensions* (GASB Statement No. 75); therefore, assets are accumulated to pay associated benefits. For additional information about the Plan, please refer to the State of New Jersey (the State), Division of Pensions and Benefits' (the Division) Comprehensive Annual Financial Report (CAFR), which can be found at <https://www.state.nj.us/treasury/pensions/financial-reports.shtml>.

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

Further, the law provides that the employer paid obligations for retiree coverage may be determined by means of a collective negotiations agreement.

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

Pursuant to Chapter 78, P.L. 2011, future retirees eligible for postretirement medical coverage who have less than 20 years of creditable service on June 28, 2011 will be required to pay a

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

General Information about the OPEB Plan (continued)

percentage of the cost of their health care coverage in retirement provided they retire with 25 or more years of pension service credit. The percentage of the premium for which the retiree will be responsible will be determined based on the retiree's annual retirement benefit and level of coverage.

Allocation Methodology

GASB Statement No. 75 requires participating employers in the Plan to recognize their proportionate share of the collective OPEB liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense. The special funding situation's and nonspecial funding situation's OPEB liability, deferred outflows of resources, deferred inflows of resources, and OPEB expense are based on separately calculated total OPEB liabilities. The nonspecial funding situation's OPEB liability, deferred outflows of resources, deferred inflows of resources, and OPEB expense are further allocated to employers based on the ratio of the plan members of an individual employer to the total members of the Plan's nonspecial funding situation during the measurement period July 1, 2017 through June 30, 2018. The Commission's basis of accounting does not require recording a liability on the statement of assets, liabilities and reserves and has only a disclosure requirement in the notes to financial statements.

Special Funding Situation

Under Chapter 330, P.L. 1997, the State shall pay the premium or periodic charges for the qualified local police and firefighter retirees and dependents equal to 80 percent of the premium or periodic charge for the category of coverage elected by the qualified retiree under the State managed care plan or a health maintenance organization participating in the program providing the lowest premium or periodic charge. The State also provides funding for retiree health benefits to survivors of local police officers and firefighters who die in the line of duty under Chapter 271, P.L. 1989.

Therefore, these employers are considered to be in a special funding situation as defined by GASB Statement No. 75, and the State is treated as a non-employer contributing entity. Since the local participating employers do not contribute under this legislation directly to the plan, there is no OPEB liability, deferred outflows or resources or deferred inflows of resources to report in the financial statements of the local participating employers related to this legislation. However, the notes to the financial statements of the local participating employers must disclose the portion of the non-employer contributing entities' total proportionate share of the collective OPEB liability that is associated with the local participating employer. The Commission is in a nonspecial funding situation, therefore, coverage under Chapter 330 does not apply.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

OPEB Liability

Components of OPEB Liability

The components of the Commission's OPEB liability as of December 31, 2018 based on the June 30, 2018 measurement date is as follows:

	June 30, 2018
Total OPEB liability	\$ 123,758,622
Plan Fiduciary Net Position	2,435,391
Net OPEB Liability	<u>\$ 121,323,231</u>
 Plan Fiduciary Net Position as a % of total OPEB liability	 1.97%

Actuarial Assumptions

The total OPEB liability as of June 30, 2018 was determined by an actuarial valuation as of June 30, 2017, which was rolled forward to June 30, 2018. The total OPEB liability as of June 30, 2017 was determined by an actuarial valuation as of June 30, 2017. The actuarial assumptions vary for each plan member depending on the pension plan the member is enrolled in. This actuarial valuation used the following actuarial assumptions, applied to all periods in the measurement:

Inflation	2.50%
Salary increases*	
Through 2026	1.65 - 8.98%
Thereafter	2.65 - 9.98%

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

Mortality Rates

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

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

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

Mortality Rates (continued)

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

Health Care Trend Assumptions.

For pre-Medicare preferred provider organization (PPO) and health maintenance organization (HMO) medical benefits, the trend rate is initially 5.8% and decreases to a 5.0% long-term trend rate after eight years. For self-insured post-65 PPO and HMO medical benefits, the trend rate is 4.5%. For prescription drug benefits, the initial trend rate is 8.0% decreasing to a 5.0% long-term trend rate after eight years. For the Medicare Part B reimbursement, the trend rate is 5.0%. The Medicare Advantage trend rate is 4.5% and will continue in all future years.

Discount Rate

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

Sensitivity of OPEB Liability to Changes in the Discount Rate

The following presents the collective OPEB liability of the participating employers as of June 30, 2018, calculated using the discount rate as disclosed above as well as what the collective OPEB liability would be if it was calculated using a discount rate that is 1-percentage point lower or 1-percentage- point higher than the current rate:

At June 30, 2018		
At 1% Decrease (2.87%)	At Current Discount Rate (3.87%)	At 1% Increase (4.87%)
\$ 142,344,226	\$ 121,323,231	\$ 104,532,213

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

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

At June 30, 2018		
At 1% Decrease	Healthcare cost trend rate	At 1% Increase
\$ 101,203,027	\$ 121,323,231	\$ 147,361,764

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

I. OTHER POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

Deferred Outflows of Resources and Deferred Inflows of Resources

	Year of Deferral	Amortization Period	Beginning of the year balance	Additions	Deductions	End of the year balance
Deferred Outflows of Resources:						
Differences between projected and actual investment earnings on OPEB plan investments	2017	5 years	\$ 27,094	\$ -	\$ 6,773	\$ 20,320
	2018	5 years	-	54,743	10,949	43,794
Deferred Outflows of Resources			<u>\$ 27,094</u>	<u>\$ 54,743</u>	<u>\$ 17,722</u>	<u>\$ 64,115</u>
Deferred Inflows of Resources:						
Differences between expected and actual experience	2018	8.04 years	\$ -	\$ 28,082,936	\$ 3,449,992	\$ 24,632,944
Changes of assumptions	2017	8.04 years	17,547,877	-	2,492,596	15,055,281
	2018	8.14 years	-	17,921,619	2,201,673	15,719,946
Deferred Inflows of Resources			<u>\$ 17,547,877</u>	<u>\$ 46,004,554</u>	<u>\$ 8,144,261</u>	<u>\$ 55,408,170</u>

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

	OPEB
2019	\$ (8,111,254)
2020	(8,111,254)
2021	(8,111,255)
2022	(8,117,758)
2023	(8,128,909)
Thereafter	(14,763,625)
	<u>\$ (55,344,055)</u>

Changes in Proportion

The previous amounts do not include employer specific deferred outflows of resources and deferred inflow of resources related to the changes in proportion. These amounts will be recognized (amortized) by the Commission over the average remaining service lives of all plan members, which is 8.14 years and 8.04 years for the 2018 and 2017 amounts, respectively.

J. CONCENTRATION OF RISK AND UNCERTAINTIES

For the year ended December 31, 2018, the Commission received approximately 45% of its total user charges from two customers, City of Newark 30% and City of Jersey City 15%. For the year ended December 31, 2018, the Commission received approximately 89% of its total grant revenue from two grantors, NJIB 79% and Federal Emergency Management Agency ("FEMA") 20%.

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

L. COLLECTIVE BARGAINING AGREEMENTS

During 2018, the Commission was a party in four (4) separate collective bargaining agreements covering various employees at the Commission. They were as follows:

- Local 1158 I.B.E.W.- Blue Collar covering January 1, 2018 – December 31, 2021
- Local 1158 I.B.E.W.- White Collar covering January 1, 2018 – December 31, 2021
- Local 1158 I.B.E.W.- Supervisors Group covering January 1, 2018 – December 31, 2021
- Local 1158 I.B.E.W.- Professional Group covering January 1, 2018 – December 31, 2021

All contract renewals were concluded during 2018. There are no retroactive salary amounts due as of December 31, 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 2018, the Commission received \$15,320,691 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. PRIOR PERIOD ADJUSTMENT

As of January 1, 2018, the Commission has made a change in the timing of the State/Federal appropriation-based revenue recognition for projects financed through the NJIB. Previously, the Commission recognized revenue upon issuance of long-term permanent financing for eligible projects reported in the Wastewater Treatment Trust Fund. Recently the NJIB has modified its financing program to include short term construction loans which precede the long-term permanent financing. Effective with this change, the Commission has determined to recognize the appropriation-based revenue upon issuance of the short-term construction loans to better match revenues with project expenditures. The effect on the 2018 financial statements is an increase in reserves of the Wastewater Treatment Trust Fund as of January 1, 2018, in the amount of \$14,330,381.

P. RECOGNITION OF LOANS RECEIVABLE FROM AND LOANS PAYABLE TO NJIB

The Commission recorded \$12 million worth of loans receivable from NJIB as of December 31, 2018. As of that date, those funds were not certified by the State but approved to be used for expenditures only if FEMA funds cannot be used toward those expenditures. These receivables may not fully be realized in the future, depending on whether funds from FEMA can be used instead of the NJEIT loans. The corresponding short-term NJIB loans payable also include the \$12 million that may not be realized in the future as amounts paid to NJIB.

Q. SUBSEQUENT EVENT

Management has determined no subsequent events requiring disclosure occurred after year end through September 12, 2019, the date the financial statements were available to be issued.

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

To the Commissioners of
Passaic Valley Sewerage Commission

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Passaic Valley Sewerage Commission (the "Commission"), as of and for the year ended December 31, 2018, and the related notes to financial statements, which collectively comprise the Commission's basic financial statements, and have issued our report thereon dated September 12, 2019, in which we expressed an adverse opinion on the conformity of the financial statements with accounting principles generally accepted in the United States of America due to differences between those principles and accounting practices of the Commission.

Internal Control Over Financial Reporting

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

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AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
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(CONTINUED)**

Compliance and Other Matters

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

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Commission'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 Commission's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



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

**MERCADIEN, P.C.
CERTIFIED PUBLIC ACCOUNTANTS**

September 12, 2019