

PRELIMINARY OFFICIAL STATEMENT DATED JULY 1, 2020

NEW ISSUE- Book-Entry Only

RATINGS: Moody's: A2
See "RATINGS" herein

In the opinion of DeCotiis, FitzPatrick, Cole & Giblin, LLP, Bond Counsel, under existing statutes, regulations, rulings and court decisions, and assuming continuing compliance by the Commission with certain requirements described herein, interest on the Series J Bonds (as hereinafter defined) is not includable in gross income for Federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code") and is not treated as a preference item under Section 57 of the Code for purposes of calculating the Federal alternative minimum tax imposed on individuals and corporations; such interest is, however, included in the adjusted current earnings of a corporation for purposes of the Federal alternative minimum tax imposed on corporations. Under existing laws of the State of New Jersey, interest on the Series J Bonds and any gain on the sale thereof are not includable in gross income under the New Jersey Gross Income Tax Act. For a more complete discussion, see "TAX MATTERS" herein.

\$83,625,000*

PASSAIC VALLEY SEWERAGE COMMISSIONERS (State of New Jersey)
Sewer System Bonds, Series J

Dated: Date of Delivery

Due: December 1, as shown on the inside front cover

This Preliminary Official Statement has been prepared to provide information relating to the issuance by the Passaic Valley Sewerage Commissioners (the "Commission") of its \$83,625,000* aggregate principal amount of Sewer System Bonds, Series J (the "Series J Bonds"). The Bank of New York Mellon, Woodland Park, New Jersey, will serve as the Trustee and Paying Agent for the Series J Bonds.

The Series J Bonds will be issued in fully registered form without coupons, and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"). DTC will act as securities depository for the Series J Bonds, as more fully described herein. Individual purchases of the Series J Bonds will be made in book-entry form only in denominations of \$5,000 or any integral multiples thereof. Purchasers of the Series J Bonds will not receive certificates representing their interest therein.

Interest on the Series J Bonds will accrue from their Date of Delivery and will be payable semiannually on each June 1 and December 1, commencing on December 1, 2020, until prior redemption or maturity, and will be calculated on the basis of a 360-day year of twelve 30-day months. The Series J Bonds will bear interest at the interest rates per annum set forth on the inside front cover page of this Preliminary Official Statement.

The Series J Bonds are being issued by the Commission pursuant to the provisions of Chapter 14 of Title 58 of the Revised Statutes of New Jersey, as amended and supplemented (the "Act"), and a resolution of the Commission adopted on May 20, 1971 and entitled "Resolution Providing for the Issuance of Bonds of Passaic Valley Sewerage Commissioners and for the Rights of the Holders thereof, and Authorizing \$23,700,000 Principal Amount Thereof", as amended and supplemented (the "General Bond Resolution"), including as supplemented by Supplemental Resolution No. 17 relating thereto, adopted by the Commission on February 13, 2020 and which became effective on May 9, 2020 ("Supplemental Resolution No. 17" and, together with the General Bond Resolution, the "Resolution"). The Series J Bonds will be payable from and secured by a pledge of the System Revenues (as defined in the Resolution) of the Commission on a parity with all Bonds Outstanding (as such terms are defined in the Resolution) under the Resolution from time to time, subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.

The Series J Bonds are subject to redemption prior to maturity on the terms and conditions described herein. See "THE SERIES J BONDS -Redemption" herein.

The Series J Bonds are being issued by the Commission for the purpose of providing the funds necessary, together with other available funds of the Commission, to (i) currently refund and legally defease all of the Commission's outstanding Sewer System Bonds, Series F Bonds, (ii) pay the costs of the planning, design, acquisition, improvement, renovation, replacement, construction and installation of various capital projects to and for the System (as defined in the Resolution), and (iii) pay the costs of issuance of the Series J Bonds.

THE SERIES J BONDS ARE NOT A DEBT OR LIABILITY OF THE STATE OF NEW JERSEY OR OF ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE COMMISSION), AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF NEW JERSEY OR OF ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE SERIES J BONDS. THE COMMISSION HAS NO TAXING POWER.

Selected information is presented on this cover page for the convenience of a prospective purchaser in brief or summary form. To make an informed decision regarding the Series J Bonds, a prospective purchaser should read this Preliminary Official Statement in its entirety.

The Series J Bonds are offered when, as and if issued by the Commission, subject to the approval of legality thereof by, DeCotiis, FitzPatrick, Cole and Giblin, LLP, Paramus, New Jersey, Bond Counsel to the Commission. Certain legal matters will be passed upon for the Commission by Michael D. Witt, Esq., General Counsel for the Commission. It is expected that the Series J Bonds will be available for delivery through DTC on or about July 22, 2020.

* Preliminary, subject to change.

\$83,625,000*
PASSAIC VALLEY SEWERAGE COMMISSIONERS
(State of New Jersey)
Sewer System Bonds, Series J

<u>Maturity*</u> <u>(December 1)</u>	<u>Principal*</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield**</u>	<u>Cusip***</u>
12/1/2023	\$1,800,000			
12/1/2024	1,815,000			
12/1/2025	1,840,000			
12/1/2026	6,765,000			
12/1/2027	6,855,000			
12/1/2028	6,955,000			
12/1/2029	7,060,000			
12/1/2030	7,175,000			
12/1/2031	7,300,000			
12/1/2032	7,425,000			
12/1/2033	1,935,000			
12/1/2034	1,970,000			
12/1/2035	2,010,000			
12/1/2036	2,055,000			
12/1/2037	2,095,000			
12/1/2038	2,140,000			
12/1/2039	2,190,000			
12/1/2040	2,240,000			
12/1/2041	2,290,000			
12/1/2042	2,345,000			
12/1/2043	2,395,000			
12/1/2044	2,455,000			
12/1/2045	2,515,000			

* Preliminary, subject to change.

** Yield to first optional redemption date of December 1, 2028.

*** Registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the Series J Bonds and the Commission does not make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series J Bonds as a result of procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series J Bonds.

**PASSAIC VALLEY SEWERAGE COMMISSIONERS
(STATE OF NEW JERSEY)**

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INDEPENDENT AUDITORS

Mercadien, P.C., Certified Public Accountants
Princeton, New Jersey

No dealer, broker, salesman, or any other person has been authorized by the Commission to give any information or to make any representations, other than those contained in this Official Statement, and if given or made, such other information must not be relied upon as having been authorized by the Commission. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series J Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The Series J Bonds have not been registered under the Securities Act of 1933, as amended, and the Resolution has not been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon certain exemptions contained in such Federal laws. In making an investment decision, investors must rely upon their own examination of the Series J Bonds and the security therefor, including an analysis of the risks involved. The Series J Bonds have not been recommended by any Federal or state securities commission or regulatory authority. The registration, qualification or exemption of the Series J Bonds in accordance with applicable provisions of securities laws of the various jurisdictions in which the Series J Bonds have been registered, qualified or exempted cannot be regarded as a recommendation thereof. Neither such jurisdictions nor any of their agencies have passed upon the merits of the Series J Bonds or the adequacy, accuracy or completeness of this Official Statement. Any representation to the contrary may be a criminal offense.

References in this Official Statement to the Act, the Resolution, other statutes, laws, rules, regulations, resolutions, agreements, reports and documents do not purport to be comprehensive or definitive, and all such references are qualified in their entirety by reference to the particular document, the full text of which may contain qualifications of and exceptions to statements made herein. This Official Statement is distributed in connection with the sale of the Series J Bonds referred to herein and may not be reproduced or used, in whole or in part, for any other purpose.

The order and placement of materials in this Official Statement, including the Appendices, are not to be deemed to be a determination of relevance, materiality or importance, and this Official Statement, including the Appendices, must be considered in its entirety. The offering of the Series J Bonds is made only by means of this entire Official Statement.

The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale of the Series J Bonds made hereunder shall, under any circumstance, create any implication that there has been no change in the affairs of the Commission since the date hereof.

Certain statements included or incorporated by reference in this Official Statement constitute projections or estimates of future events, generally known as forward-looking statements. These statements are generally identifiable by the terminology used such as “anticipate” “plan,” “expect,” “estimate,” “budget” or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involves known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements described in or expressed or implied by such forward-looking statements. Other than as may be required by law, the Commission does not plan to issue any updates or revisions to any such forward-looking statements if or when its expectations are realized or not realized, or when the events, conditions or circumstances on which such statements are based, occur.

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SUMMARY STATEMENT

This Summary Statement is subject in all respects to the definitions and more complete information contained in this Official Statement and no conclusion should be drawn from the order of material or information presented in this Official Statement. The offering of the Series J Bonds to potential investors is made only by means of this entire Official Statement. No person is authorized to detach this Summary Statement from this Official Statement or to otherwise use it without this entire Official Statement. All capitalized terms used in this Summary Statement shall have the same meaning as defined in this Official Statement.

Purpose of the Issue

The Series J Bonds are authorized and being issued for the purpose of providing the funds necessary, together with other available funds of the Commission, to (i) currently refund and legally defease all of the Commission's outstanding Sewer System Bonds, Series F Bonds, all as more fully described in APPENDIX H to this Official Statement (the "Refunded Bonds"), (ii) pay the costs of the planning, design, acquisition, improvement, renovation, replacement, construction and installation of various capital projects to and for the System (as defined in the Resolution), including, without limitation, various roof replacements, rehabilitation of meter chambers, various main and lateral sewer line improvements, HVAC upgrades, fire alarm upgrades, electrical substation improvements, rehabilitation of sludge storage tanks, refurbishment of sludge thickener facility and acquisition of certain real property (collectively, the "Projects"), and (iii) pay the costs of issuance of the Series J Bonds.

The Refunding Plan

In order to provide for the current refunding and legal defeasance of the Refunded Bonds, on the date of issuance and delivery of the Series J Bonds, a portion of the proceeds of the Series J Bonds, together with other available funds of the Commission, will be irrevocably deposited into an escrow fund (the "Escrow Fund") to be held by The Bank of New York Mellon, as Escrow Agent (the "Escrow Agent"), and established pursuant to an escrow deposit agreement (the "Escrow Agreement") between the Commission and the Escrow Agent. Simultaneously with the issuance of the Series J Bonds, substantially all of the amounts so deposited into the Escrow Fund will be used by the Escrow Agent to purchase certain direct and general obligations of the United States of America constituting "Investment Obligations" as defined in the Resolution (the "Defeasance Securities"). The maturing principal of and interest on the Defeasance Securities, together with the other available moneys, if any, on deposit in the Escrow Fund, will be sufficient, to pay, when due, the Redemption Price of the Refunded Bonds on August __, 2020. All of the Refunded Bonds will be redeemed on August __, 2020 (the "Redemption Date"), at a Redemption Price equal to 100% of the principal amount thereof to be redeemed, plus interest accrued thereon to the Redemption Date. Upon the deposit of the Defeasance Securities and such other available moneys, if any, in the Escrow Fund, the Refunded Bonds will no longer be deemed Outstanding for purposes of the Resolution and will no longer have the benefit of the pledge of the System Revenues under the Resolution, but will be secured solely by the amounts on deposit in the Escrow Fund. See "PLAN OF REFUNDING" and "VERIFICATION" herein.

Security for the Series J Bonds

The Series J Bonds are direct and general obligations of the Commission and the full faith and credit of the Commission is pledged to the payment of the principal or Redemption Price of and interest on the Series J Bonds, when due. When issued, the Series J Bonds will be secured on a parity with \$23,060,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series G, \$33,095,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series H, \$27,465,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series I, and any Additional Bonds thereafter issued under and pursuant to the Resolution. As provided in the Resolution, the System Revenues of the Commission are pledged to secure the payment of the principal or Redemption Price of and interest on all

Bonds issued and Outstanding from time to time under the Resolution, subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution. In each year, the Contracting Municipalities (as hereinafter defined) and other Users of the System (as hereinafter defined) are required to pay to the Commission their respective portions of the Commission's Operating Expenses, which include the principal or Redemption Price of and interest on the Bonds of the Commission becoming due prior to the end of such year, and such payments (with certain exceptions) are included in the System Revenues. The portion of the payments owed to the Commission by all Contracting Municipalities and other Users of the System on account of the Commission's Operating Expenses which is allocable to the payment of debt service on the Bonds is excluded from the Annual Tax Levy Cap imposed by New Jersey law upon such municipalities and other users and ranks on a parity with payments due by such municipalities and other users on their own general obligation debt.

Effect of Fiscal Condition of Users on Bond Payments

Payment of the Series J Bonds is dependent upon payment to the Commission by the Contracting Municipalities and other Users of the System of their respective portions of the Commission's Operating Expenses. Therefore, potential purchasers of the Series J Bonds are advised that if any Contracting Municipality or other User of the System experiences a fiscal problem of sufficient magnitude to result in the cessation of payments to the Commission, the System Revenues would be adversely affected and payment of the Series J Bonds could be adversely affected.

The System

The System, which is operated and maintained by the Commission, is the principal sewage collection and treatment system in the Passaic River Valley between the Great Falls in the City of Paterson and the mouth of the Passaic River at Newark Bay. The Commission's secondary treatment facility is capable of treating an average influent flow of 330 million gallons per day (MGD), peak dry weather flow of 400 MGD, and peak wet weather flow of 720 MGD. The service area of the System is a densely populated industrial and residential area in northern New Jersey, which encompasses parts of Bergen, Essex, Hudson, and Passaic Counties. Between 1911 and 1942, a total of 22 municipalities entered into contracts with the Commission for the provision of sewage collection and treatment services. These 22 municipalities comprise the "Contracting Municipalities". Since 1943, 11 municipalities have been added to the Commission's System as "Lessees". Since 1985, 3 municipalities, including Jersey City, Bayonne and North Bergen, were each added to the System as a "Contracting Agency". The Contracting Municipalities, the Lessees and the Contracting Agencies are collectively referred to herein as "Users of the System" or "Users".

OFFICIAL STATEMENT
of the
PASSAIC VALLEY SEWERAGE COMMISSIONERS
(State of New Jersey)
relating to
\$83,625,000*
Sewer System Bonds, Series J

INTRODUCTION

This Official Statement, which includes the cover page, Summary Statement and Appendices hereto, has been prepared by the Commission to provide information relating to the issuance by the Passaic Valley Sewerage Commissioners (herein called the “Commissioners” or the “Commission”) of its \$83,625,000* aggregate principal amount of Sewer System Bonds, Series J (the “Series J Bonds”).

The Series J Bonds are being issued by the Commission pursuant to the provisions of Chapter 14 of Title 58 of the Revised Statutes of New Jersey, as amended and supplemented (the “Act”), and a resolution of the Commission adopted on May 20, 1971 and entitled “Resolution Providing for the Issuance of Bonds of Passaic Valley Sewerage Commissioners and for the Rights of the Holders thereof, and Authorizing \$23,700,000 Principal Amount Thereof”, as amended and supplemented (the “General Bond Resolution”), including as supplemented by Supplemental Resolution No. 17 relating thereto, adopted by the Commission on February 13, 2020 and which became effective on May 9, 2020 (“Supplemental Resolution No. 17” and, together with the General Bond Resolution, the “Resolution”). Capitalized terms used herein and not otherwise defined have the meanings given to such terms in “APPENDIX A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION” attached to this Official Statement or in the Resolution.

When issued, the Series J Bonds will be secured on a parity with \$23,060,000 aggregate principal amount of the Commission’s outstanding Sewer System Bonds, Series G, \$33,095,000 aggregate principal amount of the Commission’s outstanding Sewer System Bonds, Series H, \$27,465,000 aggregate principal amount of the Commission’s outstanding Sewer System Bonds, Series I, and any Additional Bonds thereafter issued under and pursuant to the Resolution. The Series J Bonds, the Series G Bonds, the Series H Bonds, the Series I Bonds and any Additional Bonds which may hereafter be issued under and pursuant to the Resolution are herein collectively referred to as the “Bonds.”

The Commission is a body corporate and politic of the State of New Jersey (the “State”) existing under and by virtue of the provisions of the Act. The Commission operates and maintains the principal sewage collection and treatment system in the Passaic River Valley between the Great Falls in the City of Paterson, New Jersey, and the mouth of the Passaic River at Newark Bay (the “System”). The service area of the System is a densely populated industrial and residential area in northern New Jersey, which encompasses parts of Bergen, Essex, Hudson, and Passaic Counties. Between 1911 and 1942, a total of 22 municipalities entered into contracts with the Commission for the provision of sewage collection and treatment services. These 22 municipalities comprise the “Contracting Municipalities”. Since 1943, 11 municipalities have been added to the Commission’s System as “Lessees”. Since 1985, 3 municipalities, including Jersey City, Bayonne and North Bergen, were each added to the System as a “Contracting Agency”. The Contracting Municipalities, the Lessees and the Contracting Agencies are collectively referred to herein as “Users of the System” or “Users”. See “THE COMMISSION” herein.

*Preliminary, subject to change

The Series J Bonds are direct and general obligations of the Commission and the full faith and credit of the Commission is pledged to the payment of the principal or Redemption Price of and interest on the Series J Bonds, when due. As provided in the Resolution, the System Revenues of the Commission are pledged to secure the payment of the principal or Redemption Price of and interest on all Bonds issued and Outstanding from time to time under the Resolution, subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution. In each year, the Contracting Municipalities and other Users of the System are required to pay to the Commission their respective portions of the Commission's Operating Expenses, which include the principal or Redemption Price of and interest on the Bonds of the Commission becoming due prior to the end of such year, and such payments (with certain exceptions) are included in the System Revenues. See "SOURCES OF PAYMENT AND SECURITY FOR THE SERIES J BONDS" herein.

The Series J Bonds are being issued for the purpose of providing the funds necessary, together with other available funds of the Commission, to (i) currently refund and legally defease all of the Commission's outstanding Sewer System Bonds, Series F Bonds, all as more fully described in APPENDIX H to this Official Statement (the "Refunded Bonds"), (ii) pay the costs of the planning, design, acquisition, improvement, renovation, replacement, construction and installation of various capital projects to and for the System, including, without limitation, various roof replacements, rehabilitation of meter chambers, various main and lateral sewer line improvements, HVAC upgrades, fire alarm upgrades, electrical substation improvements, rehabilitation of sludge storage tanks, refurbishment of sludge thickener facility and acquisition of certain real property (collectively, the "Projects"), and (iii) pay the costs of issuance of the Series J Bonds. See "THE REFUNDING PLAN", "THE PROJECTS" and "ESTMATED SOURCES AND USES" herein.

For a complete description of the Series J Bonds, including the redemption provisions thereof, see "THE SERIES J BONDS" herein.

THE SERIES J BONDS

General Description

The Series J Bonds will be dated their Date of Delivery and will bear interest from such date, payable on June 1 and December 1 of each year, commencing on December 1, 2020 (each, an "Interest Payment Date"), until their maturity date or prior redemption. Interest on the Series J Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The Series J Bonds will bear interest at the interest rates per annum set forth on the inside front cover page of this Official Statement.

The Series J Bonds will mature on the dates, in the years and in the amounts shown on the inside front cover page of this Official Statement. The Series J Bonds are subject to optional and mandatory sinking fund redemption prior to maturity as described below. See "THE SERIES J BONDS – Redemption" herein.

The Bank of New York Mellon, Woodland Park, New Jersey, will serve as the Trustee and Paying Agent for the Series J Bonds.

Book-Entry Only System

The Series J Bonds will be issued as fully registered bonds without coupons, and, when issued, will be registered in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"). DTC will act as securities depository for the Series J Bonds. Purchases of the Series J Bonds will be made in book-entry form (without certificates) in denominations of \$5,000 or any integral multiple thereof. So long as Cede & Co., as nominee for DTC, is the registered owner of the Series J Bonds, DTC (or a successor securities depository) or its

nominee will be the registered owner of the Series J Bonds for all purposes of the Resolution, the Series J Bonds and this Official Statement and payments of the principal of and interest on the Series J Bonds will be made directly to DTC. Disbursement of such payments to the DTC Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of the DTC Participants and the Indirect Participants, as each such term is defined in APPENDIX B hereto. For more information with respect to DTC and the book-entry only system for the Series J Bonds, see APPENDIX B -- BOOK-ENTRY ONLY SYSTEM attached to this Official Statement.

In the event that the book-entry only system for the Series J Bonds is discontinued, the Series J Bonds shall be registered in the names of the Beneficial Owners thereof, the principal thereof will be payable upon presentation and surrender thereof at the principal office of the Paying Agent, and the interest thereon will be payable by check or draft mailed on each June 1 and December 1 to each holder thereof in whose name the Series J Bonds are registered upon the registration books of the Commission maintained by the Trustee, as of the close of business on each Record Date. The Record Date is defined as the fifteenth (15th) day (whether or not a business day) of the calendar month next preceding any interest payment date or any applicable redemption date. Additionally, subject to the further conditions contained in the Resolution, the Series J Bonds may be transferred or exchanged for one or more Series J Bonds of the same Series in different authorized denominations upon surrender thereof at the principal corporate trust office of the Trustee by the registered owners or their duly authorized attorneys. Upon surrender of any Series J Bonds to be transferred or exchanged, the Trustee shall record the transfer or exchange in its registration books, and shall authenticate and deliver new Series J Bonds appropriately registered and in appropriate authorized denominations. During the 15 days immediately preceding the date of mailing of any notice of redemption or any time following the mailing of any notice of redemption, the Trustee shall not be required to effect or register any transfer or exchange of any Series J Bond or which has been selected for such redemption. The Commission and the Trustee shall be entitled to treat the registered owners of the Series J Bonds, as their names appear in the registration books as of the appropriate dates, as the owners of such Series J Bonds for all purposes under the Resolution. No transfer or exchange made other than as described above and in the Resolution shall be valid or effective for any purposes under the Resolution.

Redemption

Optional Redemption of the Series J Bonds

The Series J Bonds maturing on or after December 1, 2029 are subject to optional redemption by the Commission, in whole or in part, on any date on or after December 1, 2028, upon notice as described in the Resolution, at a Redemption Price equal to 100% of the principal amount of the Series J Bonds being redeemed, plus accrued interest to the redemption date.

Mandatory Sinking Fund

The Bonds maturing _____ are subject to mandatory sinking fund redemption prior to their stated maturity, in the years set forth below, at a redemption price which is equal to 100% of the principal amount thereof being redeemed plus interest accrued to the redemption date from mandatory sinking fund installments set forth below:

<u>Year</u>	<u>Principal Amount</u>
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Selection of Series J Bonds for Redemption

If less than all of the Series J Bonds are to be redeemed, the specific maturity or maturities of the Series J Bonds to be redeemed shall be selected by the Commission. If less than all of the Series J Bonds of a particular maturity are to be redeemed, then (a) if the Series J Bonds are in book-entry only form at the time of such redemption, the Trustee shall instruct DTC to instruct the DTC Participants to select the specific Series J Bonds within such maturity for redemption by lot among such Series J Bonds, and neither the Commission nor the Trustee shall have any responsibility to insure that DTC or its Participants properly select such Series J Bonds for redemption, and (b) if the Series J Bonds are not then in book-entry form at the time of such redemption, Trustee shall select the specific Series J Bonds within such maturity to be redeemed by lot among the Series J Bonds of such maturity.

In the case of a partial redemption of the Series J Bonds when Series J Bonds of denominations greater than \$5,000 then Outstanding, for all purposes in connection with such redemption, each principal amount equal to \$5,000 shall be treated as though it were a separate Series J Bond for purposes of selecting the specific Series J Bonds to be redeemed, provided that no Series J Bond shall be redeemed in part if the principal amount to be Outstanding following such partial redemption is not \$5,000 or any integral multiple thereof.

Notice of Redemption of Series J Bonds

In the event of any redemption of the Series J Bonds, either in whole or in part, notice of such redemption specifying the redemption date and the numbers and maturities of the Series J Bonds or portions thereof to be redeemed shall be published in an Authorized Newspaper published in the Borough of Manhattan, City and State of New York at least once not less than thirty (30) days or more sixty (60) days prior to the redemption date. The Trustee shall also mail a copy of such notice by first class mail mailed, postage prepaid, not less than thirty (30) days or more sixty (60) days prior to the redemption date to the registered owners of any Series J Bonds or portions of Series J Bonds to be redeemed at their registered addresses in the manner and under the terms and conditions provided in the Resolution. As long as DTC, or its nominee, remains the sole registered owner of the Series J Bonds, such notice of redemption shall be sent to DTC as provided in the Resolution. Such mailing shall not be a condition precedent to such redemption and failure to mail any such notice shall not affect the validity of the proceedings for the redemption of the Series J Bonds. Notice of redemption having been given as aforesaid, the Series J Bonds or portions thereof so called for redemption shall become due and payable at the applicable redemption price herein provided, and from and after the date so fixed for redemption, interest on the Series J Bonds or portions thereof so called for redemption shall cease to accrue and become payable. Any failure of DTC to advise any DTC Participant or of any DTC Participant or Indirect Participant to notify the beneficial owner of any such notice and its content or effect will not affect the validity of the redemption of the Series J Bonds called for redemption or of any other action premised on such notice. See APPENDIX B -- BOOK-ENTRY ONLY SYSTEM attached to this Official Statement.

SOURCES OF PAYMENT AND SECURITY FOR THE SERIES J BONDS

General

The Bonds, including the Series J Bonds, are direct and general obligations of the Commission and the full faith and credit of the Commission is pledged to the payment of the principal or Redemption Price of and interest on the Bonds, when due. When issued, the Series J Bonds will be secured on a parity with \$23,060,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series G, \$33,095,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series H, \$27,465,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series I, and any Additional Bonds thereafter issued under and pursuant to the Resolution.

The Act

The Act authorizes the issuance of bonds or notes of the Commission for any of its corporate purposes. Under the Act, the Commission is authorized to maintain and operate the System (see “THE SYSTEM -- Description of the System” herein for a description of the System) and to collect from the Contracting Municipalities and other Users of the System the cost and expense of maintenance, repair and operation of the System, including principal and Redemption Price, if any, of and interest on the Bonds becoming due prior to the end of each year, and any other sums which the Commission may determine or are required by the Resolution to be set aside during any year as a reserve for payment or security of principal of or interest on the Bonds. The Act provides that each of the Contracting Municipalities and other Users of the System is directed by law to pay in each year its share, determined as provided in the Act, of said cost and expense.

Pledge of System Revenues

Pursuant to the Resolution, the System Revenues are pledged to secure the payment of the principal and Redemption Price of and interest on the Bonds and other obligations of the Commission, if any, issued pursuant to the Act, subject only to the right of the Commission (a) to pay therefrom, free and clear of any lien or pledge, all amounts required for reasonable and necessary cost and expense of maintaining, repairing, and operating the System, (b) to revise, correct, and adjust the Annual Estimate as provided in the Act, and (c) to pay to any Municipality or Municipalities, which may be entitled thereto under the terms of the Act or any contract or lease, any amount received from a Lessee as annual rental. (See “THE SYSTEM -- Summary of Revenues and Operating Expenses” herein for a description of credits to the Contracting Municipalities for Lessee payments). The Contracting Municipalities and other Users of the System are required to pay each year to the Commission their respective portions of the Commission’s Operating Expenses, which are comprised of all costs and expenses of maintenance, repair, and operation of the System incurred or to be incurred by the Commission for any Fiscal Year, and shall include, in addition to all other items heretofore mentioned, all interest becoming due prior to the end of such Fiscal Year on Bonds or other obligations of the Commission issued pursuant to the Act, plus the principal or redemption price, if any, of any such Bonds or other obligations becoming due prior to the end of such year, plus such sums as the Commission may determine, or by the terms of any contract be required, to set aside during such year as a reserve for payment or security for principal of or interest on any such Bonds or obligations or, by the terms of any contract, be required to set aside during such year as a reserve for any other purpose. “System Revenues” means the moneys paid or required to be paid to the Commission by any Contracting Municipality or other User of the System on account of Operating Expenses but does not include any amounts received by the Commission as annual rentals which the Commission is required by the Act or contract to pay to any Municipality or Municipalities.

Annual Estimate, Certification, and Collection of Annual Charges

The Resolution provides that on or before January 15 in each Fiscal Year, the Commission shall, pursuant to the provisions of the Act: (1) prepare an Annual Estimate of Operating Expenses including the cost of maintenance, repair, and operation of the System for such Fiscal Year, and including all interest becoming due prior to the end of such Fiscal Year on the Bonds or other obligations of the Commission issued pursuant to the Act, plus the principal of any such Bonds or other obligations becoming due or called for redemption, prior to the end of such Fiscal Year, and the redemption premium thereof (if any), plus any Sinking Fund Installment, plus such sums as the Commission may determine or, by the terms of the Resolution or any other contract, be required to set aside during such Fiscal Year as a reserve for payment or security of principal of or interest on any such Bonds or obligations to be, by the terms of the Resolution or any other contract, required to set aside during such Fiscal Year as a reserve for any other purpose; (2) apportion the amount of such Annual Estimate among the Contracting Municipalities and other users of the System in proportion to the amount of sewage by them respectively delivered and discharged into the System or such other method of apportionment as may be prescribed

by law; and (3) certify to each Contracting Municipality and other user of the System its share of such Annual Estimate.

Immediately after the preparation of the Annual Estimate and the determination of the respective shares thereof of the Contracting Municipalities and other users of the System, the Commission shall notify each Contracting Municipality and other users of the amount of the payment due from it as such share and of the due date thereof. The Commission shall take all steps, actions, and proceedings permitted by law to enforce the full and punctual payment of the amount due in each Fiscal Year from each Contracting Municipality and other user of the System.

Flow of Funds

Pursuant to the Resolution, the Commission has established a Bond Service Fund, a Sinking Fund, a Bond Reserve Fund and a Construction Fund, all of which are special funds held by the Trustee. The Resolution requires the Commission to make deposits of System Revenues into such Funds at the times and in the amounts set forth in the Resolution. The Resolution also contains provisions which set forth how the amounts on deposit in such Funds are to be applied. For a more complete description of the Funds created and established under the Resolution, see "APPENDIX A -- DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION" attached to this Official Statement.

Bond Reserve Fund

As described above, the Resolution establishes a Bond Reserve Fund for the benefit of all Bonds issued thereunder and there is required to be on deposit in the Bond Reserve Fund an amount equal to the Bond Reserve Requirement with respect to all Bonds Outstanding under the Resolution.

Pursuant to the Resolution, the Bond Reserve Requirement is equal to equal to the greater of (A) the average of the amounts of money required to be raised in each future Fiscal Year for interest payable on Bonds and maturing principal of Bonds and required payments to the Sinking Fund on account of Bonds, all calculated on the assumption that the Bonds will cease to be Outstanding after such date of computation by reason of, but only by reason of (i) the payment of such Bonds at their respective maturities, and (ii) the payment of all moneys required to be paid into the Sinking Fund on account of such Bonds in the amounts and at the times so required by the terms of the Resolution or any resolution of the Commission authorizing such Bonds and the immediate application of such moneys so paid into the Sinking Fund to the retirement of Bonds in accordance with their terms, and (B) the maximum of the amounts of money required to be raised in any future Fiscal Year for interest payable on Bonds and maturing principal of Bonds and required payments to the Sinking Fund on account of Bonds, all calculated on the assumption that the Bonds will cease to be Outstanding after such date of computation by reason of, but only by reasons of (i) the payment of such Bonds at their respective maturities, and (ii) the payment of all moneys required to be paid into the Sinking Fund on account of such Bonds in the amounts and at the times so required by the terms of the Resolution or any resolution of the Commission authorizing such Bonds and the immediate application of such moneys so paid into the Sinking Fund to the retirement of Bonds in accordance with their terms, but in no event shall the amount described in clause (B) equal or exceed the amount which, in the opinion of nationally recognized bond counsel, would cause the interest on any Bonds to be includable in gross income under Section 103 of the Internal Revenue Code of 1986, as amended.

Upon the issuance of the Series J Bonds, the Bond Reserve Requirement will be \$_____ and the amounts on deposit in the Bond Reserve Fund will be at least equal to such Bond Reserve Requirement. As of May 31, 2020, the Commission had \$19,966,481 on deposit in the Bond Reserve Fund.

For a more information relating to the Bond Reserve Fund and the Bond Reserve Requirement, see “APPENDIX A -- DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION” attached to this Official Statement.

Additional Bonds

The Act sets forth procedures for the issuance of Additional Bonds by the Commission. Pursuant to the Act such Additional Bonds shall be authorized pursuant to a resolution that would be adopted by the Commission describing the project to be financed and stating the amount of Bonds authorized. This may be accomplished through the adoption of a Supplemental Resolution to the General Bond Resolution. After the adoption of said resolution, the Commission must give notice thereof to the Contracting Municipalities and publish notice as set forth in the Act. Not sooner than 30 days after said notice and publication, the Commission must hold a public hearing on said resolution. Said resolution shall take effect under the Act on the thirtieth day after the conclusion of the public hearing, unless prior to said thirtieth day the governing bodies of the Contracting Municipalities shall have filed with the Secretary of the Commission resolutions of such governing bodies objecting to said bond resolution and said objecting Contracting Municipalities shall have paid 25% or more of the total amount of moneys received by the Commission (with certain exceptions) from all Contracting Municipalities during the calendar year preceding said public hearing.

Pursuant to the Resolution, Additional Bonds of the Commission may be authenticated and delivered from time to time for the purposes of raising funds to pay any Costs of Construction with respect to construction, acquisition, improvement or replacement of any part of the System or refunding any Outstanding Bonds. Additional Bonds shall be issued only after their authorization in accordance with the Resolution by a Supplemental Resolution, which shall be adopted pursuant to and in accordance with the provisions of the Act.

Subordinated Indebtedness

Pursuant to the Resolution, the Commission has covenanted not to issue any bonds, notes or other evidences of indebtedness, other than the Bonds (including Additional Bonds), secured by a pledge of or other lien or charge on the System Revenues (including amounts which the Commission may thereafter be entitled to expend for Operating Expenses) and shall not create or cause to be created any lien or charge on such System Revenues or on any amounts held by any Fiduciary under the Resolution; provided however, that such covenant shall not prevent the Commission from issuing bonds or notes or other obligations for the purposes of the Commission payable out of, or secured by a pledge of, System Revenues, to be derived on and after such date as the pledge of the System Revenues provided in the Resolution shall be discharged and satisfied as provided in the Resolution, or from issuing temporary obligations pursuant to the Act, payable out of, or secured by a pledge of, System Revenues available therefor in accordance with the provisions of the Resolution.

In order to finance certain improvements to the System at the lowest available cost of capital, the Commission previously has participated in, and anticipates participating again in the future, in the New Jersey Infrastructure Bank (*fka* the “Environmental Infrastructure Trust”) Financing Program (the “I-Bank Program”). In connection with its participation in the I-Bank Program, the Commission has previously issued and currently has outstanding multiple series of its Subordinate Sewer System Bonds (the “I-Bank Bonds”), which were issued to the State of New Jersey, acting by and through the State’s Department of Environmental Protection, and to the New Jersey Infrastructure Bank (the “I-Bank”) in order to secure various loans made by the State and the Bank to the Commission. The outstanding I-Bank Bonds are, and any future issues of I-Bank Bonds will be, subordinate and junior in all respects to all of the Bonds Outstanding under the Resolution, including the Series J Bonds and any Additional Bonds hereafter issued by the Commission. The Commission currently has \$79,302,423 aggregate principal amount of I-Bank Bonds outstanding and \$58,576,202 aggregate principal amount of I-Bank Notes outstanding.

Users' Payment of Operating Expenses – Property Tax Levy Cap Law

The Contracting Municipalities and other Users of the System are authorized and required by the Act to do all things necessary so that they shall annually pay the total costs and expenses owed by each of them to the Commission on account of its Operating Expenses, including the levying of taxes upon the general populations of such municipalities or by the issuance of notes in anticipation of taxation.

Under the Property Tax Levy Cap Law of the State, constituting Chapter 62 of the Pamphlet Laws of 2007 of the State, as amended and supplemented, including without limitation, as amended and supplemented by Chapter 44 of the Pamphlet Laws of 2010 (the “*Property Tax Levy Cap Law*”), the State has imposed a ceiling on the annual increase in the levy of property taxes that a municipality may establish in any year (the “*Annual Tax Levy Cap*”). Pursuant to N.J.S.A. 40A:4-45.45(b), certain items are to be excluded from the calculation of the adjusted tax levy in the preparation of annual budgets by municipalities, including without limitation the payment of “debt service”, which calculation is made in order to determine if the Annual Tax Levy Cap has been exceeded.

There is no specific reference within the enumerated exclusions from the calculation of the adjusted tax levy set forth in the Property Tax Levy Cap Law for payments made by a municipality pursuant to a service agreement with a public authority or agency which are used to pay debt service on obligation of such public authority or agency secured by such service agreement. However, in connection with the issuance of its Sewer System Bonds, Series G (the “Series G Bonds”) in 2010, the Commission received a letter from the Director of the Division of Local Government Services in the State’s Department of Community Affairs (the “*Director*”) whereby the Director determined, pursuant to the provisions of N.J.S.A. 40A: 4-45.47, that the portion of payments allocable to the payment of principal of and interest on the Series G Bonds owed to the Commission by the Contracting Municipalities and other municipal Users of the System on account of their Operating Expenses pursuant to existing agreements and the Act, shall be considered as the equivalent of local unit debt service (which is exempt from the Annual Tax Levy Cap) and shall be treated as such for all purposes under the Property Tax Levy Cap Law. Such letters or other similar waivers or determinations from the Director or the Local Finance Board of the State are no longer available under the Property Tax Levy Cap Law.

In the opinion of Bond Counsel, pursuant to the Act, the obligation of each Contracting Municipality and other municipal User of the System to pay the portion of the Commission’s Operating Expenses allocable to the payment of principal of and interest on the Bonds owed to the Commission by such Contracting Municipality or other municipal Users of the System is a valid, binding, direct and general obligation of such Contracting Municipality or other municipal User of the System and, unless payable from other sources, is payable from the levy of *ad valorem* taxes without limitation as to rate or amount, in an amount sufficient to pay its share of the debt service on the Bonds.

In the event that such Operating Expense payments due the Commission from any Contracting Municipality or other User of the System are not paid for thirty days after notification by the Commission, the Act specifies that interest will be charged on the amount remaining unpaid at the rate equal to two percentage points over the average prime rate for the 30-day period beginning on the date the notice of the Commissioners was mailed. The Commission is authorized by the Act to institute whatever action, suit, or proceeding provided by law which shall be necessary for the enforcement of such obligation. See “Enforcement Procedures for Collection” below.

Effect of Fiscal Condition of Users on Payment of the Bonds

Payment of the Bonds is dependent upon receipt by the Commission of System Revenues, which is in turn dependent upon payment to the Commission by the Contracting Municipalities and other Users of the System of their respective portions of the Commission’s Operating Expenses. Therefore, potential purchasers of the Series J Bonds are advised that if any Contracting Municipality or other User of the System experiences a fiscal problem

of sufficient magnitude to result in the cessation of payment to the Commission, the System Revenues would be adversely affected and payment of the Bonds, including the Series J Bonds, could be adversely affected.

Enforcement Procedures for Collection

Under the provisions of N.J.S.A. 58:14-34.20 of the Act, all Contracting Municipalities and other Users of the System are required to participate in the annual costs and expenses of the maintenance, repair, and operation of the sewerage system. Pro rata shares of costs and expenses are determined by a formula which considers the relationship of the flow and wastewater quality of the individual user to the total flow and wastewater quality of the System. In the case of Lessees, there is an annual fixed rate payable to the Commissioners in addition to the flow charge. Principal and interest payments on all Bonds as well as Bond Reserve Fund payments are included as described above in the annual costs and expenses chargeable to the Contracting Municipalities and other Users of the System. The Contracting Municipalities and other Users of the System are directed by the Act to do and perform any and all acts and things necessary, convenient, and desirable to pay the Commission its Operating Expenses.

The Commission is required to bill its Operating Expenses to the Contracting Municipalities and other Users of the System not later than January 15 of each year. Operating Expenses are due and payable under the Act in quarterly installments on February 1, May 1, August 1, and November 1 of each year. Mandatory interest charges are provided by the Act for any payment unpaid for thirty days after notification.

The obligations of Contracting Municipalities and other Users of the System to make such payments are enforceable by the Commission by suit. The Commission can pursue any and all remedies provided by law for the enforcement of payment. In the case of Lessees, in addition to the remedy of suit for damages, the Leases are renewable annually and may be terminated upon non-payment.

In addition to the aforementioned remedy whereby any creditor may collect a money judgment against a debtor, the Commission may rely on the provisions of the Local Budget Law of the State of New Jersey (N.J.S.A. 40A:4-1 *et seq.*) (the "Local Budget Law"). Under this law, all municipalities are required to adopt budgets each year. For those municipalities that operate on a January 1 to December 31 fiscal year, the budget is required to be introduced not later than February 10, and is required to be finally adopted not later than March 20. For those municipalities that operate on a July 1 to June 30 fiscal year, the budget is required to be introduced not later than July 21, and is required to be finally adopted not later than September 1. The budget includes a statement of all anticipated revenues and must include line item appropriations for moneys to be expended by the municipality during the year. The annual charge of the Commission for Operating Expenses to a municipal User of the System is required to be included in each municipal budget as an appropriation. Municipal budgets in New Jersey are required by statute to be balanced, and each municipality is required to provide sufficient funds for the payment of all appropriations contained in the budget.

The Local Budget Law also requires each municipality to adopt a temporary budget within the first 30 days of the beginning of its fiscal year. The purpose of the temporary budget is to provide appropriation authorization until the annual budget has been finally adopted. Furthermore, each municipality is authorized to make emergency temporary appropriations after the adoption of the temporary budget, and prior to the adoption of the annual budget, where the line item appropriation in the temporary budget is insufficient to meet any obligations which accrue prior to the adoption of the annual budget.

In any case in which a municipal User of the System has failed to make an appropriation in its annual or temporary budget for the payment of its annual charge from the Commission, the Commission would have the right to institute an action in the Superior Court of New Jersey to compel the municipality to make the appropriation. Such a suit would be instituted by complaint and an order to show cause, and would be heard by the Superior Court in a summary manner. The rules of the Superior Court permit emergent orders to be issued

without the municipality being present or represented. A hearing could be held on a motion for summary judgment within twenty-eight days. Upon a grant of summary judgment for the Commission and upon request of the Commission, the Superior Court would issue an order directing the municipality to make the necessary appropriation.

If a municipality made an appropriation in its temporary budget and the annual budget but was in default as to actual payment to the Commission, the Commission could obtain a hearing on a motion for summary judgment within a thirty-day period. Upon the granting of summary judgment for the Commission, the Superior Court could issue a mandatory injunction directing the municipality to make the necessary payment. If the failure of the municipality to make timely payment resulted from an inadequate cash flow, that condition could be remedied through the utilization of tax anticipation notes, which, under the provisions of N.J.S.A. 40A:4-64, are authorized to be issued in anticipation of the collection of taxes for the fiscal year.

All Contracting Municipalities and other Users of the System have paid their respective portion of Operating Expenses to date. The Commission has sufficient funds available on hand to pay its Operating Expenses and to meet its obligations. In addition, the Commission has a rate stabilization reserve fund, which is funded, as of the date of the Official Statement, in the amount of approximately \$85,279,340.

THE REFUNDING PLAN

In order to provide for the current refunding and legal defeasance of the Refunded Bonds, on the date of issuance and delivery of the Series J Bonds, a portion of the proceeds of the Series J Bonds, together with other available funds of the Commission, will be irrevocably deposited into an escrow fund (the "Escrow Fund") to be held by The Bank of New York Mellon, as Escrow Agent (the "Escrow Agent"), and established pursuant to an escrow deposit agreement (the "Escrow Agreement") between the Commission and the Escrow Agent. Simultaneously with the issuance of the Series J Bonds, substantially all of the amounts so deposited into the Escrow Fund will be used by the Escrow Agent to purchase certain direct and general obligations of the United States of America constituting "Investment Obligations" as defined in the Resolution (the "Defeasance Securities"). The maturing principal of and interest on the Defeasance Securities, together with the other available moneys, if any, on deposit in the Escrow Fund, will be sufficient, to pay, when due, the Redemption Price of the Refunded Bonds on August __, 2020. All of the Refunded Bonds will be redeemed on August __, 2020 (the "Redemption Date"), at a Redemption Price equal to 100% of the principal amount thereof to be redeemed, plus interest accrued thereon to the Redemption Date. Upon the deposit of the Defeasance Securities and such other available moneys, if any, in the Escrow Fund, the Refunded Bonds will no longer be deemed Outstanding for purposes of the Resolution and will no longer have the benefit of the pledge of the System Revenues under the Resolution, but will be secured solely by the amounts on deposit in the Escrow Fund. See "VERIFICATION" herein.

THE PROJECTS

The Series J Bonds are also being issued to pay the costs of the planning, design, acquisition, improvement, renovation, replacement, construction and installation of the Projects. The projects consist of the following: the planning, design, acquisition, improvement, renovation, replacement, construction and installation of various capital projects to and for the System, including, without limitation, various roof replacements, rehabilitation of meter chambers, various main and lateral sewer line improvements, HVAC upgrades, fire alarm upgrades, electrical substation improvements, rehabilitation of sludge storage tanks, refurbishment of sludge thickener facility and acquisition of certain real property.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds for the Series J Bonds are as follows:

Sources of Funds:

Par Amount of Series J Bonds	\$	
Net Original Issue Premium		
Other Available Funds		_____
Total Sources of Funds	\$	_____

Uses of Funds:

Deposit to Escrow Fund for Refunding of Series F Bonds	\$	
Deposit to Construction Fund		
Underwriter's Discount		
Costs of Issuance (1).....		_____
Total Uses of Funds.....	\$	_____

(1) Includes legal, financial advisory, Trustee, rating agency fees and costs and other costs of issuance, including rounding amount.

AGGREGATE DEBT SERVICE REQUIREMENTS

As of the date of issuance and delivery, the Series J Bonds will be secured on a parity under the Resolution with \$23,060,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series G, \$33,095,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series H, \$27,465,000 aggregate principal amount of the Commission's outstanding Sewer System Bonds, Series I, after taking into account the defeasance of the Refunded Bonds. As of such date, there will be no other Bonds or other outstanding indebtedness of the Commission which will be payable and secured on a parity with the Series J Bonds. However, as of such date, the Commission will have outstanding \$79,302,423 aggregate principal amount of I-Bank Bonds and \$58,576,202 aggregate principal amount of I-Bank notes, which are payable and secured on a subordinate basis to the Bonds, including the Series J Bonds, Outstanding under the Resolution. The following table details the Commission's aggregate debt service requirements for all of the Bonds Outstanding under the Resolution and the outstanding I-Bank Bonds after the issuance of the Series J Bonds.

**PASSAIC VALLEY SEWERAGE COMMISSIONERS
SEWER SYSTEM BONDS AND I-BANK BONDS
AGGREGATE DEBT SERVICE SCHEDULE**

Period Ending Dec. 31	Aggregate Debt Service On Outstanding Bonds*	Sewer System Bonds Series J	Total Senior Lien Debt Service	Subordinate I-Bank Bonds	Aggregate Debt Service**
2020	\$ 19,103,975	\$	\$	\$ 8,742,638	\$ __, __, __
2021	18,645,475			8,937,094	__, __, __
2022	18,645,713			8,687,186	__, __, __
2023	7,045,525			8,535,348	__, __, __
2024	7,048,275			8,225,499	__, __, __
2025	7,047,025			7,698,810	__, __, __
2026	2,136,275			6,957,829	__, __, __
2027	2,135,875			5,774,584	__, __, __
2028	2,138,075			5,455,806	__, __, __
2029	2,137,675			4,636,736	__, __, __
2030	2,139,675			2,171,488	__, __, __
2031	2,134,850			2,156,233	__, __, __
2032	2,139,725			2,165,983	__, __, __
2033	2,138,350			2,086,622	__, __, __
2034	2,136,350			604,693	__, __, __
2035	2,137,700			599,124	__, __, __
2036	2,137,250			598,555	__, __, __
2037				423,223	__, __, __
2038				434,499	__, __, __
2039				380,521	__, __, __
2040					__, __, __
2041					__, __, __
2042					__, __, __
2043					__, __, __
2044					__, __, __
2045					__, __, __
Totals	\$101,047,788	\$	\$	\$85,272,471	\$ __, __, __

* Includes Series G, H, I Bonds But Excludes Refunded Series F Bonds

** Totals may not add up due to rounding.

THE COMMISSION

The Commission was created on March 27, 1902 by legislative action of the State of New Jersey (the “Original Act”) as a public body established for the purpose of developing a plan for eliminating pollution from the streams and rivers within the Passaic River valley drainage area (the “Area” is defined herein as the drainage areas of the Passaic River basin extending from the Great Falls in Paterson, New Jersey to Newark Bay. See APPENDIX E attached to this Official Statement). In accordance with the provisions of the Original Act, the Commissioners prohibited the discharge of polluting matter into that portion of the Passaic River and the tributaries lying within the Area and financed the construction of the original portions of the System with contributions received from certain municipalities located either wholly or partially within the Area. These municipalities comprise the Contracting Municipalities and were, in return, allocated capacity within the System under contract with the Commission, in accordance with the needs of such municipalities as agreed upon with the Commission. In addition, the Commission has arrangements with other Users of the System. The Original Act has been subsequently amended (the “Amendatory Acts”) to provide the Commission with, among other things, the power to issue bonds. The Original Act and the Amendatory Acts constitute the “Act”, as defined earlier herein. See “INTRODUCTION” herein.

Governance

Under the Act, the Commission shall consist of nine Commissioners each of whom are appointed by the Governor of the State of New Jersey with the advice and consent of the Senate. Additionally, the Act requires that each County within said sewerage district shall be represented by two Commissioners, of different political parties. Not more than five of the nine members of the Commission shall be from the same political party. The ninth member shall be an at-large member who shall serve during the term of office of the Governor of the State of New Jersey. Each Commissioner serves for a term of five years or until his successor is appointed, except for the at-large member. The Act requires that each Commissioner be a resident of the sewerage district as defined by the Act.

<u>Commissioner</u>	<u>Municipality of Residence</u>	<u>Term Expires</u>
Thomas Tucci, Jr., Chairman	Nutley, NJ	Expired- Holdover*_
Luis A. Quintana, Vice Chairman	Newark, NJ	Expired- Holdover*
Mildred C. Crump, Secretary	Newark, NJ	11/19/2020
Elizabeth Calabrese, Treasurer	Wallington, NJ	11/19/2020
John J. Cosgrove	Fair Lawn, NJ	Expired- Holdover*
James P. Doran	Harrison, NJ	6/29/2022
Joseph F. Isola	Union City, NJ	6/29/2022
Hector C. Lora	Passaic, NJ	Expired- Holdover*
Brendan Murphy	Totowa, NJ	Expired- Holdover*

*Continues to serve until a successor is appointed.

Executive Director

Gregory A. Tramontozzi, Esq.

Thomas Tucci, Jr., Chairman. Mr. Tucci, Essex County, was appointed to the Commission in August 2014. Mr. Tucci currently serves as the Township Manager for the Township of Cedar Grove, a position he has held for the past twenty years. Mr. Tucci served as a Commissioner of the New Jersey State Lottery Commission from June of 2009 through October of 2015, including serving as Chairman from June 2013 through June of 2015. He also currently serves as a Commissioner of the New Jersey Intergovernmental Insurance Fund, where he heads the coverage and professional committees. Mr. Tucci holds a New Jersey Building Inspectors License, Housing Code License, Inspector of Hotels and Multiple Dwellings License, and is also a Certified Public Works Manager. Mr. Tucci has managed and supervised Public Works projects for over 34 years as part of his engineering background and training.

Luis A. Quintana, Vice-Chairman. Luis A. Quintana, At-Large, was re-elected to his seventh term on the Newark City Council in 2018. In 1994, he became the first Hispanic elected to the position of Councilman at Large in the City of Newark. He has also served as City Council President and Mayor of the City of Newark. He received his B.A. in Criminal Justice from Seton Hall University. A devoted youth advocate, Quintana has worked with many organizations and programs related to youth development and education. He is the recipient of numerous awards and honors and serves on a number of non-profit boards.

Mildred C. Crump. Mildred C. Crump, Essex County, currently serves as the first female and African-American president of the Newark Municipal Council, having been elected as Newark's first African-American Councilwoman in 1994. She is a graduate of Wayne State University and Rutgers University, where she received her Masters' degree in Public Administration. She is the recipient of numerous awards and honors and has been a longtime community activist, lending her skills and talents to scores of organizations in Newark and throughout the State.

Elizabeth Calabrese. Elizabeth Calabrese, Bergen County, has previously served as Vice Chairwoman of the Bergen County Board of Chosen Freeholders, on which she served two terms. During her tenure, she served on numerous committees and boards including Labor and Personnel, Social Services, and Organization and Internal Affairs. In addition to her work on the Freeholder Board, she has also served as a longtime Wallington Borough Councilwoman and on the New Jersey Highlands Water Protection and Planning Council. Commissioner Calabrese resides in Wallington, NJ.

John J. Cosgrove. Mr. Cosgrove, Bergen County, was appointed to the Commission in May 2019. Mr. Cosgrove is an experienced municipal leader and a successful businessman. He served as Mayor of Fair Lawn for five consecutive terms and as a member of the Fair Lawn Town Council for eight consecutive terms. He now serves as the borough's Deputy Mayor for Community Affairs. Since 2005, he has served as President of Atlantic Handling Systems (AHS) in Fair Lawn. AHS designs, sells, installs and services conveyor and storage systems.

James P. Doran. Dr. Doran, Hudson County, was appointed to the Commission in July 2017. Dr. Doran was the Superintendent of Schools for the Harrison Public School System from 2009 to 2014. In that role, he provided supervision over all aspects of the operation, including fiscal operations, district-wide instructional programs, and directed the administrative and supervisory staff. Since then, he has served as the district's Personnel Director. Prior to working in the Harrison district, he served as the Principal of Hudson County Schools of Technology for more than 20 years.

Joseph F. Isola. Mr. Isola, Hudson County, was appointed to the Commission in July 2017. Mr. Isola has more than 32 years of fire-fighting, rescue, fire investigation and safety experience. He was the Fire Captain with North Hudson Fire and Rescue from 2001 to 2010. Prior to that, he was a fire fighter with the Union City Fire Department from 1981 to 1999. From 1989 to 1999, he also served as that department's Recruit Training Instructor. He has extensive experience in management and supervision of staff, as well as training and education.

Hector C. Lora. Mr. Lora, Passaic County, was appointed to the Commission in June 2019. Since 2017, Mr. Lora has served as Mayor of the City of Passaic. He was previously elected to two terms as a Passaic County Freeholder, serving as the Director of the Board in his second term. Prior to that, he was a City of Passaic Councilman. He spent 14 years with St. Mary's Hospital in Passaic, where he served as an Ancillary Department Director and as the Public Health and Patient Liaison within the Public Relations and Marketing Department.

Brendan Murphy. Mr. Murphy, Passaic County, was appointed to the Commission in June 2019. Mr. Murphy has served as a Totowa Councilman and as the Chairman of Totowa's Public Works and Public Safety Committees. He also serves as the Vice Chairman of the Totowa Republican Party. He is an accountant for Lerch, Vinci & Higgins in Fair Lawn. He is also part owner of Murph's Tavern in Totowa and is a member of the New Jersey Licensed Beverage Association.

Gregory A. Tramontozzi – Executive Director. Mr. Tramontozzi was appointed Executive Director of the Commission in October, 2015. An attorney, Mr. Tramontozzi served as PVSC's first in-house General Counsel between June 2011 and March 2016. Mr. Tramontozzi worked as an Assistant Bergen County Prosecutor between 1995 and 2000 before working for two large New Jersey law firms between 2000 and 2011. He is a Supreme Court of New Jersey-Certified Civil Trial Attorney.

Awards and Distinctions

Throughout its history the Commission has received numerous awards and distinctions recognizing it for its work in wastewater treatment and environmental protection, including the burgeoning green infrastructure industry. The following is a brief discussion of the awards and distinctions the Commission has received since 2016.

In 2016, the Commission received a New Jersey Association of Environmental Authorities "Best Management Practices" Wave Award for its River Restoration Program and a "Public Education" Wave Award for its Lower Passaic River Blueway Canoe and Kayak Trail, Trailhead Maps and Signs Program.

In 2017, the Commission received a New Jersey Association of Environmental Authorities "Forward Thinking" Wave Award for its Clean Waterways, Healthy Neighborhoods Initiative and a "Public Education" Wave Award for its Lab Day event.

In 2018, the Commission received a New Jersey Association of Environmental Authorities "Forward Thinking" Wave Award for the successful efforts of its New Jersey Combined Sewer Overflow (CSO) Group. The Commission also received the New Jersey Water Environment Association "Public Education" Award for significant accomplishments in promoting awareness and understating of water environment issues among the general public through the development or and implementation of public programs. PVSC was honored with this award for the following various initiatives: River Restoration, Educational Outreach, Green Infrastructure Educational Outreach, World Lab Day Event, CSO Long Term Control Planning Education and Outreach, and participation in various science fairs and career day events.

In 2019, the Commission received a New Jersey Association of Environmental Authorities "Forward Thinking" Wave Award for its efforts in enhancing stormwater resiliency at its Newark plant.

Employees – Collective Bargaining Units

The Commission currently has approximately 589 employees. Of these, approximately 514 employees are members of one of four collective bargaining units. The four units consist of approximately (i) 350 regularly employed blue collar, non-supervisory, non-professional personnel (the “Blue Collar Unit”), (ii) 70 regularly employed white collar, non-supervisory, non-professional personnel (the “White Collar Unit”), (iii) 67 regularly employed non-professional supervisors (the “Supervisory Unit”), and (iv) 27 non-supervisory professionals (the “Professional Unit”).

All of the above listed units are represented by the International Brotherhood of Electrical Workers, Local 1158 (the “IBEW”).

All of the above listed units have entered into bargaining unit agreements with the Commission, all of which expire on December 31, 2021.

Pension Information

All of the full-time regular employees of the Commission are enrolled in the Public Employees Retirement System (PERS), a multiple employer cost-sharing defined benefit pension plan sponsored by the State of New Jersey. The Commission is a member of the local unit pension system and has been making all actuarially-determined pension contributions as determined by the Division of Pensions and Benefits, Department of the Treasury, State of New Jersey. Additional information on the PERS is contained herein and in the Notes to the Commission’s financial statements. See “THE SYSTEM – Pension and OPEB Obligations” herein and APPENDIX C and APPENDIX D attached to this Official Statement.

THE SYSTEM

Background

The System, which is operated and maintained by the Commission, is the principal sewage collection and treatment system in the Passaic River valley between the Great Falls in the City of Paterson and the mouth of the Passaic River at Newark Bay. The service area of the System is a densely populated industrial and residential area in northern New Jersey, which encompasses parts of Bergen, Essex, Hudson, and Passaic Counties. Between 1911 and 1942, a total of 22 municipalities entered into contracts with the Commission for the provision of sewage collection and treatment services. These 22 municipalities comprise the Contracting Municipalities. Since 1943, 11 municipalities have been added to the Commission’s System as Lessees. Since 1985, 3 municipalities, including Jersey City, Bayonne and North Bergen, were each added to the System as a Contracting Agency.

In addition, other municipalities in the service area of the System indirectly utilize the System (the “Indirect Lessees”) through the facilities of neighboring municipalities who are Users of the System. Each Indirect Lessee makes payments to the appropriate User whose facilities are utilized by such Indirect Lessee, and such Users of the System are responsible for making payments to the Commission for their respective portions of the Operating Expenses, including those of the appropriate Indirect Lessees. If an Indirect Lessee fails to make such a payment, the appropriate User is nevertheless responsible for payment in full to the Commission.

The Contracting Municipalities are Belleville, Bloomfield, Clifton, East Newark, East Rutherford, Garfield, Glen Ridge, Haledon, Harrison, Kearny, Lodi, Lyndhurst, Montclair, Newark, North Arlington, Nutley, Orange, Passaic, Paterson, Prospect Park, Rutherford, and Wallington. The Lessees are presently Elmwood Park, Fair Lawn, Garfield, Glen Rock, Hawthorne, Little Falls, North Haledon, Saddle Brook, South Hackensack, Totowa, Woodland Park and Wood-Ridge.

Under the Original Act, the Commission had no bond issuing powers, and all capital outlays were included with current expenses for operations, maintenance, and repairs and charged annually to all users. Since the

enactment of the Amendatory Acts, the Commission has been authorized to issue debt to fund the long-term capital costs of additions and improvements to the System, and the Contracting Municipalities and other Users of the System are required to pay annually the principal, interest, and redemption price, if any, of the Commission's debt becoming due prior to the end of each year.

Present Users

The following table details the fiscal year 2016, 2017, 2018, 2019 and 2020 apportionment of Operating Expenses of each User of the System.

**PASSAIC VALLEY SEWERAGE COMMISSION
PERCENTAGE APPORTIONMENT OF NET OPERATING EXPENSES
FOR FISCAL YEARS 2016, 2017, 2018, 2019 AND 2020**

MUNICIPALITY	ACTUAL 2016	ACTUAL 2017	ACTUAL 2018	ACTUAL 2019	ESTIMATE 2020
Bayonne	3.33%	3.30%	3.36%	3.47%	3.43%
Belleville	2.29	2.27	2.22	2.28	2.33
Bloomfield	2.62	2.56	2.55	2.60	2.62
Clifton	5.05	4.97	5.05	5.10	5.05
East Newark	0.22	0.22	0.22	0.22	0.22
East Rutherford	0.24	0.22	0.21	0.21	0.21
Elmwood Park	0.96	2.21	2.11	1.35	0.96
Fair Lawn	1.36	1.30	1.28	1.26	1.31
Garfield	1.35	1.26	1.23	1.23	1.24
Glen Ridge	0.49	0.46	0.48	0.52	0.55
Glen Rock	0.42	0.40	0.39	0.40	0.41
Haledon	0.45	0.44	0.44	0.45	0.45
Harrison	0.60	0.57	0.55	0.56	0.55
Hawthorne	0.93	0.88	0.86	0.89	0.87
Jersey City (2)	16.09	15.54	15.39	15.39	15.07
Kearny	3.47	3.33	3.27	3.26	3.19
Little Falls (5)	0.71	0.67	0.67	0.68	0.69
Lodi (4)	1.19	1.14	1.17	1.13	1.12
Lyndhurst	1.35	1.31	1.30	1.28	1.25
Montclair	3.07	3.02	2.98	3.03	3.10
Newark (1)	28.79	29.43	29.76	29.92	30.73
North Arlington	0.90	0.87	0.86	0.86	0.87
North Bergen	3.41	3.34	3.21	3.15	2.96
North Haledon (6)	0.30	0.29	0.29	0.29	0.30
Nutley	2.38	2.32	2.32	2.45	2.50
Orange (3)	2.19	2.12	2.08	2.10	2.10
Passaic	3.55	3.54	3.58	3.73	3.78
Paterson	8.87	8.68	8.66	8.83	8.66
Prospect Park	0.19	0.18	0.18	0.18	0.17
Rutherford	0.41	0.40	0.39	0.41	0.42
Saddle Brook	0.64	0.61	0.60	0.64	0.66
South Hackensack	0.01	0.01	0.01	0.01	0.01
Totowa	0.92	0.95	1.12	0.92	1.00
Wallington	0.54	0.53	0.52	0.52	0.50
Woodland Park	0.69	0.65	0.64	0.65	0.65
Wood-Ridge	0.01	0.02	0.03	0.03	0.04
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

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- (1) Includes flow from East Orange and Hillside
 - (2) Includes flow from Union City
 - (3) Includes flow from West Orange and South Orange
 - (4) Includes flow from South Hackensack and Hasbrouck Heights
 - (5) Includes flow from Cedar Grove and North Caldwell
 - (6) Includes flow from Wyckoff and Franklin Lakes

Source: Passaic Valley Sewerage Commission

**PASSAIC VALLEY SEWERAGE COMMISSION
STATISTICAL DATA RELATED TO THE LARGEST USERS
(OVER 2%) OF THE SYSTEM**

Apportionment of Expenses Prior to Credits

MUNICIPALITY	ACTUAL 2018 ⁽¹⁾	ACTUAL 2019 ⁽¹⁾	2010 POPULATION ⁽²⁾	PERCENTAGE OF 2019 TAXES COLLECTED ⁽³⁾
NEWARK	\$40,533,156	\$41,232,536	277,140	97.08%
JERSEY CITY	20,969,247	21,202,113	247,597	96.89
PATERSON	11,793,505	12,170,961	146,199	97.57
CLIFTON	6,872,699	7,029,298	84,136	98.77
PASSAIC	4,877,488	5,135,387	69,781	99.28
ELMWOOD PARK	2,879,433	1,860,803	19,403	98.74
KEARNY	4,454,837	4,487,005	40,684	98.28
BAYONNE	4,576,166	4,787,643	63,024	99.61
NORTH BERGEN	4,377,514	4,341,514	60,773	98.63
MONTCLAIR	4,059,331	4,170,341	37,669	98.83
BLOOMFIELD	3,474,837	3,578,386	47,315	98.31
NUTLEY	3,156,890	3,379,744	28,370	98.71
BELLEVILLE	3,030,504	3,141,702	35,926	99.86
ORANGE	2,837,758	2,893,157	30,134	97.64

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- (1) Provided by the Passaic Valley Sewerage Commission
 - (2) From the 2010 U.S. Census
 - (3) From each Municipality (note PATERSON as of June 30, 2019)

PASSAIC VALLEY SEWERAGE COMMISSION
STATISTICAL DATA RELATING TO THE LARGEST USERS (OVER 2%) OF THE SYSTEM
(For the Calendar Year Ending December 31, 2019, except where noted)

Municipality	Net Valuation Taxable	Total Gross Debt (A)	Statutory Total Deductions (A)	Statutory Total Net Debt (A)	Equalized Valuation Basis (A)	Statutory Net Debt As a % of Equalized Valuation Basis (A)	Property Tax Rate per \$100 of Net Valuation Taxable (B)
NEWARK	\$ 12,096,393,664	\$ 854,823,027	\$ 488,046,376	\$ 366,776,651	\$ 15,824,260,295	2.318%	\$ 3.761
JERSEY CITY	35,286,973,573	787,467,972	237,495,808	549,972,164	34,139,344,870	1.611%	1.540
PATERSON **	6,220,103,228	136,740,651	-0-	136,740,651	6,743,594,250	2.028%	4.134
CLIFTON	5,322,486,863	121,116,657	34,633,369	86,483,288	10,120,891,222	0.855%	5.454
PASSAIC	2,959,786,200	21,767,628	1,320,651	20,446,977	3,748,997,295	0.545%	3.677
ELMWOOD PARK	2,076,266,290	45,165,940	27,042,771	18,123,169	2,865,398,171	0.632%	2.951
(B) KEARNY	1,089,223,039	82,401,869	5,185,000	77,216,869	3,992,031,243	1.934%	10.542
BAYONNE	2,182,496,041	231,933,144	69,338,711	162,594,433	6,436,775,677	2.526%	8.630
NORTH BERGEN	2,578,214,731	193,308,986	115,817,087	77,491,899	6,425,660,312	1.206%	5.726
MONTCLAIR	7,060,027,900	164,726,533	91,044,539	73,681,995	7,655,926,934	0.962%	3.146
BLOOMFIELD	4,046,096,140	155,473,393	63,543,532	91,929,861	4,755,047,979	1.933%	3.981
NUTLEY	3,264,126,800	52,973,049	39,255,656	13,717,393	3,848,913,856	0.356%	3.608
BELLEVILLE	3,111,700,250	76,356,687	48,269,323	28,087,364	2,902,707,183	0.968%	3.541
ORANGE	1,303,052,000	80,398,396	40,134,371	40,264,025	1,621,865,700	2.483%	5.315

(A) From 2019 Annual Debt Statement filed by the Municipality with the Division of Local Government Services, Department of Community Affairs, State of New Jersey

(B) From the 2019 Abstract of Ratables- Bergen County, Essex County, Hudson County, Passaic County

** Debt Information as of June 30, 2019

Description of the System

The original System consisted of a primary treatment plant and steam powered pumping station located near Newark Bay, an interceptor sewer running parallel to the Passaic River between Paterson and Newark Bay, and an outfall into New York harbor. Since completion of these original facilities in 1924, the Commission has made numerous modifications to improve treatment and increase capacity. In the 1930's and 1940's, two additional sedimentation basins were constructed. In the 1950's and 1960's, the sedimentation basins were mechanized, the pumps in the main station were provided with electric and diesel drives, their capacity was increased, sludge handling facilities were added, and modifications were made to the grit chamber and screening facilities. A grit and screening chamber, grit screenings, incinerator facilities, chlorination facilities, and an administration and control building were completed in the early 1970's. Construction of the secondary treatment facility, which is the principal component of the System, was initiated in 1977 and completed in 1985. The sludge handling facilities constructed in 1990 are the most recent units added to the System. In the 1990's and 2000's, numerous additional capital improvements and upgrades were completed which were intended to rehabilitate, expand and enhance System efficiency.

The secondary treatment facility is capable of treating an average influent flow of 330 million gallons per day (MGD), and peak wet weather flow of 368 MGD. The facility utilizes primary clarification and a pure oxygen activated sludge secondary treatment process. The wet train units consist of a 510 MGD influent pumping station, twelve oxygenation tanks, twelve final clarifiers, and a 1,200 MGD effluent pumping station. Two 500-ton per day cryogenic oxygen production plants provide oxygen for the biological process.

The solids generated in the primary and secondary clarifiers are mixed and directed to twelve gravity thickeners. The thickened sludge is then pumped to sludge conditioning units for treatment, stabilization, and dewatering. The sludge cake produced by the sludge dewatering facilities is stored in silos within a heated structure prior to being beneficially reused or transported to an out-of-state landfill for disposal. The sludge conditioning units include a Zimpro wet air oxidation facility with associated filter presses, as well as centrifuges with related polymer conditioning and lime stabilization facilities.

The System presently consists of the following major units:

- Interceptor Sewer
- Grit and Screenings Removal
- Influent Pump Stations
- Primary Clarifiers
- Oxygenation Tanks
- Final Clarifiers
- Effluent Pump Station
- Industrial and Pollution Control Building
- Sludge Thickeners
- Thickening Centrifuges
- Sludge Heat Treatment
- Sludge Decant
- Sludge Storage Tanks
- Sludge Cake Storage Facility
- Sludge Dewatering (Filter Presses and Centrifuges)
- Sodium Hypochlorite Facilities
- Liquid Waste Acceptance Facilities
- Outfall Works
- Electric Substations
- Administration Building

Vehicle Maintenance Facility
Operations and Maintenance Building
Warehouse

In the opinion of the Commission, the System is in good operating condition with appropriately funded reserves for its renewal and replacement. All permits necessary for the operation of the System are in full force and effect.

Future Construction Requirements

The Commission continues to upgrade and improve plant and sewerage treatment facilities on an ongoing basis. The Commission has a longstanding policy of undertaking improvements to various facilities to both extend their service life and to make use of new, more efficient technologies as they become available. Improvements to the electrical and mechanical systems continue throughout the treatment plant as well as repairs to the Commission's interceptor system.

Over the next five (5) years, the Commission anticipates that it will undertake two major classes of capital improvements to the System: (i) Superstorm Sandy related mitigation projects, consisting of the construction of a floodwall, on-site standby power plant, drainage improvements and stormwater pump stations and (ii) various improvements to the intercepting sewers and plant treatment works. The Commission currently estimates that the costs of these two projects classes will be \$550,000,000 for the mitigation projects, of which approximately ninety percent (90%) will be funded by the Federal Emergency Management Agency (FEMA), and \$500,000,000 for the improvements to the plant treatment works. The Commission anticipates that it will finance the costs of these projects through its participation in the I-Bank Program and the issuance of Subordinate Sewer System Bonds.

Summary of Revenues and Operating Expenses

Pursuant to the Act and the Resolution, the Commission must charge all Users of the System only that amount which, in the aggregate, is sufficient to pay its Operating Expenses. Accordingly, the Commission is required to prepare, on or prior to January 15 of each year, an annual estimate of Operating Expenses (the "Annual Estimate") and to apportion the amount equal thereto among each of the Contracting Municipalities and the other Users of the System on the basis of the proportion to which the estimated amount of sewage to be delivered and discharged into the System by each of them is a part of the total estimated annual flow, or by such other method of apportionment as may be prescribed by law.

On December 12, 2019, the Commission adopted its 2020 Fiscal Year Budget (the "2020 Budget"). As part of the 2020 Budget, the Commission anticipated revenues of \$186,662,044 and expenses of \$186,662,044 (consisting of operating expenses of \$156,531,842 and debt service of \$30,130,202). As of the date hereof, expenses are substantially in line with the 2020 Budget. Due to the COVID-19 pandemic, certain revenues have been weaker than was expected at the time the 2020 Budget was developed. Specifically, interest revenue, new connection fees, sludge acceptance fees and pollution prevention fees are trending lower than budget. The effect has been a reduction of approximately \$1 million per month compared to budget. As the economy reopens, the Commission expects all revenues, with the exception of interest earnings, to recover to historical trends.

The following summary of revenues and operating expenses is derived from the Commission's audited Statements of Revenues and Expenditures for the four years ended December 31, 2018, with unaudited results for the year ended December 31, 2019.

**PASSAIC VALLEY SEWERAGE COMMISSION
SUMMARY OF REVENUES, EXPENDITURES AND INCREASE/(DECREASE)
IN RATE STABILIZATION - GENERAL FUND**

	2015	2016	2017	2018	2019 (Unaudited)	2020 BUDGET
REVENUES						
User Charges	\$126,688,997	\$132,497,310	\$134,319,161	\$136,492,623	\$138,417,215	\$142,698,069
Other Revenues	<u>41,915,268</u>	<u>41,930,311</u>	<u>46,288,769</u>	<u>44,532,574</u>	<u>48,170,326</u>	<u>36,463,975</u>
TOTAL REVENUES	<u>168,604,265</u>	<u>174,427,621</u>	<u>180,607,930</u>	<u>181,025,197</u>	<u>186,587,541</u>	<u>179,162,044</u>
EXPENDITURES						
Operating	120,135,150	127,722,391	131,406,948	136,545,354	141,138,144	156,531,842
Debt Service	<u>31,826,040</u>	<u>30,406,612</u>	<u>31,051,073</u>	<u>31,335,481</u>	<u>30,091,798</u>	<u>30,130,202</u>
TOTAL EXPENDITURES	<u>151,961,190</u>	<u>158,129,003</u>	<u>162,458,021</u>	<u>167,880,735</u>	<u>171,229,942</u>	<u>186,662,044</u>
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES- BEFORE TRANSFERS	<u>\$ 16,643,075</u>	<u>\$ 16,298,618</u>	<u>\$ 18,149,909</u>	<u>\$ 13,144,462</u>	<u>\$ 15,357,599</u>	<u>\$ (7,500,000)</u>

Under the Act, the Contracting Municipalities and other Users of the System pay their proportionate shares quarterly on February 1, May 1, August 1, and November 1 of each year. After determining the amount of the Annual Estimate, the Commission apportions such amount as aforesaid and, at each year end, adjustments are made for any divergences in (i) the actual expenditures made by the Commission on account of the Operating Expenses and (ii) the amounts and quality of sewage actually delivered and discharged by each User into the System. Such adjustments are made to each User's bill for the next succeeding year as a debit or credit thereto in proportion to such User's proportionate share of any such divergences.

In addition to the System Revenues paid or required to be paid to the Commission on account of the Operating Expenses by all Contracting Municipalities and other Users of the System, the Commission is also required to collect rentals paid by Lessees of the System's unused capacity under lease agreements with the Commission, all of which lease agreements are renewable annually unless terminated upon six months' notice by either party. Such unused capacity within the System has been made available for lease by the Contracting Municipalities who have unused allotted capacity therein as determined by contract. Users operating under lease agreements include municipalities that joined the System after the capacity allotments were originally contracted for and Contracting Municipalities leasing capacity in addition to their contracted allotments. Upon the collection of such lease rental payments, the Commission is required to make a distribution to all Contracting Municipalities who have unused capacity, in proportion to each Contracting Municipality's share of the Annual Expenses owed in the next succeeding year. Annual lease rentals paid by Lessees are fixed by the Act at \$2,500 per million gallons of average daily flow delivered and discharged into the System, subject to a minimum annual payment of \$1,500. Other unused capacity within the System has been made available to the Contracting Agencies by the Contracting Municipalities. The Contracting Agencies have entered into contracts with the Commission for the use of the Commission's treatment facilities with a term of twenty-five years, which are thereafter renewable annually unless terminated upon six months' notice by either party. Those contracts require each Contracting Agency to construct at its expense the interceptor line to the Commission's treatment facilities. To the extent permitted by the Resolution and the Act, the payments of the Contracting Agencies are credited to the Contracting Municipalities in a manner similar to the crediting of Lessee payments.

The audited financial statements of the Commission for the years ended December 31, 2017 and 2018, respectively, are contained in APPENDIX C attached to this Official Statement. The unaudited financial statements of the Commission for the year ended December 31, 2019 are contained in APPENDIX D attached to this Official Statement.

Pension and OPEB Obligations

Employees of the Commission belong to the Public Employees' Retirement System ("PERS"), an actuarially funded multi-employer pension plan operated by the State. The plan provides retirement, disability, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Each employee contributes to PERS based on a percentage of the employee's salary, currently 7.5%. Employees are enrolled in PERS upon commencement of employment with the Commission. The Commission makes an annual contribution to PERS in an amount determined by the New Jersey Division of Pensions and Benefits. P.L. 2011, c.78, effective June 28, 2011, increased the active member contribution rates from 5.5% to the current 7.5% over a period of seven years. Additionally, the payment of automatic cost-of-living adjustment (the "COLA") additional increases to current and future retirees and beneficiaries was suspended. COLA increases may be reactivated at a future date as permitted by this law. Set forth below are the contributions made by the employees of the Commission and the Commission itself during the fiscal years ending December 31, 2015 through and including December 31, 2019:

PASSAIC VALLEY SEWERAGE COMMISSION
SUMMARY OF EMPLOYER AND EMPLOYEE PENSION CONTRIBUTIONS

	2015	2016	2017	2018	2019
PERS Pension Contributions					
Employee Contributions	\$2,709,698	\$2,967,540	\$3,300,009	\$3,451,448	\$3,719,502
Commission Contributions *	<u>4,070,141</u>	<u>4,361,057</u>	<u>4,679,835</u>	<u>5,121,599</u>	<u>6,067,524</u>
TOTAL CONTRIBUTIONS	\$6,779,839	\$7,328,597	\$7,979,844	\$8,573,047	\$9,787,026
 Number of Contributing Employees at December 31,	 <u>516</u>	 <u>533</u>	 <u>555</u>	 <u>554</u>	 <u>568</u>

* Commission contributions include normal cost and accrued liability amounts but exclude group life insurance premiums and early retirement liabilities, if any.

For the year ended December 31, 2018, the Commission’s proportionate share of the net pension liability was \$125,827,307. The net pension liability was measured as of June 30, 2018 and was determined by an actuarial valuation as of that date. The 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, as actuarially determined. Additional details on the Commission’s pension plan may be found in the Notes to the Commission’s financial statements. See APPENDIX C and APPENDIX D attached to this Official Statement.

The Commission currently participates in a cost-sharing multiple employer post-employment benefits plan other than for pensions (the “Plan”). The Plan provides medical and prescription drug coverage through the State of New Jersey Health Benefits Plan. 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 252, 243 and 236 at December 31, 2019, 2018 and 2017, respectively. The Commission's contribution to the Plan for the years ended December 31, 2019, 2018 and 2017 was \$2,595,706, \$4,185,333 and \$4,406,645, 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.

The Commission also provides dental and optical coverage through a self-insured plan, as well as Medicare Part B reimbursement, to eligible retirees and their covered dependents. The Commission currently funds for the cost and liabilities of the Plan on a pay-as-you-go basis. Subject to the provisions of certain labor contracts, the Commission establishes and has the power to amend the benefits and contribution obligations of the Plan. The Plan does not issue stand-alone financial statements and is not included in the report of another entity.

RATINGS

Moody's Investors Service, Inc. ("Moody's") has assigned its municipal bond rating of "A2" to the Series J Bonds. An explanation of the significance of such credit rating may be obtained from Moody's directly. Such rating is not a recommendation to buy, sell or hold the Series J Bonds. There is no assurance that any such credit rating will continue for any given period of time or that it will not be reviewed or withdrawn, if, in the judgment of Moody's, circumstances so warrant. The Commission has not undertaken any responsibility to oppose any such proposed revisions. Any such downward change in or withdrawal of any such credit rating may have an adverse effect on the market price of the Series J Bonds. Except as set forth in the Continuing Disclosure Agreement, neither the Commission nor Bond Counsel has agreed to take any action with respect to any proposed rating change or to bring such rating change, if any, to the attention of the owners of any Series J Bonds.

TAX EXEMPTION

The Commission has covenanted to comply with any continuing requirements that may be necessary to preserve the exclusion from gross income for purposes of federal income taxation of interest on the Series J Bonds under the Internal Revenue Code of 1986, as amended (the "Code"). Failure to comply with certain requirements of the Code could cause interest on the Series J Bonds to be includable in gross income for federal income tax purposes retroactive to the date of issuance of the Series J Bonds. In the opinion of DeCotiis, FitzPatrick, Cole & Giblin, LLP, Bond Counsel, to be delivered at the time of original issuance of the Series J Bonds, assuming continuing compliance by the Commission with certain covenants described herein, under current law, interest on the Series J Bonds is not includable in gross income for federal income tax purposes and is not an item of tax preference under Section 57 of the Code for purposes of computing the federal alternative minimum tax. No opinion is expressed regarding other federal tax consequences or other federal taxes arising with respect to the Series J Bonds.

The Code imposes certain significant ongoing requirements that must be met after the issuance and delivery of the Series J Bonds in order to assure that the interest on the Series J Bonds will be and remain excludable from gross income for federal income tax purposes. These requirements include, but are not limited to, requirements relating to use and expenditure of proceeds, yield and other restrictions on investments of gross proceeds, and the arbitrage rebate requirement that certain excess earnings on investments of gross proceeds of the Series J Bonds be rebated to the federal government. Noncompliance with such requirements may cause interest on the Series J Bonds to become subject to federal income taxation retroactive to their date of issuance, regardless of the date on which such noncompliance occurs or is discovered. The Commission has covenanted that it shall do and perform all acts permitted by law that are necessary or desirable to assure that interest on the Series J Bonds will be and will remain excluded from gross income for federal income tax purposes. The Commission will deliver its Arbitrage and Tax Certificate concurrently with the issuance of the Series J Bonds, which will contain provisions relating to compliance with the requirements of the Code, including certain covenants in that regard by the Commission. In rendering its opinion, Bond Counsel has relied on certain representations, certifications of fact and statements of reasonable expectations made by the Commission in connection with the Series J Bonds, and Bond Counsel has assumed compliance by the Commission with certain ongoing covenants to comply with applicable requirements of the Code to assure the exclusion of interest on the Series J Bonds from gross income under Section 103 of the Code.

In the opinion of Bond Counsel, under current law, interest on the Series J Bonds and any gain on the sale thereof are not includable as gross income under the New Jersey Gross Income Tax Act.

The opinions of Bond Counsel are limited to and based upon the laws and judicial decisions of the State and the federal laws and judicial decisions of the United States of America as of the date of the opinions, and are subject to any amendment, repeal or other modification of the applicable laws or judicial decisions that served as the basis for its opinions or to any laws or judicial decisions hereafter enacted or rendered. Bond Counsel assumes

no obligation to update its opinions after the issue date to reflect any future action, fact or circumstance, or change in law or interpretation, or otherwise. Bond Counsel expresses no opinion on the effect of any action taken after the date of the opinions or not taken in reliance upon an opinion of other counsel on the exclusion from gross income for federal income tax purposes of interest on the Series J Bonds.

Bank Qualification. The Series J Bonds will **not** be designated as qualified under Section 265 of the Code by the Commission for an exemption from the denial of deduction for interest paid by financial institutions to purchase or to carry tax-exempt obligations.

Branch Profits Tax. Section 884 of the Code imposes on foreign corporations a branch profits tax equal to 30% of the “dividend equivalent amount” for the taxable year, unless modified, reduced or eliminated by income tax treaty in certain instances. Interest on the Series J Bonds received or accrued by a foreign corporation subject to the branch profits tax may be included in computing the “dividend equivalent amount” of such corporation for purposes of the branch profits tax.

S Corporation Tax. Section 1375 of the Code imposes a tax on the “excess net passive income” of certain S corporations with passive investment income in excess of 25% of gross receipts for a taxable year. The U.S. Department of the Treasury has issued regulations indicating that interest on tax-exempt bonds, such as the Series J Bonds, held by an S corporation would be included in the calculation of excess net passive income.

Other Federal Tax Consequences. Owners of the Series J Bonds should be aware that the ownership of tax-exempt obligations may result in other collateral federal income tax consequences to certain taxpayers, including property and casualty insurance companies, individual recipients of Social Security and Railroad Retirement benefits and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or to carry tax-exempt obligations. Owners of the Series J Bonds should consult their own tax advisors as to the applicability and the effect on their federal income taxes of the alternative minimum tax, the branch profits tax and the tax on S corporations, as well as the applicability and the effect of any other federal income tax consequences.

Possible Government Action. Legislation affecting municipal bonds is regularly under consideration by the United States Congress. In addition, the Internal Revenue Service (the “IRS”) has established an expanded audit program for tax-exempt bonds. There can be no assurance that legislation enacted or proposed or an audit initiated or concluded by the IRS after the issue date of the Bonds involving either the Series J Bonds or other tax-exempt bonds will not have an adverse effect on the tax-exempt status or market price of the Series J Bonds.

ALL POTENTIAL PURCHASERS OF THE SERIES J BONDS SHOULD CONSULT WITH THEIR TAX ADVISORS WITH RESPECT TO THE FEDERAL, STATE, LOCAL OR FOREIGN TAX CONSEQUENCES (INCLUDING, BUT NOT LIMITED TO, THOSE DESCRIBED ABOVE) OF THE OWNERSHIP OF THE SERIES J BONDS.

See APPENDIX G to this Official Statement for the complete text of the proposed form of Bond Counsel’s opinion with respect to the Series J Bonds.

LITIGATION

There is no litigation of any nature now pending or, to the knowledge of the Commission, threatened, restraining or enjoining the authorization, issuance, sale, execution or delivery of the Series J Bonds, or in any way contesting or affecting the validity of the Series J Bonds or any proceedings of the Commission taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or security provided for the payment of the Series J Bonds, or the creation, organization, existence or powers of the Commission, or the title to the present officers thereof to their respective offices.

Diamond Alkali Superfund Site

In 1984, the United States Environmental Protection Agency (the “USEPA”) listed the Diamond Alkali Site (the “Site”) on the Superfund National Priorities List. As defined by the USEPA, the Site includes the former manufacturing facility at 80-120 Lister Avenue in Newark, New Jersey, the Lower Passaic River Study Area, which includes the 17-mile tidal stretch of the river from Dundee Dam to Newark Bay, and tributaries thereto, the Newark Bay Study Area, which includes the Newark Bay and portions of the Hackensack River, Arthur Kill and Kill van Kull, and the areal extent of contamination.

The Diamond Alkali Superfund Case is the largest, most expensive case that the United States Environmental Protection Agency (“USEPA”) has instituted to date and principally concerns the cleanup and removal of dioxin from the Site. Although the case has been ongoing since the 1990’s, it was not until 2016 that the USEPA named the Commission and four of its Contracting Municipalities (Newark, East Newark, Harrison, and Kearny) as “potentially responsible parties” under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq. At that time, public officials stated that “no public funds” would be spent on the cleanup of the Passaic River; however, USEPA’s settlement position is that Commission and the four Contracting Municipalities should contribute “in-kind” services to the cleanup process for at least the lower 8.3 miles of the Passaic River, which cleanup is expected to cost at least \$1.4 billion. USEPA has estimated that the cost for cleanup of the entire site will be over \$12 billion.

The Commission has denied all allegations and continues to vigorously contest any liability, including any liability of its Contracting Municipalities. The main responsible party in the matter, Occidental Chemical Corporation, has indicated that it believes the Commission’s liability to be upwards of 35% of the total cleanup costs. The USEPA has indicated that it believes the Commission’s liability to be significant, although not nearly as high as Occidental’s estimate. The Commission has retained nationally-recognized technical experts as part of its defense team and they have assessed the Commissions’ liability to be extremely small, based in part on USEPA’s own published data and previous studies of the Site. Notwithstanding, in the opinion of the Commission’s counsel, if the Commission does not prevail in this action, it could have a material impact on the financial stability or results of operations of the Commission.

City of Newark User Charge Administrative Challenge

The City of Newark has filed an administrative appeal with the Commission challenging how the Commission calculates its User Charges. The administrative challenge is currently before the Commission’s Board of Commissioners and no final agency decision has been rendered. If Newark is successful in its claim, the Commission will have to adjust the methodology by which it allocates its budget amongst the Contracting Municipalities and other Users of the System. The effect of any such potential reallocation will have no impact on the overall User Charges of the Commission.

The Commission denies all allegations that its User Charge methodology and calculation is incorrect. The methodology the Commission utilizes in calculating its User Charges is based upon, and in compliance with, one of four methodologies recommended by the USEPA for the calculation of sewer user charges, and it is the methodology specifically recommended by the USEPA for use in a system such as that operated by the Commission. In the opinion of the Commission’s counsel, if Newark is successful in its claim, it will not have a material impact on the financial stability or results of operations of the Commission.

CONTINUING DISCLOSURE

The Securities and Exchange Commission (the “SEC”) pursuant to the Securities Exchange Act of 1934, as amended and supplemented (the “Securities Exchange Act”) has adopted amendments to Rule 15c2-12 (“Rule 15c2-12”) effective July 3, 1995 which generally prohibit a broker, dealer, or municipal securities dealer (“Participating Underwriter”) from purchasing or selling municipal securities, such as the Series J Bonds, unless the Participating Underwriter has reasonably determined that an issuer of municipal securities or an obligated person has undertaken in a written agreement or contract for the benefit of holders of such securities to provide certain annual financial information and event notices to the Municipal Securities Rulemaking Board (the “Continuing Disclosure Requirements”).

On the date of delivery of the Series J Bonds, the Commission will enter into a Continuing Disclosure Agreement (the “Continuing Disclosure Agreement”) containing the Continuing Disclosure Requirements for the benefit of the beneficial holders of the Series J Bonds pursuant to which the Commission will agree to comply on a continuing basis with the Continuing Disclosure Requirements of Rule 15c2-12. Specifically, the Commission will covenant in the Continuing Disclosure Agreement to provide certain financial information and operating data relating to the Commission and the Users which are scheduled to make payments related to debt service on the Series J Bonds in any one calendar year, which equal or exceed ten percent of the debt service scheduled to be paid with respect to the Series J Bonds, by no later than two hundred seventy days after the end of each fiscal year, commencing with the fiscal year ending December 31, 2020 (the “Annual Report”), and to provide notices of the occurrence of certain enumerated events, if material. The Annual Report and the notices of material events, if applicable, will be filed by the Commission with the Municipal Securities Rulemaking Board. The form of the Continuing Disclosure Agreement is included in APPENDIX F – FORM OF CONTINUING DISCLOSURE AGREEMENT attached to this Official Statement.

A failure by the Commission to comply with the provisions of the Continuing Disclosure Agreement will not constitute an Event of Default under the Resolution, and the Holders and Beneficial Owners of the Series J Bonds are limited to the remedies set forth in the Continuing Disclosure Agreement. However, failure by the Commission to comply with the Continuing Disclosure Agreement must be reported in accordance with the Rule 15c2-12 and must be considered by any broker or dealer before recommending the purchase or sale of Series J Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series J Bonds and their market price.

STATE NOT LIABLE

THE SERIES J BONDS ARE NOT A DEBT OR LIABILITY OF THE STATE OF NEW JERSEY OR OF ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE COMMISSION), AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF NEW JERSEY OR OF ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE SERIES J BONDS. THE COMMISSION HAS NO TAXING POWER.

COVENANT OF THE STATE

In the Act, the State pledges to and agrees with the holders of bonds of the Commission (including the holders of all Bonds issued under the Resolution) that it will not limit or restrict the rights thereby vested in the Commission to maintain, construct, reconstruct, and operate any project as defined therein, or to establish and collect such charges and tolls as may be convenient or necessary to produce sufficient revenue to meet the expenses of maintenance and operation thereof and to fulfill the terms of any agreements made with the bondholders or in any way impair their rights or remedies until all bonds issued by the Commission under the Act, together with interest thereon, are fully paid and discharged.

LEGALITY FOR INVESTMENT

Under the Act, the State of New Jersey and all public officers, municipalities, counties, political subdivisions and public bodies, and agencies thereof; all banks, bankers, trust companies, savings banks and institutions, building and loan associations, savings and loan associations, investment companies, and other persons carrying on a banking business; all insurance companies, insurance associations and other persons carrying on an insurance business; and all executors, administrators, guardians, trustees and other fiduciaries, may legally invest any sinking funds, moneys, or other funds belonging to them or within their control in the Series J Bonds, and such Series J Bonds shall be authorized security for any and all public deposits.

VERIFICATION

In connection with the issuance of the Series J Bonds, PKF O'Connor Davies LLP, Certified Public Accountants (the "Verification Agent"), will deliver to the Commission its attestation report indicating that it has examined, in accordance with standards established by the American Institute of Certified Public Accountants, certain information and assertions provided by the Commission and its representatives. The scope of its examination will be a verification of the accuracy of the mathematical computations used to determine the adequacy of the cash and the maturing principal of and interest on the Defeasance Securities deposited with the Escrow Agent, to pay, when due, the Redemption Price of the Refunded Bonds on August __, 2020, the Redemption Date of the Refunded Bonds. The Verification Agent will express no opinion on the assumptions provided to it.

APPROVAL OF LEGAL PROCEEDINGS

All legal matters incident to the authorization, issuance, sale, and delivery of the Series J Bonds by the Commission are subject to the approval of DeCotiis, FitzPatrick, Cole & Giblin, LLP, Paramus, New Jersey, Bond Counsel to the Commission. Certain legal matters will be passed upon for the Commission by Michael D. Witt, Esq., General Counsel to the Commission.

INDEPENDENT AUDITORS

The financial statements of the Commission for the years ended December 31, 2017 and December 31, 2018, included herein as part of APPENDIX C, have been audited by Mercadien, P.C., Certified Public Accountants, Princeton, New Jersey, independent auditors, as stated in its report appearing therein, and are included in reliance upon the report of such firm and upon its authority as an expert in accounting and auditing.

FINANCIAL ADVISOR

In connection with the authorization and issuance of the Series J Bonds, the Commission has retained NW Financial Group, LLC, Hoboken, New Jersey as its financial advisor. The financial advisor is not obligated to undertake, and has not undertaken, either to make an independent verification of or to assume responsibility for the accuracy, completeness, or fairness of the information contained in this Official Statement and the Appendices herein

COVID19-CRISIS

The World Health Organization has declared a pandemic following the global outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, which was first discovered in China and has since spread to other countries, including the United States (and thus has the potential to impact the Commission) (the “COVID-19 Crisis”). On March 13, 2020, President Trump declared a national emergency to unlock federal funds and assistance to help states and local governments fight the pandemic. On March 9, 2020, Governor Philip Murphy, governor of the State of New Jersey, has also instituted mandatory measures via various executive orders to contain the spread of the virus, including closing schools and nonessential businesses, limiting social gatherings, and prohibiting non-essential travel. These measures, which alter the behavior of businesses and people, are expected to have significant negative impacts on regional, state and local economies and cause significant declines in the financial markets in the United States and volatility attributed to concerns about the duration of the pandemic and its continued economic impact. Federal and State Governments have adopted legislation to address and mitigate the financial impact of the pandemic on the U.S. economy and financial markets, businesses, people and governments. It is too early to predict if the legislation will have its intended affect. If market declines and/or volatility continue, the ability to sell or trade securities in the financial markets could be materially constrained. The municipal securities market has experienced at times, volatility and a lack of liquidity with supply outpacing demand.

The acute phase of the COVID-19 Crisis in New Jersey is expected to continue for an indefinite time. While its potential impact cannot be quantified at this time, the Commission expects that the COVID-19 Crisis will likely have a material adverse impact on the Commission and its finances.

In the face of the COVID-19 Crisis, the Commission continues to provide sewer service to its customers, and, wherever possible, to continue implementation of infrastructure and capital improvements subject to additional safe guards. Due to the COVID-19 Crisis, the Commission has implemented several plans to reduce the number of employees in its office and in the field, including requiring employees to work remotely where possible, in order to protect their health and wellbeing. In addition, the Commission is requiring the wearing of facemasks and taking of other safety measures to ensure social distancing wherever possible, both at its office and in the field.

Due to the COVID-19 Crisis, certain revenues have been weaker than was expected at the time the 2020 Budget was developed. Specifically, interest revenue, new connection fees, sludge acceptance fees and pollution prevention fees are trending lower than the adopted budget. The effect has been a reduction of approximately \$1 million per month compared to budget. As the economy reopens, the Commission anticipates that all revenues, with the exception of interest earnings, shall recover to historical trends.

The Commission cannot predict i) the duration of the COVID-19 Crisis; ii) to what extent the COVID-19 Crisis may affect its operations and revenues; iii) to what extent the COVID-19 Crisis may disrupt the local, State, national or global economy, manufacturing, or supply chains and whether any such disruption might adversely impact the Commission’s capital improvement plan or other operations; iv) to what extent the Commission might provide additional deferrals, forbearances, adjustments or other changes to its customers or its billing and collection procedures; or (v) whether any of the foregoing may have a further material adverse effect on the finances and operations of the Commission. Prospective investors should assume that the restrictions and limitations instituted related to the COVID-19 Crisis will increase, and the current upheaval to the national and global economies will continue and/or be exacerbated, at least over the near term, and the recovery may be prolonged, and therefore, the COVID-19 Crisis may adversely impact the Commission revenues in the future.

MISCELLANEOUS

The references herein to the Act, the Resolution, and the Series J Bonds are brief outlines of certain provisions thereof. Such outlines do not purport to be complete, and reference is made to the Act, the Resolution, and the Series J Bonds for full and complete statements of such provisions.

The authorization, agreements, and covenants of the Commission are set forth in the Resolution, and neither this Official Statement nor any advertisement of the Series J Bonds is to be construed as a contract with the holders of the Series J Bonds. Any statements made in this Official Statement involving matters of opinion or of estimates, whether or not expressly so identified, are intended merely as such and not as representations of fact.

The execution and delivery of this Official Statement by its Chairman have been duly authorized by the Commission.

**PASSAIC VALLEY SEWERAGE
COMMISSIONERS**

By: _____
Executive Director

Dated: _____, 2020

APPENDIX A

**DEFINITIONS AND SUMMARY OF CERTAIN
PROVISIONS OF THE RESOLUTION**

DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION

The Resolution contains various covenants and security provisions, certain of which are summarized below. Such summaries do not purport to be complete and reference is made to the Resolution for a full and complete statement thereof. Whenever particular provisions of the Resolution are referred to, such provisions are incorporated by reference as part of the statements made, and the statements made are qualified in their entirety by reference to the Resolution. Copies of the Resolution may be obtained from the Office of the Clerk of the Commission.

Certain Definitions

Below are definitions in summary form of certain terms contained in the Resolution and, used herein. Reference is made to the Resolution for a complete definition of such terms and any undefined terms.

“Act” means the Original Act and all subsequent acts of the Legislature of the State of New Jersey, including the Supplemental Act, and the acts amendatory thereof and supplemental thereto.

“Additional Bond” means any of the bonds of the Commission authenticated and delivered under and pursuant to Section 303 of the Resolution and any Bonds issued in lieu of or in substitution for said bonds pursuant to Section 414, Section 417, Section 419, Section 705 or Section 906 of the Resolution.

“Annual Charge” means with respect to any particular Fiscal Year and any particular Contracting Municipality or other user of the System the share of the Annual Estimate which is payable to the Commission by such Contracting Municipality or other user in such Fiscal Year.

“Annual Estimate” means the annual estimate of Operating Expenses prepared by the Commission pursuant to Section 501 of the Resolution.

“Authorized Newspapers” means (a) one newspaper which is customarily published at least once in each calendar week in the City of Newark, New Jersey, and (b) one newspaper which is customarily published in the Borough of Manhattan, City and State of New York, at least once a day for at least five days (other than legal holidays) in each calendar week, each of which newspapers is printed in the English language and of general circulation in the municipality in which it is published.

“Bond” means any of the bonds of the Commission authenticated and delivered under and pursuant to the Resolution including the Initial Bonds and the Additional Bonds.

“Bond Reserve Requirement” means, as of any particular date of calculation, the amount of money equal to the greater of (A) the average of the amounts of money required to be raised in each future Fiscal Year for interest payable on Bonds and maturing

principal of Bonds and required payments to the Sinking Fund on account of Bonds, all calculated on the assumption that the Bonds will cease to be Outstanding after such date of computation by reason of, but only by reason of (1) the payment of such Bonds at their respective maturities, and (2) the payment of all moneys required to be paid into the Sinking Fund on account of such Bonds in the amounts and at the times so required by the terms of the Resolution or any resolution of the Commission authorizing such Bonds and the immediate application of such moneys so paid into the Sinking Fund to the retirement of Bonds in accordance with their terms, and (B) the maximum of the amounts of money required to be raised in any future Fiscal Year for interest payable on Bonds and maturing principal of Bonds and required payments to the Sinking Fund on account of Bonds, all calculated on the assumption that the Bonds will cease to be Outstanding after such date of computation by reason of, but only by reasons of (1) the payment of such Bonds at their respective maturities, and (2) the payment of all moneys required to be paid into the Sinking Fund on account of such Bonds in the amounts and at the times so required by the terms of the Resolution or any resolution of the Commission authorizing such Bonds and the immediate application of such moneys so paid into the Sinking Fund to the retirement of Bonds in accordance with their terms, but in no event shall the amount described in clause (B) equal or exceed the amount which, in the opinion of nationally recognized bond counsel, would cause the interest on any Bonds to be includable in gross income under Section 103 of the internal Revenue Code of 1986, as amended.

“Commission” and “Commissioners” means the board of commissioners known as the Passaic Valley Sewerage Commissioners, a body politic and corporate created and existing by virtue of the Act and sometimes designated therein as the “Commissioners”.

“Contracting Municipality” means any municipality entitled to rights in or use of the Sewerage System by virtue of contributions heretofore made by it to the Commission toward the cost of construction of the Sewerage System pursuant to the provisions of the Act.

“Cost of Construction” when used with reference to a Project or part thereof, means the Commission's costs of physical construction in connection therewith, costs of acquisition by or for the Commission thereof and of all or any lands, real or personal property, rights, rights-of-way, easements, privileges, agreements and franchises deemed by the Commission to be necessary or useful and convenient therefor or in connection therewith.

“District” means the Passaic Valley Sewerage District as constituted and defused by the Act. “Fiscal Year” means the period of twelve calendar months ending with December 31 of any year. “Investment Obligation” means any of the following securities:

(a) Direct obligations of or obligations guaranteed by the United States of America;

(b) Bonds, debentures or notes issued by any of the following Federal agencies: Bank for Cooperatives; Federal Intermediate Credit Banks; Federal Home Loan Bank System; Federal Land Banks; Federal National Mortgage Association; or the Government National Mortgage Association;

(c) Public Housing Bonds issued by Public Housing Authorities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an Annual Contributions Contract or Contracts with the United States of America; or Project Notes issued by Public Housing Authorities or by Local Public Agencies, in each case, fully

secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America; and

(d) Direct and general obligations, to the payment of the principal of and interest on which the full faith and credit of the issuer is pledged, of any of the following: any State within the territorial United States, or any political subdivision of any such State; provided that (a) all the taxable real property within such political subdivision shall be subject to taxation thereby to pay such obligations and the interest thereon, without limitation as to rate or amount, and (b) at the time of their purchase under the Resolution, such obligations of any such State or political subdivision are rated in either of the two highest rating categories by two nationally recognized bond rating agencies and are legal investments for fiduciaries in both the State of New York and the State of New Jersey.

“Lessee” means any municipality, governmental agency, person, firm or corporation entering into a lease agreement with the Commission under the provisions of the Act.

“Municipality” means any city of any class, any borough, village, town, township or other municipality, other than a county or a school district.

“Operating Expenses” means all costs and expenses of maintenance, repair and operation of the System incurred or to be incurred by the Commission for any Fiscal Year, and shall include in addition to all other items heretofore mentioned, all interest becoming due prior to the end of such Fiscal Year on Bonds or other obligations of the Commission issued pursuant to the Act, plus the principal or redemption premium of any such Bonds or other obligations becoming due prior to the end of such year, plus such sums as the Commission may determine, or, by the terms of any contract be required, to set aside during such year *as* a reserve for payment or security for principal of or interest on any such Bonds or obligations or be, by the terms of any contract, required to set 'aside during such year as a reserve for any other purpose.

“Original Act” means Chapter Fourteen of Title 58 of the Revised Statutes of the State of New Jersey (Section 58:14-1 *et seq.*) and all acts of the Legislature of the State of New Jersey continued thereby, and all acts of said Legislature amendatory thereof or supplemental thereto heretofore adopted.

“Project” means the Initial Project or any Additional Project.

“Resolution” means the General Bond Resolution as the same may from time to time be amended, modified or supplemented by Supplemental Resolution or Resolutions.

“Supplemental Act” means the act of the Legislature of the State of New Jersey entitled “An Act concerning the Passaic Valley Sewerage Commissioners and the sanitation facilities constructed or to be constructed by it, providing for the issuance of bonds and other obligations for financing such facilities, and prescribing powers and duties of said commissioners and of municipalities with respect thereto, and supplementing chapter fourteen of Title 58 of the Revised Statutes”, approved August 14, 1953 constituting Chapter 388 of the Laws of 1953 and all acts of said Legislature amendatory thereof heretofore adopted.

“Supplemental Resolution” means any resolution of the Commission amending or supplementing the Resolution.

“System” means the Passaic Valley intercepting sewer, together with its branches and appurtenances, constructed, maintained and operated by the Commission pursuant to the Act, the Newark Bay Pumping Station, the Outfall System to the Dispersal Field, the Initial Project and every other Project and all other sewers, conduits, pipelines, mains, pumping and ventilating stations, sewage treatment or disposal systems, plants and works, connections, outfalls, compensating reservoirs, and other plants, structures, boats, conveyances and other real and tangible personal property and rights therein acquired, constructed or operated or to be acquired, constructed or operated by the Commission for the purposes of the Commission under the Act

“System Revenues” means the moneys paid or required to be paid to the Commission by any Contracting Municipality or any other user of the System on account of Operating Expenses but does not include any amounts received by the Commission as annual rentals which the Commission is required by the Act or contract to pay to any Municipality or Municipalities.

Resolution to Constitute Contract

The provisions of the Resolution shall be a part of the contract of the Commission with the Holders of the Initial Bonds and, if and to the extent so provided in the Supplemental Resolution authorizing the issuance of any particular Additional Bonds, the Holders of such Additional Bonds, and shall be deemed to be and shall constitute contracts between the Commission, the Trustee and the Holders from time to time of said Bonds. The pledge made in the Resolution and the provisions, covenants and agreements set forth in the Resolution to be performed by or on behalf of the Commission shall be for the equal benefit, protection and security of the Holders of any and all of said Bonds.

Obligation of Bonds and Pledge Securing the Same

The Initial Bonds shall be direct and general obligations of the Commission, and the full faith and credit of the Commission are pledged to the payment of the principal or Redemption Price of and interest on the Initial Bonds. All Initial Bonds and, if and to the extent so provided in the Supplemental Resolution authorizing the issuance of any particular Additional Bonds, such Additional Bonds shall be entitled to the benefits of the continuing pledge and lien created by the Resolution to secure the full and final payment of the principal or Redemption Price of and interest on all of said Bonds.

Authorized Purposes of Additional Bonds

Bonds of the Commission, each constituting an Additional Bond, may be authenticated and delivered from time to time for any one of the following purposes: (1) Raising funds to pay Costs of Construction with respect to the Initial Project; (2) Raising funds to pay any other Costs of Construction with respect to construction or acquisition of any other part, improvement or replacement (each called an “Additional Project”) of the System; or (3) Refunding any Outstanding Bonds.

Authorization of Additional Bonds

Additional Bonds shall be issued only after their authorization in accordance with the Resolution by a Supplemental Resolution which shall be adopted pursuant to and in

accordance with the provisions of the Act.

General Description of Bonds and Limitation of Amount

The Bonds may from time to time, after their authorization in accordance with the Resolution, be issued in one or more Series upon compliance with the provisions of the General Bond Resolution. The aggregate principal amount of Bonds which may be executed and authenticated and delivered is not limited except as provided in the Resolution or as may be limited by law.

Annual Estimate and Certification of Annual Charges

On or before January 15 in each Fiscal Year, the Commission shall, pursuant to the provisions of the Act: (1) Prepare an Annual Estimate of Operating Expenses including the cost of maintenance, repair and operation of the System for such Fiscal Year, and including in addition to all other items hereinbefore included, all interest becoming due prior to the end of such Fiscal Year on Bonds, Additional Bonds or other obligations of the Commission issued pursuant to the Act, plus the principal of any such Bonds, Additional Bonds or other obligations becoming due, or called for redemption, prior to the end of such Fiscal Year, and the redemption premium thereof (if any), plus any Sinking Fund Installment, plus such sums as the Commission may determine, or by the terms of the Resolution or any other contract be required to set aside during such Fiscal Year as a reserve for payment or security of principal of or interest on any such Bonds, Additional Bonds or obligations to be, by the terms of the Resolution or any other contract required to set aside during such Fiscal Year as a reserve for any other purpose; (2) Apportion the amount of such Annual Estimate among the Contracting Municipalities and other users of the System in proportion to the amount of sewage by them respectively delivered and discharged into the System or such other method of apportionment as may be prescribed by law; and (3) Certify to each Contracting Municipality and other user of the System its share of such Annual Estimate.

Collection of Annual Charges

Immediately after the preparation of the Annual Estimate and the determination of the respective shares thereof of the Contracting Municipalities and other users of the System, the Commission shall notify each Contracting Municipality and other users by mail of the amount of the payment due from it as such share and of the due date thereof. The Commission shall take all steps, actions and proceedings permitted by law to enforce the full and punctual payment of the amount due in each Fiscal Year from each Contracting Municipality and other user of the System.

Establishment of Funds

The Commission establishes and creates the following reserves or funds, which shall be special funds held by the Trustee: (1) Bond Service Fund; (2) Sinking Fund; (3) Bond Reserve Fund; and (4) Construction Fund.

Provision for Inclusion of Principal and Interest on the Bonds in Annual Estimate and Pledge of Moneys Received from Users of the System

(A) The Commission covenants and agrees with the Trustee and the holders of

Bonds and coupons that in its Annual Estimate for each Fiscal Year thereafter so long as any of the Bonds are Outstanding, it will include in its Annual Estimate an amount sufficient to pay the interest on and the principal of all Outstanding Bonds, and other obligations of the Commission, if any, issued pursuant to the Act which become due and payable during such Fiscal Year, plus an amount necessary, if any, to increase the amount in the Bond Reserve Fund so that it equals the Bond Reserve Requirement and that from and after the Retirement Date of the Original Bonds, such amounts, when collected by the commission, shall be pledged and all moneys received by it from any user of the System in payment of its share of the Annual Estimate, and all other System Revenues, to secure the payment of the principal and redemption price of, and interest on the Bonds and such other obligations, subject only to the right of the Commission (a) to pay therefrom, free and clear of any lien or pledge, all amounts required for reasonable and necessary cost and expense of maintaining, repairing and operating the System, (b) to revise, correct and adjust the Annual Estimate as provided in the Act, and (c) to pay to any Municipality or Municipalities which may be entitled thereto under the term of the Act or any contract or lease, any amount received from a Lessee as annual rental.

(B) Notwithstanding the provisions of paragraph (A) above, whenever on any date in any Fiscal Year (a) the amount in the Bond Service Fund equals or exceeds any unpaid interest then due on Outstanding Bonds plus the interest, if any, to become due on Outstanding Bonds on or before the first day of December next ensuing, plus the principal amount of any Outstanding Bonds then matured, plus the principal amount of Outstanding Bonds, if any, maturing on or before the first day of December next ensuing, (b) the amount in the Sinking Fund equals or exceeds the aggregate amount of all Sinking Fund Installments payable during such Fiscal Year, (c) the amount in the Bond Reserve Fund equals or exceeds the Bond Reserve Requirement, and (d) the Commission is not in default in the payment of the principal amount of and interest on or Redemption Price of any of the Bonds, then and thereafter during such Fiscal Year the Commission may use and spend for any lawful purpose of the Commission, including payment of obligations, if any, of the Commission issued pursuant to the Act, all such moneys received from users of the System, including System Revenues, free and clear of any lien or pledge created by the Resolution.

Deposits Into the Bond Service Fund

On or before the fifth day next preceding any interest payment date of Outstanding Bonds in any Fiscal Year, the Commission shall pay to the Trustee for deposit in the Bond Service Fund, an amount equal to the principal of and unpaid interest due on Outstanding Bonds on or before such interest payment dates. All moneys deposited in the Bond Service Fund shall be held in trust and used by the Trustee to pay the interest on and principal of Outstanding Bonds, *as* the same becomes due and payable and are irrevocably pledged for such purpose.

Deposits of Government Grants

All Government Grants for or with respect to any Project financed in whole or in part by the issuance of Bonds pursuant to this Resolution received by the Commission shall be deposited promptly in the name of the Trustee with the Trustee. The Trustee

shall be accountable only for moneys actually so deposited. All such Government Grants shall be paid by the Trustee into the Construction Fund and credited to the account therein established and maintained for the Project for which such Government Grants shall have been made.

Application and Restoration of Bond Service Fund

(1) The Trustee shall withdraw from the Bond Service Fund, prior to each interest payment date of the Bonds, an amount equal to the unpaid interest due on the Bonds on or before such interest payment date, and shall cause the same to be applied to the payment of said interest when due and may transmit the same to Paying Agents who shall apply the same to such payment; (2) If the withdrawals required under the provisions of Paragraph (1) above with respect to the same and every prior date shall sooner have been made, the Trustee shall withdraw from the Bond Service Fund, prior to each first day of December, an amount equal to the principal amount of the Outstanding Bonds, if any, maturing on or before said day and shall cause the same to be applied to the payment of the principal of said Bonds when due and may transmit the same to, Paying Agents who shall apply the same to such payment; (3) If the withdrawals required under the provisions of Paragraph (1) and Paragraph (2) above with respect to the same and every prior date shall sooner have been made, the Trustee shall from time to time withdraw from the Bond Service Fund and pay into any account maintained in the Sinking Fund the amount sufficient to reimburse said account for any amounts theretofore paid from said account for or on account of accrued interest on Bonds purchased in accordance with the provisions of the Resolution; and (4) if at any time there shall not be a sufficient amount in the Bond Service Fund to provide for any withdrawal therefrom required under the provisions of Paragraph (1) or Paragraph (2) or Paragraph (3) above, the Trustee shall withdraw from the Bond Reserve Fund and pay into the Bond Service Fund the amount sufficient to make up such deficiency therein.

Deposits Into, Application and Restoration of Sinking Fund

(1) On or before the twenty-fifth day of November in any Fiscal Year, the Commission shall pay to the Trustee for deposit into the Sinking Fund, the amount, if any, needed to increase the amount then or theretofore paid during such Fiscal Year into the Sinking Fund so that it equals the aggregate amount of all Sinking Fund Installments (if any) payable during such Fiscal Year.

(2) The Trustee shall establish and maintain in the Sinking Fund a separate account for each particular group of Outstanding Bonds which mature on a single date and for which Sinking Fund Installments are established in accordance with the Resolution. Moneys paid into the Sinking Fund in any Fiscal Year shall upon receipt be segregated and set aside in said accounts in proportion to the respective amounts of the Sinking Fund Installments payable during such Fiscal Year with respect to the particular Bonds for which each such account is maintained. Moneys paid into the Sinking Fund shall upon receipt be set aside in the account therein with respect to which such payment is a reimbursement. Moneys paid into the Sinking Fund pursuant to Paragraph (3) below on account of any particular Sinking Fund Installment shall be set aside in the account therein maintained for the particular Bonds entitled to said Sinking Fund Installment. All other

moneys paid into the Sinking Fund, including any interest or profit on any investment of moneys in such Fund, shall upon receipt be segregated and set aside by the Trustee in said accounts in proportion to the respective principal amounts authenticated and delivered on original issuance of the particular Bonds for which each such account is maintained.

(3) If on the twenty-fifth day of November in any Fiscal Year the full amount of any Sinking Fund Installment payable during such Fiscal Year shall not have been paid into the Sinking Fund, the Trustee shall withdraw from the Bond Reserve Fund and pay into the Sinking Fund, on account of said Sinking Fund Installment, the amount thereof not previously so paid into the Sinking Fund.

(4) The Trustee shall apply moneys in any account established in the Sinking Fund as provided in paragraph (2) above to the purchase or the redemption of the Bonds for which such account is maintained in the manner provided in this Section or to the payment of the principal thereof at maturity, provided that no such Bonds shall be so purchased during the period of forty- five days next preceding the date of a Sinking Fund Installment established for such Bonds. If at any date there shall be moneys in any such account and there shall be Outstanding none of the Bonds for which such account was established, said account shall be closed and the moneys therein shall be withdrawn therefrom and (a) be segregated and set aside in the other accounts in the Sinking Fund by the Trustee as if paid into the Sinking Fund on said date, or (b) if there be no such other accounts in the Sinking Fund, be paid into the Bond Reserve Fund.

(5) The purchase price paid by the Trustee (excluding accrued interest but including any brokerage and other charges) for any Bond purchased pursuant to this Section shall not exceed the Redemption Price of such Bond applicable upon its redemption through application of the moneys available for such purchase on the next date on which such Bond could be redeemed in accordance with its terms by operation of the Sinking Fund. Subject to the limitations hereinbefore set forth or referred to in this Section, the Trustee shall purchase Bonds at such times, for such prices, in such amounts and in such manner (whether after advertisement for tenders or otherwise) as the Trustee in its discretion may determine and as may be possible with the amounts of moneys available therefor in the Sinking Fund.

(6) As soon as practicable after the forty-fifth and before the thirtieth day prior to the date of each Sinking Fund Installment, the Trustee shall call for redemption on the date of said Installment by operation of the Sinking Fund such principal amount of the Bonds entitled to said Installment as is required to exhaust as nearly as may be the balance of said Installment remaining after deduction therefrom of any part of said Installment previously paid into the Sinking Fund, set aside in the account maintained therein as provided in Paragraph (2) above for said Bonds, and applied to the purchase of said Bonds, and on the redemption date the Trustee shall apply the moneys in said account to the payment of the Redemption Price of the Bonds so called for redemption. Subject to the limitations hereinbefore set forth or referred to in this Section, any amount of moneys in the Sinking Fund which were paid into the Sinking Fund and which on the sixteenth day of any December remain unexpended in the hands of the Trustee may, and if said amount is sufficient to effect redemption of Bonds in a principal amount exceeding \$24,000 shall, be set aside by the Trustee and applied to the redemption (through application of said moneys but in other respects as if otherwise than by operation of the Sinking Fund) of the largest

Principal amount of Bonds which may be redeemed on the next succeeding interest payment date by such application of said amount. All Bonds redeemed under the provision of this Section shall be redeemed in the manner provided in the Resolution, and prior to the redemption date the Trustee shall withdraw from the Sinking Fund the amount of the Redemption Price of such Bonds and shall cause the same to be applied to the payment of such Redemption Price when due and may transmit the same to Paying Agents Who shall apply the same to such payment.

Covenants as to and Application of Bond Reserve Fund

(1) The Commission covenants and agrees with the Trustee and Holders of Bonds that it will include in its Annual Estimate for each Fiscal Year so long as any of the Bonds are Outstanding, the amount necessary, if any, to increase the amount in the Bond Reserve Fund so that it equals the Bond Reserve Requirement, and that on or before the first day of December of each Fiscal Year, it will pay said amount, if any, to the Trustee for deposit in the Bond Reserve Fund; (2) If on the first day of any month all withdrawals or payments from the Bond Reserve Fund required by any other provision of the Resolution with respect to the same and every prior date shall have sooner been made, the Trustee within ten days thereafter shall withdraw from the Bond Reserve Fund the amount of any excess therein over the Bond Reserve Requirement as of such first day and shall pay any moneys so withdrawn to the Commission and the Commission shall use any such amounts so received as other System Revenues and for the purposes of the Resolution such amounts shall constitute and be deemed to be System Revenues; and (3) No amount shall be withdrawn from or paid out of the Bond Reserve Fund except as expressly provided in the Resolution or to pay principal of or interest on Bonds in accordance with their terms as the same becomes due.

Construction Fund

Within the Construction Fund, the Trustee shall establish a separate account for each Project. The Trustee shall credit to such separate account for an Additional Project any moneys paid into the Construction Fund constituting (1) proceeds of sale of Additional Bonds of any Series authorized for the purpose of raising funds to pay Costs of Construction with respect to said Additional Project, (2) any proceeds of insurance (other than use and occupancy insurance) received by the Commission with respect to said Additional Project, (3) amounts received from Government Grants, or (4) any amount accompanied upon its payment into the Construction Fund by an Officer's Certificate directing its credit to the said separate account for said Additional Project.

Payment of Bonds

The Commission shall duly and punctually pay or cause to be paid the principal of every Bond and the interest thereon, at the dates and places and in the manner mentioned in the Bonds and in the coupons thereto appertaining, and on the twenty-fifth day of November in each Fiscal Year, shall pay to the Trustee any part of any Sinking Fund Installments payable during such Fiscal Year which has not previously been paid into the Sinking Fund pursuant to any other provision of the Resolution.

Progress Reports During Construction

The Commission shall, during the construction and acquisition of any part of the System, secure from the Consulting Engineer not less often than once every twelve

months a written report in reasonable detail as to the progress and cost of such acquisition and construction, showing comparisons of such Progress and cost with the prior estimates of such progress and cost made by the Consulting Engineer and describing any modifications made in the plans for such acquisition and construction. The Commission shall cause a copy of every such report to be mailed to the Trustee for inspection by Bondholders and to each Bondholder who requests a copy thereof.

Operation, Maintenance and Reconstruction

The Commission shall at all times operate, or cause to be operated, the System properly and in a sound and economical manner and shall maintain, preserve, and keep the same or cause the same to be maintained, preserved and kept, with the appurtenances and every part and parcel thereof, in good repair, working order and condition, and shall from time to time make, or cause to be made, all necessary and proper repairs, replacements and renewals so that at all times the operation of the System may be properly and advantageously conducted, and, if any useful part of the System is damaged or destroyed, the Commission shall, as expeditiously as may be possible, commence and diligently prosecute the replacement or reconstruction of such part so as to restore the same to use.

Powers as to System and Apportionment and Collection of Annual Charges

The Commission has good right and lawful authority to operate, maintain, repair, improve and reconstruct the System and to allocate to, and demand and collect from the Contracting Municipalities and other users of the System in each Fiscal Year, the cost and expenses of maintenance, repair and operation of the System for such Fiscal Year, including (except as hereinafter provided in this Section) in addition to all other items hereinbefore mentioned, all interest becoming due prior to the end of such Fiscal Year on Bonds and Additional Bonds issued pursuant to the Act and on other obligations of the Commission plus the principal of any such Bonds.

Payment of Lawful Charges

The Commission shall pay all taxes and assessments or other municipal or governmental charges, if any, lawfully levied or assessed against the Commission upon or in respect of the System, or upon any part thereof or upon any revenue therefrom, when the same shall become due, and shall duly observe and comply with all valid requirements of any municipal or governmental authority relative to any part of the System, and shall not create or suffer to be created any lien or charge upon the System or any part thereof or upon the revenues therefrom, except the pledge and lien created by the Resolution for the payment of the principal and Redemption Price of and interest on the Bonds.

Compliance with Contracts and Leases

The Commission shall so plan, schedule and prosecute all construction on or about the System, and after carrying out the Initial Project shall so operate and maintain the System, as to entitle it at all times after such completion to receive and enforce payments to it of the Annual Charges pursuant to the Act and its Contracts with Contracting Municipalities and Leases with Lessees and to collect all System Revenues, and shall not release the obligations of any Municipality or other person under the Act or any Contract or Lease, except as provided by statute, and shall at all times, to the extent permitted by law, defend, enforce, preserve and protect the rights and privileges of the Commission and

of the Bondholders under the Act or with respect to such Contracts and Leases.

Enforcement of Annual Charges

The Commission shall take all reasonable measures permitted by the Act or otherwise by law to enforce prompt payment of all moneys due and payable to it as Annual Charges, System Revenues, or otherwise, from any user of the System.

Insurance and Reconstruction

The Commission shall at all times maintain with responsible insurers all such insurance as is customarily maintained with respect to sewerage systems of like character against loss of or damage to the System and against public and other liability to the extent reasonably necessary to protect the interests of the Commission and the Bondholders.

Sale or Encumbrance

No part of the System shall be sold, leased, mortgaged, pledged, encumbered or otherwise disposed of.

Indebtedness and Liens

The Commission shall not issue any bonds, notes or other evidences of indebtedness, other than the Bonds (including Additional Bonds), secured by a pledge of or other lien or charge on the System Revenues (including amounts which the Commission may thereafter be entitled to expend for Operating Expenses) and shall not create or cause to be created any lien or charge on such System Revenues or on any amounts held by any Fiduciary, under the Resolution.

Books and Records of Accounts

The Commission shall keep or cause to be kept proper books of record and account (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions relating to the System or under the Resolution and which, together with all other books and papers of the Commission including insurance policies, shall at all reasonable times be subject to the inspection of the Trustee or the Holder or Holders of not less than five per centum (5%) in principal amount of the Bonds then Outstanding or their attorneys duly authorized in writing.

Supplemental Resolutions

For any one or more of the following purposes and at any time or from time to time, a resolution of the Commission supplementing the Resolution may be adopted which resolution, upon the filing with the Trustee of a copy thereof certified by the Clerk, shall be fully effective in accordance with its terms:

(1) To close the Resolution against, or provide limitations and restrictions in addition to the limitations and restrictions contained in the Resolution on, the issuance in future of Bonds, or of other notes, bonds, obligations or evidences of indebtedness; (2) To add to the covenants or agreements of the Commission in the Resolution contained other covenants or agreements to be observed by the Commission which are not contrary to or inconsistent with the Resolution as theretofore in effect; (3) To add to the limitations or restrictions in the Resolution contained other limitations or restrictions to be observed by the Commission which are not contrary to or inconsistent with the Resolution as

theretofore in effect; (4) To surrender any right, power or privilege reserved to or conferred upon the Commission by the Resolution; (5) To confirm, as further assurance, any pledge under, and the subjection to any lien or pledge created or to be created by, the Resolution, of the Revenues or of any other moneys, securities or funds; (6) To specify, determine or authorize any and all matters and things relative to the Bonds of a Series of Initial Bonds or the proceeds thereof which are not contrary to or inconsistent with the Resolution as theretofore in effect; (7) To authorize Additional Bonds or, in connection therewith, specify, determine or authorize the matters and things mentioned or referred to in the Resolution and also any other matters and things relative to such Bonds or the proceeds thereof which are not contrary to or inconsistent with the Resolution as theretofore in effect; and (8) To change the date of maturity of any Additional Bond theretofore authorized which has not theretofore been authenticated and delivered under the Resolution, or to change the date of such Bond when coupon in form.

Supplemental Resolutions Effective Upon Consent of Trustee

For any one or more of the following purposes and at any time or from time to time, a resolution of the Commission amending or supplementing the Resolution may be adopted which resolution, upon the (a) filing with the Trustee of a copy thereof certified by the Clerk and (b) filing with the Trustee and the Commission of an instrument in writing made by the Trustee consenting to such resolution, shall be fully effective in accordance with its terms: (1) To cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the Resolution; and (2) To insert such provisions clarifying matters or questions arising under the Resolution as are necessary or desirable and are not contrary to or inconsistent with the Resolution as theretofore in effect

Supplemental Resolution Effective With Consent of Bondholders

At any time or from time to time, a resolution of the Commission amending or supplementing the Resolution may be adopted modifying any of the provisions of the Resolution or releasing the Commission from any of the obligations, covenants, agreements, limitations, conditions or restrictions therein contained, but no such resolution shall be effective until after the filing with the Trustee of a copy thereof certified by the Clerk and unless (1) no Bonds authenticated and delivered by the Trustee prior to the adoption of such resolution remain Outstanding at the time it becomes effective, or (2) such resolution is consented to by or on behalf of Bondholders in accordance with and subject to the provisions of the Resolution.

Powers of Amendment

Any modification or amendment of the Resolution and of the rights and obligations of the Commission and of the Holders of the Bonds and coupons thereunder, in any particular, may be made by a Supplemental Resolution with the written consent of the Holders of at least sixty per centum (60%) in Principal amount of the Bonds Outstanding at the time such consent is given; provided however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series, maturity and interest rate remain Outstanding, the consent of the Holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purposes of any calculation of Outstanding Bonds under this Section; and provided,

further, that no such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or the rate of interest thereon without the consent of the Holder of such Bond, or shall reduce the percentages or otherwise affect the description of Bonds the consent of the Holders of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of any Fiduciary without the filing with the Trustee of its written assent thereto.

Default and Remedies

The Bondholders and the Trustee, acting for the Bondholders, shall be entitled to all of the rights and remedies provided in the Act, which are summarized as follows: In the event that there shall be a default in the payment of principal of or interest on any Bonds after the same shall become due, whether at maturity or upon call for redemption, and such default shall continue for a period of thirty days, or in the event that the Commissioners shall fail or refuse to comply with the provisions of the Act or shall fail or refuse to carry out and perform the terms of any contract with the Holders of any of the Bonds, and such failure or refusal shall continue for a period of ninety days after written notice to the Commissioners of its existence and nature, the Trustee may and upon written request of the Holders of twenty-five per centum (25%) in aggregate principal amount of the Bonds then outstanding shall, in his or its own name, by action, suit or proceeding in the nature of mandamus, injunction, certiorari or otherwise, enforce all rights of the Holders of such Bonds, including the right to require the Commissioners to charge and collect System Revenues and other charges adequate to carry out any contract as to, or pledge of, such moneys, and to require the Commissioners to carry out and perform the terms of any contract with the Holders of such Bonds or its duties under the Act; bring action upon all or any part of such Bonds or interest coupons or claims appurtenant thereto; by action, suit or other proceeding, as if in equity, require the Commissioners to account as if it were the trustee of an express trust for the Holders of such Bonds; by action, suit or other proceeding, as if in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the Holders of such Bonds. The Trustee shall, in addition to the foregoing, have and possess all of the powers necessary or appropriate for the exercise of the functions specifically set forth in the Act, or incident to the general representation of the Holders of Bonds of such series in the enforcement and protection of their rights.

Defeasance

If the Commission shall pay or cause to be paid to the Holders of the Bonds and coupons, the principal and interest and Redemption Price, if any, to become due thereon at the times and in the manner stipulated therein and in the Resolution, then, at the option of the Commission expressed in an Officer's Certificate delivered to the Trustee, the pledge of the System Revenues and other moneys, securities and funds pledged by the Resolution and the covenants, agreements and other obligations of the Commission to the Bondholders under the Resolution shall be discharged and satisfied. In such event, the Trustee shall, upon the request of the Commission expressed in an Officer's Certificate delivered to the

Trustee, execute and deliver to the Commission all such instruments as may be desired to evidence such discharge and satisfaction and the Fiduciaries shall pay over or deliver to the Commission all money or securities held by them pursuant to the Resolution which are not required for the payment or redemption of Bonds or coupons not theretofore surrendered for such payment or redemption.

Any Bonds and coupons or interest installments appertaining thereto for the payment or redemption of which moneys shall have been deposited with the Trustee by or on behalf of the Commission, whether at or prior to the maturity or the redemption date of such Bonds, shall be deemed to have been paid within the meaning of this Section; provided, however, that if any such Bonds are to be redeemed prior to maturity thereof, there shall have been taken all action necessary to call such Bonds for redemption and notice of such redemption shall have been duly given or provision satisfactory to the Trustee shall have been made for the giving of such notice. No moneys so deposited with the Trustee shall be withdrawn or used for any purpose other than, and all such moneys shall be held in trust for and be applied to, the payment, when due, of the principal or Redemption Price of the Bonds for the payment or redemption of which they were deposited and the interest accrued thereon to the date of maturity or redemption, excepting only that (a) any money so held by the Trustee for the payment to the holders of any particular Bonds or the coupons appurtenant thereto of principal or Redemption Price of, or interest on, such Bonds shall be invested by the Trustee, upon receipt of a copy of a resolution of the Commission, certified by the Clerk, authorizing such investment in such Investment Obligations as the Commission may approve, provided that a principal amount of such Obligations at least equal to the amount of money required for the payment on any future date of the interest on or principal or Redemption Price of such Bonds shall mature on or before said future date, and (b) all interest on all such investments shall be paid over to the Commission as received by the Trustee, free and clear of any trust, lien or pledge.

As an alternative cumulative to and not excluding the provisions of the above paragraph, any Bonds and coupons or interest installments appertaining thereto, whether at or prior to the maturity or the redemption date of such Bonds, shall be deemed to have been paid within the meaning of this Section if (1) in case any such Bonds are to be redeemed prior to the maturity thereof, there shall have been taken all action necessary to call such Bonds for redemption and notice of such redemption shall have been duly given or provision satisfactory to the Trustee shall have been made for the giving of such notice, and (2) there shall have been deposited with the Trustee by or on behalf of the Commission either (a) moneys in an amount which shall be sufficient, or (b) Investment Obligations the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with the Trustee at the same time, shall be sufficient, to pay when due the principal or Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be. Neither the Investment Obligations or any moneys so deposited with the Trustee nor any moneys received by the Trustee on account of principal of or interest on said Investment Obligations shall be withdrawn or used for any purpose other than, and all such moneys shall be held in trust for and applied to, the payment, when due, of the principal or Redemption Price of the Bonds for the payment or redemption of which they were deposited and the interest accrued thereon to the date of maturity or redemption.

Anything in the Resolution to the contrary notwithstanding, any moneys held by a Fiduciary in trust for the payment and discharge of any of the Bonds or coupons appurtenant thereto which remain unclaimed for six years after the date when such Bonds have become due and payable, either at maturity or by call for redemption, if such moneys were held by the Fiduciary at said date, or for six years after the date of deposit of such moneys if deposited with the Fiduciary after the said date when such Bonds became due and payable, shall, at the request of the Commission expressed in Officer's Certificates delivered to the Trustee, be paid by the Fiduciary to the Commission as its absolute property and free from trust, and the Fiduciary shall thereupon be released and discharged with respect thereto and the Holder of such Bonds and coupons shall look only to the Commission for the payment thereof.

APPENDIX B

BOOK-ENTRY ONLY SYSTEM

BOOK-ENTRY ONLY SYSTEM

The information in this APPENDIX B concerning The Depository Trust Company (“DTC”) and DTC’s book-entry only system has been provided by DTC. Accordingly, the Commission takes no responsibility for the accuracy or completeness of such information and neither the DTC Participants nor the Beneficial Owners (as defined below) should rely on such information with respect to such matters but should instead confirm the same with DTC or the DTC Participants, as the case may be.

General. DTC will act as securities depository for the Series J Bonds. The Series J Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. Initially, one fully registered Bond certificate will be issued for each maturity of the Series J Bonds, in the aggregate principal amount of such maturity of the Series J Bonds as set forth on the inside front cover page of this Official Statement and will be deposited with DTC. The following discussion will not apply to any Series J Bonds issued in certificate form due to the discontinuance of DTC’s Book-Entry System, as described below.

DTC and its Participants. DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission.

Purchase of Ownership Interests. Purchases of Series J Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series J Bonds on DTC’s records. The ownership interest of each actual purchaser of a Series J Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners, are however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series J Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series J Bonds, except in the event that use of the book-entry system for the Series J Bonds is discontinued.

Transfers. To facilitate subsequent transfers, all Series J Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series J Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC

has no knowledge of the actual Beneficial Owners of the Series J Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series J Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Notices. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series J Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series J Bonds, such as redemptions, tenders, defaults, and proposed amendments to the documents relating to the Series J Bonds. For example, Beneficial Owners of Series J Bonds may wish to ascertain that the nominee holding the Series J Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption. Notices of redemption of the Series J Bonds will be sent to DTC. If less than all of the Series J Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Series J Bonds to be redeemed.

Voting. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to any matter related to the Series J Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Commission as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series J Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of Principal, Redemption Price and Interest. Payments of the principal or Redemption Price of and interest on the Series J Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Commission or the Trustee on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC (or its nominee), the Trustee or the Commission, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of the principal or Redemption Price of and interest on the Series J Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Commission or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

Discontinuation of Book-Entry System. DTC may discontinue providing its services as securities depository with respect to the Series J Bonds at any time by giving reasonable notice to the Commission or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates for the Series J Bonds are required to be printed and delivered. The use of the system of book-entry transfers through DTC (or a successor depository) may be discontinued by the Commission as described in the Resolution. In that event, Bond certificates for the Series J Bonds will be printed and delivered to DTC.

THE COMMISSION AND THE TRUSTEE CANNOT AND DO NOT GIVE ANY ASSURANCES THAT DTC WILL DISTRIBUTE TO THE DIRECT PARTICIPANTS OR THAT THE DIRECT PARTICIPANTS OR THE INDIRECT PARTICIPANTS WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE SERIES J BONDS, (I) PAYMENTS OF PRINCIPAL OR REDEMPTION PRICE OF OR INTEREST ON THE SERIES J BONDS, (II) CERTIFICATES REPRESENTING AN OWNERSHIP INTEREST OR OTHER CONFIRMATION OF BENEFICIAL OWNERSHIP INTEREST IN THE SERIES J BONDS OR (III) NOTICES SENT TO DTC OR CEDE & CO., ITS NOMINEE, AS THE REGISTERED

OWNER OF THE SERIES J BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS OR THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT ON THE MANNER DESCRIBED ABOVE.

NEITHER THE COMMISSION NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION, EITHER SINGULARLY OR JOINTLY, TO ANY DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS, OR ANY PERSON CLAIMING A BENEFICIAL OWNERSHIP INTEREST IN THE SERIES J BONDS UNDER OR THROUGH DTC OR ANY DIRECT PARTICIPANT, INDIRECT PARTICIPANT OR ANY OTHER PERSON WHICH IS NOT SHOWN ON THE REGISTRATION BOOKS OF THE COMMISSION KEPT BY THE TRUSTEE AS BEING A BONDHOLDER. THE COMMISSION AND THE TRUSTEE SHALL HAVE NO RESPONSIBILITY WITH RESPECT TO (I) ANY OWNERSHIP INTEREST IN THE SERIES J BONDS; (II) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, CEDE & CO., ANY DTC PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (III) THE DELIVERY TO ANY PARTICIPANT OR ANY BENEFICIAL OWNER OF ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE SERIES J BONDS UNDER THE BOND RESOLUTION; (IV) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OR ANY INDIRECT PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER WITH RESPECT TO THE PRINCIPAL OR REDEMPTION PRICE OF OR INTEREST ON THE SERIES J BONDS; (V) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE OWNER OF THE SERIES J BONDS; OR (VI) ANY OTHER MATTER.

SO LONG AS CEDE & CO., AS NOMINEE OF DTC, IS THE REGISTERED OWNER OF ALL OF THE SERIES J BONDS, REFERENCES IN THIS APPENDIX B TO THE BONDHOLDERS OR REGISTERED OWNERS OF THE SERIES J BONDS SHALL MEAN CEDE & CO. OR DTC AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES J BONDS.

APPENDIX C

**AUDITED FINANCIAL STATEMENTS OF THE
COMMISSION FOR THE YEARS ENDED
DECEMBER 31, 2017 AND 2018**

PASSAIC VALLEY SEWERAGE COMMISSION

FINANCIAL STATEMENTS

December 31, 2017

PASSAIC VALLEY SEWERAGE COMMISSION

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December 31, 2017

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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"), 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.

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, 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.



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 Finance 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	\$ 26,039,346	\$ -	\$ 418,951	\$ 119,106,326
Investments	29,994,531	16,410,897	-	-	-	-	-	-	46,405,428
Receivables									
Interfund receivables	5,306,444	-	-	9,366,760	2,723,693	141,553	8,958,697	-	21,190,703
Accounts receivable, net of allowance \$454,891	8,658,971	-	-	359,164,523	-	-	30,834,796	-	395,305,763
Inventory	-	-	-	-	-	-	-	-	8,658,971
Property, plant and equipment									
Construction and acquisition cost	252,159,560	-	-	80,091,198	-	-	-	-	80,091,198
Buildings	-	-	-	-	-	-	-	-	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	\$ 1,661,756,850
Liabilities									
Loans payable-current	-	-	-	-	-	-	10,490,769	-	10,490,769
Bonds payable-current	-	-	-	-	-	13,245,000	-	-	13,245,000
Notes Payable	2,495,660	-	-	-	-	-	15,249,456	-	15,249,456
Accounts payable	11,797,637	-	-	1,053,327	13,200	-	-	-	2,507,750
Accrued expenses	825,682	-	-	-	75,695	-	465,504	-	13,392,363
Payroll deductions	334,191	-	-	-	-	-	-	-	825,682
Escrow deposits	9,067,548	-	-	8,949,310	-	308,599	2,965,246	416,826	751,017
Interfund payable	-	-	-	10,002,637	88,095	13,553,599	29,070,975	416,826	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	8,668,971	-	-	-	-	-	-	-	8,668,971
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	-	394,688,508
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	21,213,297	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	\$ 1,661,756,850

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	6,000	1,461,173		182,440			719,950
Macollaneous	14,568,512	6,222	6,000	1,461,173		182,440			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	5,259,988								5,259,988
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	6,079,880								6,079,880
Sundry	799,434								799,434
Advertising	60,537								60,537
Real estate taxes (in lieu)	1,106,849								1,106,849
Bad debt expense	98,047								98,047
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									
Interfund transfers	(15,100,000)	8,728	-	7,600,000	7,590,000	(8,728)	(1,320,622)	-	(1,320,622)
Excess of revenues over (under) expenditures and other financing sources/uses	3,049,909	14,950	6,000	(12,432,976)	6,165,908	(6,211,976)	(12,709,980)	-	(22,088,165)
Reserves, beginning of year	82,227,370	19,967,265	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	10,001,462	25,932,300	21,213,287	2,125	528,091,249
Investment in inventory	8,659,971								8,659,971
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		40,184,273
Investment in fixed assets	386,975,612								386,975,612
Total reserves	490,911,862	\$ 19,982,205	\$ 5,094,277	\$ 482,033,788	\$ 16,652,861	\$ 197,454,766	\$ 176,447,739	\$ 2,125	\$ 1,388,579,613

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.

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:

<u>Project Number</u>	<u>Project Description</u>	<u>Amount</u>
S340689-30	Sump Pump & Generator	\$ 2,478,251
S340689-32	Newark Bay Outfall Dechlorination	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
		<u>\$ 47,512,769</u>

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
	<u>\$ 119,106,326</u>	<u>\$ 119,788,945</u>

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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
	<u>\$ 46,405,428</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, 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	-	950,972	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
	<u>\$ 239,259,266</u>	<u>\$ 46,075,557</u>	<u>\$ 285,334,823</u>

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

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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%

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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:

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

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:

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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	<u>28,878,437,027</u>	<u>23,278,401,588</u>	<u>18,612,878,069</u>

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	<u>\$ 723,829,861</u>

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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.

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	\$ 16,411,000
	<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 Outflows of Resources	Deferred Inflows 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.

**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*
(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

APPENDIX D

**UNAUDITED FINANCIAL STATEMENTS OF
THE COMMISSION FOR THE YEAR ENDED
DECEMBER 31, 2019**

PASSAIC VALLEY SEWERAGE COMMISSION

FINANCIAL STATEMENTS

December 31, 2019

PASSAIC VALLEY SEWERAGE COMMISSION

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INDEPENDENT ACCOUNTANTS' COMPILATION REPORT

INDEPENDENT ACCOUNTANTS' COMPILATION REPORT

To the Commissioners of
Passaic Valley Sewerage Commission

Management is responsible for the accompanying financial statements of the Passaic Valley Sewerage Commission (the "Commission"), which comprise the statement of assets, liabilities and reserves of the various funds as of December 31, 2019, and the related statement of revenues, expenditures and changes in reserves for the year then ended, and the related notes to the financial statements in accordance with the modified cash basis and for determining that the modified cash basis is an acceptable financial reporting framework. We have performed the compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. We did not audit or review the financial statements, nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on these financial statements.

We draw attention to Note A of the financial statements, which describes the basis of accounting. The financial statements are prepared on the modified cash basis, which is a comprehensive 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, although not reasonably determinable, are presumed to be material.

Management has elected to omit the statement of cash flows for the year ended December 31, 2019 ordinarily included in financial statements prepared in accordance with the modified cash basis of accounting described in Note A and accounting principles generally accepted in the United States of America. If the omitted statement was included in the financial statements, they might influence the user's conclusions about the Commission's assets, liabilities, reserves, revenues, and expenditures. Accordingly, the financial statements are not designed for those who are not informed about such matters.

As described on Notes H and I of the financial statements, the Commission contributes to a cost-sharing multiple-employer defined benefit pension plan administered by Public Employees' Retirement System of New Jersey and participates in a cost sharing multiple-employer defined post-retirement benefit plan, which is also administered by the State of New Jersey. As of June 2, 2020, the December 31, 2019, information for these plans was not made available by the State of New Jersey. As a result, the plan information presented in Notes H and I is as of December 31, 2018, which was the most recent period end that plan information was available. This does not have any financial impact on the Commission's reserve balances.

INDEPENDENT ACCOUNTANTS' COMPILATION REPORT (CONTINUED)

The December 31, 2018, financial statements were previously audited by us and we expressed an adverse opinion on the financial statements, due to the Commission's policy of preparing its financial statements on a basis of accounting discussed in paragraph two above, in our report dated September 12, 2019, but we have not performed any auditing procedures since that date.

Mercedien, P.C.

Certified Public Accountants

June 2, 2020

FINANCIAL STATEMENTS

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF ASSETS, LIABILITIES AND RESERVES

December 31, 2019

	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	\$ 86,499,116	\$ 3,667,172	\$ 2,994,277	\$ 4,406,762	\$ 431,321	\$ 16,548,812	\$ -	\$ 338,827	\$ 114,886,287
Investments	20,000,000	16,410,026	-	-	-	-	-	-	36,410,026
Receivables									
Interfund receivables	905,590	-	2,000,000	299,211	14,211,493	141,553	126,455	-	17,684,302
Accounts receivable, net of allowance of \$479,418	6,153,553	21,364	-	71,496	-	-	-	-	6,246,413
Federal/state grants and loans	-	-	-	334,731,178	-	-	52,715,512	-	387,446,690
Inventory	9,461,635	-	-	-	-	-	-	-	9,461,635
Property, plant and equipment									
Construction and acquisition cost	-	-	-	120,302,150	-	-	-	-	120,302,150
Buildings	252,159,560	-	-	-	-	-	-	-	252,159,560
Machinery and equipment	97,786,994	-	-	-	-	-	-	-	97,786,994
Improvements other than building	47,029,058	-	-	-	10,319,054	177,562,943	175,240,788	-	410,151,843
Projects authorized and in process	-	-	-	32,488,835	6,661,912	4,860,584	20,913,846	-	64,925,177
Other assets									
Amounts to be provided for bond, loan and note retirement	-	-	-	-	-	120,680,000	141,060,991	-	261,740,991
Total Assets	<u>\$ 519,995,506</u>	<u>\$ 20,098,562</u>	<u>\$ 4,994,277</u>	<u>\$ 492,299,632</u>	<u>\$ 31,623,780</u>	<u>\$ 319,793,892</u>	<u>\$ 390,057,592</u>	<u>\$ 338,827</u>	<u>\$ 1,779,202,068</u>

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF ASSETS, LIABILITIES AND RESERVES (CONTINUED)

December 31, 2019

	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
Liabilities									
Current liabilities									
Loans payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,612,079	\$ -	\$ 7,612,079
Bonds payable	-	-	-	-	-	14,650,000	-	-	14,650,000
Notes Payable	-	-	-	-	-	-	68,683,222	-	68,683,222
Accounts payable	5,378,831	-	-	3,306,438	984,414	582,628	1,218,541	-	11,470,852
Accrued expenses	8,738,083	-	-	851,619	-	-	325,426	-	9,915,128
Payroll deductions	327,814	-	-	-	-	-	-	-	327,814
Escrow deposits	334,191	-	-	-	-	-	-	336,702	670,893
Interfund payable	13,500,000	-	-	763,312	-	299,211	3,121,778	-	17,684,301
Total current liabilities	28,278,919	-	-	4,921,369	984,414	15,531,839	80,961,046	336,702	131,014,289
Noncurrent Liabilities									
Loans payable	-	-	-	-	-	-	64,765,690	-	64,765,690
Bonds payable	-	-	-	-	-	106,030,000	-	-	106,030,000
Total noncurrent liabilities	-	-	-	-	-	106,030,000	64,765,690	-	170,795,690
Total Liabilities	28,278,919	-	-	4,921,369	984,414	121,561,839	145,726,736	336,702	301,809,979
Reserves									
Insurance trust	-	-	4,994,277	-	-	-	-	-	4,994,277
Investment in inventory	9,461,635	-	-	-	-	-	-	-	9,461,635
Investment in fixed assets	396,975,612	-	-	-	-	-	-	-	396,975,612
Construction and acquisition	-	-	-	120,302,150	10,319,054	177,562,943	175,240,788	-	483,424,935
Projects authorized	-	-	-	32,488,835	6,661,912	4,860,584	20,913,846	-	64,925,177
Debt service	-	20,098,562	-	-	-	-	-	-	20,098,562
Appropriated projects	-	-	-	334,587,278	13,658,400	15,808,526	48,176,222	2,125	412,232,551
Rate stabilization	85,279,340	-	-	-	-	-	-	-	85,279,340
Total Reserves	491,716,587	20,098,562	4,994,277	487,378,263	30,639,366	198,232,053	244,330,856	2,125	1,477,392,089
Total Liabilities and Reserves	\$ 519,995,506	\$ 20,098,562	\$ 4,994,277	\$ 492,299,632	\$ 31,623,780	\$ 319,793,892	\$ 390,057,592	\$ 338,827	\$ 1,779,202,068

See independent accountants' compilation report and notes to financial statements.

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN RESERVES
 Year Ended December 31, 2019

	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	\$ 138,417,215	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138,417,215
Sludge fees	34,813,880	-	-	-	-	-	-	-	34,813,880
Investment gain (loss), net	2,349,733	76,527	-	-	-	398,027	-	-	2,824,287
Miscellaneous	11,006,713	-	-	305,278	-	-	-	-	11,311,991
Federal/state grants and loans	-	-	-	2,601,917	-	-	6,840,072	-	9,441,989
Total	186,587,541	76,527	-	2,907,195	-	398,027	6,840,072	-	196,809,362
Expenditures									
Salaries	53,752,377	-	-	-	-	-	-	-	53,752,377
Payroll taxes	3,868,312	-	-	-	-	-	-	-	3,868,312
Employee benefits	13,403,385	-	-	-	-	-	-	-	13,403,385
Pension contribution	6,856,947	-	-	-	-	-	-	-	6,856,947
Supplies and postage	1,997,169	-	-	-	-	-	-	-	1,997,169
Replacement parts	8,471,083	-	-	-	-	-	-	-	8,471,083
Materials	6,829,101	-	-	-	-	-	-	-	6,829,101
Utilities	20,331,955	-	-	-	-	-	-	-	20,331,955
Rentals	394,445	-	-	-	-	-	-	-	394,445
Insurance	1,883,213	-	-	-	-	-	-	-	1,883,213
Equipment	4,090,463	-	-	-	-	-	-	-	4,090,463
Outside services	8,828,153	-	-	395,642	33,536	-	-	-	9,257,331
Professional fees	809,944	-	-	-	-	-	-	-	809,944
Permitting	922,367	-	-	-	-	-	-	-	922,367
Sludge disposal	6,013,121	-	-	-	-	-	-	-	6,013,121
Sundry	1,385,717	-	-	-	-	-	-	-	1,385,717
Advertising	52,815	-	-	-	-	-	-	-	52,815
Real estate taxes (in lieu)	1,195,505	-	-	-	-	-	-	-	1,195,505
Bad debt expense	52,072	-	-	-	-	-	-	-	52,072
Project expenditures	-	-	-	32,093,194	6,661,912	4,860,584	20,913,846	-	64,529,536
Bond issuance costs	-	-	-	-	-	-	67,724	-	67,724
Subtotal	141,138,144	-	-	32,488,836	6,695,448	4,860,584	20,981,570	-	206,164,582

See independent accountants' compilation report and notes to financial statements.

PASSAIC VALLEY SEWERAGE COMMISSION

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN RESERVES (CONTINUED)

Year Ended December 31, 2019

	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
Bond debt service									
Principal	23,373,209	-	-	-	-	-	-	-	23,373,209
Interest	6,718,589	-	-	-	-	-	-	-	6,718,589
Total expenditures	<u>171,229,942</u>	<u>-</u>	<u>-</u>	<u>32,488,836</u>	<u>6,695,448</u>	<u>4,860,584</u>	<u>20,981,570</u>	<u>-</u>	<u>236,256,380</u>
Excess of revenues over (under) expenditures	15,357,599	76,527	-	(29,581,641)	(6,695,448)	(4,462,557)	(14,141,498)	-	(39,447,018)
Other Financing Sources/(Uses)									
Interfund transfers	<u>(12,500,000)</u>	<u>-</u>	<u>-</u>	<u>7,500,000</u>	<u>5,000,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Excess of revenues over/(under) expenditures and other financing sources/uses	2,857,599	76,527	-	(22,081,641)	(1,695,448)	(4,462,557)	(14,141,498)	-	(39,447,018)
Reserves, beginning of year	<u>82,421,741</u>	<u>20,022,035</u>	<u>4,994,277</u>	<u>356,668,919</u>	<u>15,353,848</u>	<u>20,271,083</u>	<u>62,317,720</u>	<u>2,125</u>	<u>562,051,748</u>
Reserves, end of year	85,279,340	20,098,562	4,994,277	334,587,278	13,658,400	15,808,526	48,176,222	2,125	522,604,730
Investment in inventory	9,461,635	-	-	-	-	-	-	-	9,461,635
Investment in construction and acquisition	-	-	-	120,302,150	10,319,054	177,562,943	175,240,788	-	483,424,935
Investment in projects authorized	-	-	-	32,488,835	6,661,912	4,860,584	20,913,846	-	64,925,177
Investment in fixed assets	<u>396,975,612</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>396,975,612</u>
Total reserves	<u>\$ 491,716,587</u>	<u>\$ 20,098,562</u>	<u>\$ 4,994,277</u>	<u>\$ 487,378,263</u>	<u>\$ 30,639,366</u>	<u>\$ 198,232,053</u>	<u>\$ 244,330,856</u>	<u>\$ 2,125</u>	<u>\$ 1,477,392,089</u>

See independent accountants' compilation report and notes to financial statements.

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.

Insurance Trust Fund

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

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Accounting (Continued)

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, 2019, the series F, G, H and I bonds remain outstanding in the aggregate principal amount of \$120,680,000, 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.
- forward delivery agreement value and change would be recorded on the financial statements.

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.

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, 2019. 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.

Additional coverage is provided by The New Jersey Governmental Unit Deposit Protection Act ("NJGUDPA") which permits the deposit of public funds in the State of New Jersey Cash Management Fund or in institutions located in New Jersey that are insured by the Federal Deposit Insurance Corporation ("FDIC") or by any other agencies of the United States that insure deposits. NJGUDPA requires public depositories to maintain collateral for deposit of public funds that exceed insurance limits as follows:

See independent accountants' compilation report.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

B. CASH AND CASH EQUIVALENTS (CONTINUED)

Deposits (continued)

Each deposit participating in the NJGUDPA system must pledge collateral equal to at least 5% of the average amount of its public deposits and 100% of the average amount of its public funds in excess of the lesser of 75% of its capital funds or \$200 million. The minimum 5% pledge applies to institutions that are categorized as “well capitalized” by Federal banking standards. The percentage of the required pledge will increase for institutions that are less than “well capitalized.”

No collateral is required for amounts covered by FDIC or National Credit Union Share Insurance Fund (“NCUSIF”) insurance. The collateral which may be pledged to support these deposits includes obligations of the State and Federal governments, insured securities and other collateral approved by the Department of Banking and Insurance. When the capital position of the depository deteriorates or the depository takes an unusually large amount of public deposits, the Department of Banking and Insurance requires additional collateral to be pledged.

If a governmental depository fails and the FDIC or NCUSIF insurance does not insure or pay out the full amount of public deposits, the collateral pledged to protect these funds would first be liquidated and paid out. If this amount is insufficient, other institutions holding public funds would be assessed pro rata up to 4% of their uninsured public funds. Although these protections do not constitute a 100% guarantee of the safety of all funds, no governmental unit under NJGUDPA has ever lost protected deposits.

As of December 31, 2019, the Commission’s bank balances were exposed to custodial credit risk as follows:

Insured (FDIC)	\$	1,000,000
Collateralized (JP Morgan & Bank of NY)		49,954,656
Uninsured and Collateralized (GUDPA)		64,417,879
	\$	<u>115,372,535</u>

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, 2019.

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

B. CASH AND CASH EQUIVALENTS (CONTINUED)

The amounts deposited in these accounts at December 31, 2019, are as follows:

	Book Balance	Bank Balance
JP Morgan Bank	\$ 29,252,422	\$ 29,738,670
ConnectOne Bank	10,343,085	10,343,085
Santander Bank	55,074,794	55,074,794
Bank of New York	20,215,986	20,215,986
	<u>\$ 114,886,287</u>	<u>\$ 115,372,535</u>

C. INVESTMENTS

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.

Investments at December 31, 2019, are as follows:

	Cost
Certificates of deposit	\$ 20,000,000
U.S. Agency Notes	16,410,026
Total Investments	<u>\$ 36,410,026</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 or F 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, 2019, the termination value of the Agreement was \$712,001.

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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, 2018	Additions	Reductions	Outstanding December 31, 2019	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	26,740,000	-	3,680,000	23,060,000	5,700,000
2016, Series H	74,795,000	3.00%-5.00%	2025	42,265,000	-	9,170,000	33,095,000	7,820,000
2016, Series I	30,540,000	2.25%-5.00%	2036	28,540,000	-	1,075,000	27,465,000	1,130,000
Total bonds payable				<u>134,605,000</u>	<u>-</u>	<u>13,925,000</u>	<u>120,680,000</u>	<u>14,650,000</u>
Loans								
1999 Trust and Fund Loan	128,925,000	4.75%-5.70%	2019	1,769,342	-	1,769,342	-	-
2006 Trust and Fund Loan	38,894,500	4.00%-5.00%	2026	16,091,746	-	2,280,458	13,811,288	2,302,057
2007 Trust and Fund Loan	24,926,867	3.40%-5.00%	2022	1,360,954	-	489,954	871,000	358,000
2010A ARRA Trust and Fund Loan	12,542,621	3.00%-5.00%	2029	7,905,881	-	669,535	7,236,346	678,535
2010 A Trust and Fund Loan	31,981,707	3.00%-5.00%	2029	18,903,445	-	1,704,928	17,198,517	1,718,928
2010 B Trust and Fund Loan	19,662,500	5.00%	2030	10,490,361	-	1,025,972	9,464,389	1,009,972
2014 Trust and Fund Loan	26,791,177	3.00%-5.00%	2032	21,637,447	-	1,345,478	20,291,969	1,360,478
2016 Trust and Fund Loan	2,975,000	3.00%-5.00%	2036	2,759,322	-	139,407	2,619,915	139,407
2018 Trust and Fund Loan	907,481	4.00%-5.00%	2038	907,481	-	23,135	884,346	44,702
Total loans payable				<u>81,825,979</u>	<u>-</u>	<u>9,448,209</u>	<u>72,377,770</u>	<u>7,612,079</u>
Total bonds and loans payable				<u>\$ 216,430,979</u>	<u>\$ -</u>	<u>\$ 23,373,209</u>	<u>\$ 193,057,770</u>	<u>\$ 22,262,079</u>

Summary of Future Maturities

Future maturities of bonds and loans payable are as follows:

Year Ending December 31,	Principal	Interest	Total
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	13,138,528	2,688,101	15,826,629
2025-2029	59,976,928	8,525,032	68,501,960
2030-2034	33,011,735	2,462,117	35,473,852
2035-2036	4,622,623	197,350	4,819,973
	<u>\$ 193,057,770</u>	<u>\$ 31,837,747</u>	<u>\$ 224,895,517</u>

The Commission has a temporary note payable through the New Jersey Infrastructure Bank construction loan program in the amount of \$68,683,222 as of December 31, 2019. The note will be repaid upon the issuance of future permanent 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, 2019, the reserve balance was \$4,994,277. There were no claims paid in the current year resulting in no change of the reserve for self-insurance for the year ended December 31, 2019.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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. This footnote has not been updated through December 31, 2019 due to information not being available from the plan administrator.

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, 2018. 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 Outflows of Resources	Deferred Inflows 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. This footnote has not been updated through December 31, 2019 due to information not being available from the plan administrator.

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.

PASSAIC VALLEY SEWERAGE COMMISSION

NOTES TO FINANCIAL STATEMENTS

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

General Information about the OPEB Plan (continued)

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

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, 2019, 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, 2019, the Commission received approximately 89% of its total grant revenue from two grantors, NJIB 69% 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 2019, 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, 2019.

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 2019, the Commission received \$20,140,230 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. 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, 2019. 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.

P. SUBSEQUENT EVENT

The Commission authorized two new bond resolutions during 2020. Supplemental resolution 29-20 authorized the issuance of sewer system bonds not to exceed the principal amount of \$87,000,000. Supplemental resolution 30-20 authorized the issuance of subordinate sewer system bonds in connection with the New Jersey Infrastructure Bank's Environmental Infrastructure Financing Program not to exceed the principal amount of \$140,000,000. The Commission also issued New Jersey Infrastructure Bank loans for projects 25, 31, and 39 for the aggregate par amount of \$8,341,087 in May 2020.

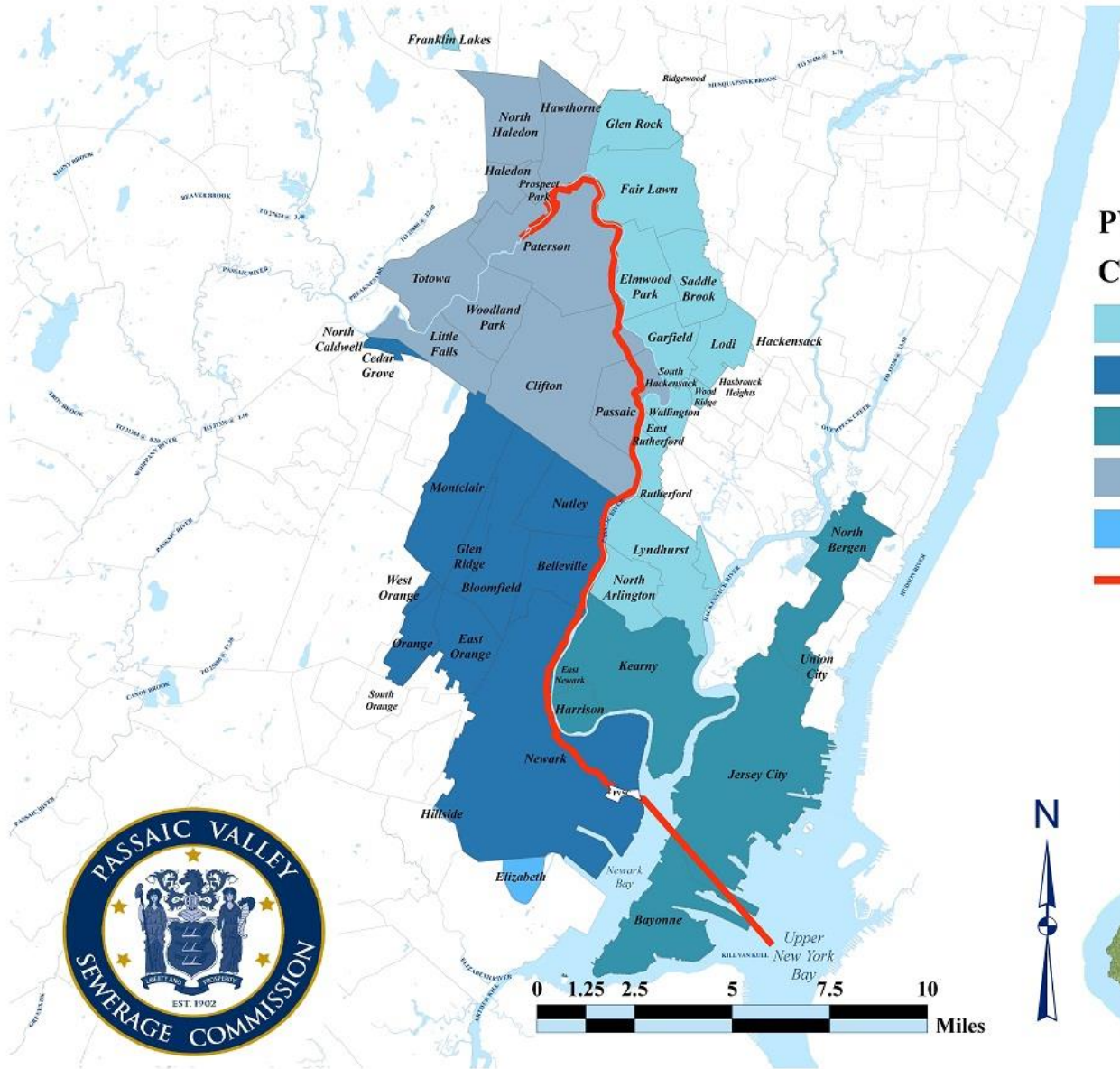
P. SUBSEQUENT EVENT (CONTINUED)

The Commission faces various risks related to the global outbreak of coronavirus disease (“COVID-19”). The Commission provides wastewater services to various municipalities, tax-exempt, industrial and non-industrial entities in the northern New Jersey region and are dependent on the financial health of the entities they serve. With significant portions of the state closed due to the Governor’s stay at home order, increasing unemployment, and other negative economic factors resulting from COVID-19, many of the Commission’s user entities’ ability to remit payment for user charges and other services the Commission provides may be compromised. Similarly, connection fee revenue is expected to be negatively impacted with all construction projects in the State temporarily halted. The Commission may also incur additional operating expenses beyond those anticipated and budgeted for in 2020 as a result of COVID-19. The impact of additional costs should be limited, however, as up to 75% of cost incurred during this emergency should be reimbursable by FEMA. The Commission currently has sufficient reserves to meet its debt service obligations through 2021.

At this time, the Commission’s management cannot predict the full impact of the COVID-19 pandemic, but management continues to monitor the situation, to assess further possible implications to operations and their customers, regulators, and creditors and will take all necessary actions in an effort to mitigate adverse consequences. Further, the pandemic may have a material adverse effect on the Commission’s results of operations, financial position, and liquidity during fiscal year ending 2020 and beyond.

APPENDIX E

MAP OF PASSAIC RIVER VALLEY DRAINAGE AREA



PVSC BY COUNTY

- BERGEN
- ESSEX
- HUDSON
- PASSAIC
- UNION

— PVSC INTERCEPTOR AND OUTFALL



APPENDIX F

FORM OF CONTINUING DISCLOSURE AGREEMENT

APPENDIX F
FORM OF CONTINUING DISCLOSURE AGREEMENT

THIS CONTINUING DISCLOSURE AGREEMENT (the "Agreement"), made as of _____, 2020, by and between the **PASSAIC VALLEY SEWERAGE COMMISSIONERS** (the "Commission") and **THE BANK OF NEW YORK MELLON**, as Trustee under the Resolution (as hereinafter defined) and as Dissemination Agent under this Agreement (the "Trustee" and the "Dissemination Agent").

WITNESSETH:

WHEREAS, on the date hereof, the Commission is Issuing \$_____ aggregate principal amount of its Sewer System Bonds, Series J (the "Bonds");

WHEREAS, the Bonds are being by the Commission pursuant to the provisions of Chapter 14 of Title 58 of the Revised Statutes of New Jersey, as amended and supplemented, and a resolution of the Commission adopted on May 20, 1971 and entitled "Resolution Providing for the Issuance of Bonds of Passaic Valley Sewerage Commissioners and for the Rights of the Holders Thereof, and Authorizing \$23,700,000 Principal Amount Thereof, as amended and supplemented (the "General Bond Resolution"), including as supplemented by Supplemental Resolution No. 17 relating thereto, adopted by the Commission on February 13, 2020 and which became effective on May 9, 2020 ("Supplemental Resolution No. 17" and, together with the General Bond Resolution, the "Resolution");

WHEREAS, pursuant to Rule 15c2-12 (codified at 17 C.P.R. §240.15c2-12) ("Rule 15c2-12") of the United States Securities and Exchange Commission (the "SEC"), a broker, dealer, or municipal securities dealer is generally prohibited from purchasing or selling municipal securities, such as the Bonds, unless such broker, dealer or municipal securities dealer has reasonably determined that the issuer of such municipal securities or an obligated person with respect thereto has undertaken in a written agreement or contract for the benefit of holders of such securities to provide certain annual financial information and operating data and notices of the occurrence of certain material events to the Municipal Securities Rulemaking Board (the "MSRB") in an electronic format and accompanied by such identifying information as prescribed by the MSRB;

WHEREAS, in order to enable a "participating underwriter" within the meaning of Rule 15c2-12 to purchase the Bonds, the Commission, as the issuer of and an "obligated person" with respect to the Bonds within the meaning of Rule 15c2-12, has agreed to deliver or caused to be delivered the information described in this Agreement to the MSRB for the period of time specified in this Agreement;

WHEREAS, the execution and delivery of this Agreement have been duly authorized by the Commission, the Trustee and the Dissemination Agent, and all conditions, acts and things necessary to have happened, or to have been performed or required to exist precedent to the execution and delivery of this Agreement, do exist, have happened and have been performed in regular form, time and manner; and

WHEREAS, the Commission, the Trustee and the Dissemination Agent are entering into this Agreement for the benefit of the Holders from time to time of the Bonds.

NOW, THEREFORE, for and in consideration of the promises and of the mutual representations, covenants and agreements herein set forth, the Commission, the Trustee and the Dissemination Agent, do mutually promise, covenant and agree as follows:

ARTICLE 1 DEFINITIONS

Section 1.1. Terms Defined in Recitals. The following terms shall have the meanings set forth in the recitals hereto:

- Agreement
- Bonds
- Commission
- General Bond Resolution
- MSRB
- Resolution
- Rule 15c2-12
- SEC
- Supplemental Resolution No. 17
- Trustee

Section 1.2. Additional Definitions. The following additional terms shall have the meanings specified below:

"Disclosure Event" means any event described in subsection 2.1(d) of this Agreement.

"Disclosure Event Notice" means any notice to the MSRB as provided in subsection 2.1(d) of this Agreement.

"Dissemination Agent" means an entity acting in its capacity as Dissemination Agent under this Agreement, or any successor Dissemination Agent designated in writing by the Commission that has filed a written acceptance of such designation. The initial Dissemination Agent is The Bank of New York Mellon.

"EMMA" means the Electronic Municipal Market Access facility for municipal securities of the MSRB.

"Financial Obligation" means a: (a) debt obligation; (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) guarantee of (a) or (b); provided, however that the term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Financial Statements" means the audited financial statements of the Commission for each fiscal year and includes balance sheets, statements of changes in fund balances and statements of current funds, revenues, expenditures and other charges or statements which convey similar information.

"GAAP" means generally accepted accounting principles as in effect from time to time in the United States of America, consistently applied.

"GAAS" means generally accepted auditing standards as in effect from time to time in the United States of America, consistently applied.

"Holder" means, when used with reference to the Bonds, any person or entity who shall be the owner of any outstanding Bonds, as applicable.

"MSRB" means the Municipal Securities Rulemaking Board.

"Official Statement" means the final Official Statement of the Commission, dated _____, 2020, relating to the Bonds.

"Operating Data" means the Financial Statements and the financial, statistical and operating data of the Commission and Users of the type included in the section of the Official Statement entitled "THE SYSTEM" in the tables captioned: "Percentage Apportionment of Net Operating Expenses", "Statistical Data Relating to the Largest Users (Over 2%) of the System", "Summary of Revenues, Expenditures, and Increase/(Decrease) in Rate Stabilization- General Fund" and under the sub-heading entitled "Pension and OPEB Obligations", including the table thereunder captioned "Summary of Employer and Employee Pension Contributions".

"Participating Underwriter" shall have the same meaning assigned to such term under Rule 15c2-12.

"User" means a governmental entity which uses the Commission's sewerage system and is scheduled to make payments related to debt service on the Bonds in any one calendar year which equal or exceed ten percent (10%) of the debt service scheduled to be paid with respect to the Bonds, in such calendar year.

Section 1.3. Interpretation. Words of masculine gender include correlative words of the feminine and neuter genders. Unless the context shall otherwise indicate, words importing the singular include the plural and vice versa, and words importing persons include corporations, associations, partnerships (including limited partnerships), trusts, firms and other legal entities, including public bodies, as well as natural persons. Articles and Sections referred to by number mean the corresponding Articles and Sections of this Agreement. The terms "hereby," "hereof," "hereto," "herein," "hereunder" and any similar terms as used in this Agreement, refer to this Agreement as a whole unless otherwise expressly stated. As the context shall require, all words importing the singular number shall include the plural number. The headings of this Agreement are for convenience only and shall not define or limit the provisions hereof.

ARTICLE2
CONTINUING DISCLOSURE COVENANTS AND REPRESENTATIONS

Section 2.1. Continuing Disclosure Covenants of the Commission. The Commission agrees that it will provide, or shall cause the Dissemination Agent to provide:

(a) Not later than two hundred and seventy (270) days after the end of each fiscal year, commencing with the fiscal year ending December 31, 2020, the Commission's Financial Statements and the Operating Data of the Commission and the Users to the MSRB;

(b) If audited Financial Statements are not available on the date set forth in paragraph (a) above, the Commission will submit unaudited financial statements with such filing and will subsequently submit audited Financial Statements when and if available, to the MSRB.

(c) Not later than fifteen (15) days prior to the date set forth in Section 2.1 (a) hereof, a copy of the Financial Statements and Operating Data, complete to the extent required in Section 2.1(a) hereof, to the Trustee and the Dissemination Agent (if the Commission has appointed or engaged a Dissemination Agent); and

(d) In a timely manner not in excess of ten (10) business days after the occurrence of the event, to the MSRB, notice of any of the following events with respect to any of the Bonds (each, a "Disclosure Event"):

- (i) Principal and interest payment delinquencies;
- (ii) Non-payment related defaults, if material;
- (iii) Unscheduled draws on debt service reserve funds reflecting financial difficulties;
- (iv) Unscheduled draws on credit enhancements reflecting financial difficulties;
- (v) Substitution of credit or liquidity providers, or their failure to perform;
- (vi) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (vii) Modifications to rights of Holders of any of the Bonds, if material;
- (viii) Bonds calls, if material, and tender offers;
- (ix) Defeasances;

Bonds;

- (x) Release, substitution, or sale of property securing repayment of any of the

- (xi) Rating changes;

User;

- (xii) Bankruptcy, insolvency, receivership or similar event of the Commission any

- (xiii) The consummation of a merger, consolidation, or acquisition involving the Commission or any User or the sale of all or substantially all of the assets of the Commission or any User, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

- (xiv) Appointment of a successor or additional trustee for the Bonds or the change of name of a trustee for the Bonds, if material;

- (xv) Incurrence of a Financial Obligation of a Party, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of a Party, any of which affect holders of the Bonds, if material; and

- (xvi) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of a Party, any of which reflect financial difficulties.

- (e) In a timely manner, to the MSRB, notice of a failure by the Commission to provide the Financial Statements and the Operating Data within the period described in subsection 2.1(a) hereof.

Section 2.2. Continuing Disclosure Representations. The Commission represents and warrants that:

- (a) The Financial Statements shall be prepared on a modified cash basis, which constitutes a comprehensive basis of accounting other than GAAP.

- (b) Any Financial Statements which are audited shall be audited by an independent certified public accountant in accordance with GAAS.

Section 2.3. Form of Filings. (a) The Financial Statements and the Operating Data may be submitted as a single document or as separate documents comprising a package.

- (b) Any or all of the items which must be included in the Financial Statements or the Operating Data may be incorporated by reference from other documents, including official statements relating to other bonds, notes or other obligations issued by or on behalf of the Commission, which are available to the public on the MSRB's Internet Web Site or filed with the

SEC. If the document incorporated by reference is a final official statement, it must be available from the MSRB (including, without limitation, from EMMA). The Commission shall clearly identify each such other document so incorporated by reference.

(c) The Financial Statements or Operating Data for any fiscal year containing any modified operating data or financial information (as contemplated by Sections 4.5 and 4.6 hereof) for such fiscal year shall explain, in narrative form, the reasons for such modification and the effect of such modification on the Financial Statements or Operating Data being provided for such fiscal year.

(d) The Financial Statements and Operating Data, and each notice required hereunder, shall be provided to the MSRB in an electronic format as prescribed by the MSRB. All documents provided to the MSRB shall be accompanied by identifying information as prescribed by the MSRB.

Section 2.4. Responsibilities and Duties of the Commission, Dissemination Agent and Trustee. (a) If fifteen (15) days prior to the date specified in Section 2.1. (a) hereof, the Trustee has not received a copy of the Financial Statements and Operating Data, the Trustee shall contact the Commission in writing to provide notice of their obligation pursuant to Section 2.1(a) hereof.

(b) If the Trustee, by the date specified in Section 2.1(a) hereof, has not received a written report from the Commission, as required by Section 2.4(c) hereof, indicating that Financial Statements and Operating Data have been provided to the MSRB by the date specified in Section 2.1(a) hereof, the Trustee shall send a notice to the MSRB, in substantially the form attached hereto as Exhibit A, together with any standard forms or cover sheets that may be required by the MSRB as of the date thereof, with a copy thereof to the Commission.

(c) The Commission shall, or shall cause the Dissemination Agent to, by the date specified in Section 2.1(a) hereof, provide a written report to the Trustee (and, if a Dissemination Agent has been appointed, to the Commission) certifying that the Financial Statements and Operating Data, complete to the extent required in Section 2.1(a) hereof, have been provided pursuant to this Agreement, stating the date it was provided to the MSRB.

Section 2.5 Appointment, Removal and Resignation of Dissemination Agent. (a) The Commission may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Agreement and shall provide notice of such appointment to the Trustee. Thereafter, the Commission may discharge any such Dissemination Agent and satisfy its obligations under this Agreement without the assistance of a Dissemination Agent, or the Commission may discharge a Dissemination Agent and appoint a successor Dissemination Agent, such discharge to be effective on the date of the appointment of a successor Dissemination Agent. The Commission shall provide notice of the discharge of a Dissemination Agent to the Trustee and shall further indicate either the decision of the Commission to satisfy its obligations under this Agreement without the assistance of a Dissemination Agent or the identity of the new Dissemination Agent.

(b) The Dissemination Agent shall have only such duties as are specifically set forth in this Agreement.

(c) The Dissemination Agent, or any successor thereto, may at any time resign and be discharged of its duties and obligations hereunder by giving not less than thirty (30) days' written notice to the Commission. Such resignation shall take effect on the date specified in such notice.

(d) The Bank of New York Mellon is hereby appointed as the initial Dissemination Agent under this Agreement.

ARTICLE 3 DEFAULTS AND REMEDIES

Section 3.1. Disclosure Default. The occurrence and continuation of a failure by the Commission to observe, perform or comply with any covenant, condition or agreement on its part to be observed or performed under this Agreement and such failure shall remain uncured for a period of thirty (30) days after written notice thereof has been given to the Commission by any Holder shall constitute a Disclosure Default hereunder.

Section 3.2. Remedies on Default. (a) Upon the occurrence of a Disclosure Default, the Trustee may, in reliance upon the advice of counsel (and at the request of the Holders of at least twenty-five percent (25%) in aggregate principal amount of outstanding Bonds, after provision of indemnity in accordance with Section 1106 of the General Bond Resolution, shall, or any Holder may, for the equal benefit and protection of all Holders similarly situated, take whatever action at law or in equity against the Commission and any of the officers agents and employees of the Commission which is necessary or desirable to enforce the specific performance and observance of any obligation, agreement or covenant of the Commission under this Agreement and may compel the Commission or any such officers, agents or employee (except for the Dissemination Agent with respect to the obligations, agreements and covenants of the Commission), to perform did carry out their duties under this Agreement; provided, that no person or entity shall be entitled to recover monetary damages hereunder under any circumstances; and provided, further, that any Holder, acting for the equal benefit and protection of all Holders similarly situated, may pursue specific performance only with respect to the failure to file Financial Statements and Operating Data, and Disclosure Event Notices required by this Agreement, and may not pursue specific performance in challenging the adequacy of Financial Statements and Operating Data, or Disclosure Event Notices that have been file pursuant to the provisions hereof.

(b) In case any Holder shall have proceeded to enforce its rights under this Agreement and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee or any Holder, then and in every such case the Commission, the Trustee and any Holder, as the case may be, shall be restored respectively to their several positions and rights hereunder, and all rights, remedies and powers of

the Commission, the Trustee and any Holder shall continue as though no such proceeding had been taken.

(c) A Disclosure Default or any other failure by the Commission to comply with the provisions of this Agreement in any respect shall not constitute or be deemed to constitute an Event of Default under the Resolution and the sole remedy under this Agreement in the event of a Disclosure Default or any other failure by the Commission to comply with the provisions of this Agreement in any respect shall be an action to compel performance as set forth in subsection 3.2(a) of this Agreement.

ARTICLE 4 MISCELLANEOUS

Section 4.1. Purposes of the Disclosure Agreement. This Agreement is being executed and delivered by the Commission and the Trustee for the benefit of the Holders and in order to assist the Participating Underwriter in complying with clause (b)(5) of Rule 15c2-12.

Section 4.2. Third-Party Beneficiaries. Each Holder and beneficial owner from time to time of the Bonds is hereby recognized as being a third-party beneficiary hereunder.

Section 4.3. Additional Information. Nothing in this Agreement shall be deemed to prevent the Commission from (a) disseminating any other information, using the means of dissemination set forth in this Agreement or any other means of communication, or (b) including any other information in any Financial Statement or Operating Data or any Disclosure Event Notice, in addition to that which is required by this Agreement. If the Commission chooses to include any information in any Financial Statement, Operating Data or any Disclosure Event Notice in addition to that which is specifically required by this Agreement, the Commission shall have no obligation under this Agreement to update such information or include it in any future Financial Statement, Operating Data or any future Disclosure Event Notice.

Section 4.4. Severability. If any provision of this Agreement shall be held or deemed to be or shall, in fact, be illegal, inoperative or unenforceable, the same shall not affect any other provision or provisions herein contained or render the same invalid, inoperative or unenforceable to any extent whatever.

Section 4.5. Amendments, Changes and Modifications. (a) Except as otherwise provided in this Agreement, subsequent to the issuance of the Bonds and prior to their payment in full (or provision for payment thereof having been made), this Agreement may not be effectively amended, changed, modified, altered or terminated without the written consent of the Holders of the Bonds.

(b) Without the need to obtain the consent of any Holders of the Bonds, the Commission, the Trustee and the Dissemination Agent, at any time and from time to time, may enter into any amendments or modifications to this Agreement for any of the following purposes:

(i) to add to covenants and agreements of the Commission hereunder for the benefit of the Holders or the beneficial owners of the Bonds, or to surrender any right or power conferred upon the Commission; or

(ii) to modify the contents, presentation and format of the Financial Statements or Operating Data from time to time to conform to changes in accounting or disclosure principles or practices and legal requirements followed by or applicable to the Commission or to reflect changes in the identity, nature, or status of the Commission, or in the business, structure or operations of the Commission, or any mergers, consolidations, acquisitions or dispositions made by or affecting the Commission; provided that any such modification shall comply with the requirements of Rule 15c2-12 as then in effect at the time of such modification; or

(iii) to cure any ambiguity, to correct or supplement any provision hereof which may be inconsistent with any other provision hereof, or to include any other provisions with respect to matters or questions arising under this Agreement which, in each case, comply with Rule 15c2-12 as then in effect at the time of such modification; or 4.6 hereof.

(c) Upon entering into any amendment or modification required or permitted by this Agreement, the Commission shall deliver, or cause the Dissemination Agent to deliver, written notice of any such amendment or modification to the MSRB.

(d) The Commission and the Trustee shall be entitled to rely exclusively upon an opinion of counsel nationally recognized as expert in federal securities law acceptable to the Commission to the effect that any such amendments or modifications comply with the conditions and provisions of this Section 4.5 and with Rule 15c2-12.

Section 4.6. Amendments Required by Rule 15c2-12. The Commission, the Trustee and the Dissemination Agent each recognize that the provisions of this Agreement are intended to enable the Participating Underwriter to comply with Rule 15c2-12. If, as a result of a change in Rule 15c2-12 or in the interpretation thereof, a change in, modification to or amendment of, this Agreement is necessary or permitted by the terms of this Agreement to assure continued compliance with Rule 15c2-12 and upon delivery by any Participating Underwriter of an opinion of counsel nationally recognized as expert in federal securities law acceptable to the Commission to the effect that such change, modification or amendment is necessary or permitted by the terms of this Agreement to assure continued compliance by the Participating Underwriter with Rule 15c2-12 as so amended or interpreted, then the Commission shall amend this Agreement to comply with and be bound by any such change, modification or amendment to this Agreement to the extent necessary or desirable to assure compliance with the provisions of Rule 15c2-12 and provide the written notice of such amendment as required by subsection 4.5(c) hereof.

Section 4.7. Governing Law. This Agreement shall be governed exclusively by and construed in accordance with the applicable laws of the State of New Jersey.

Section 4.8. Termination of Continuing Disclosure Obligation. The continuing

obligation of the Commission under Section 2.1 hereof to provide the Financial Statements, the Operating Data and any Disclosure Event Notice and to comply with the other requirements of said Section shall terminate if and when either (a) the Bonds are no longer outstanding or (b) the Commission no longer remains an "obligated person" (as defined in Rule 15c2-12(f) (10)) with respect to the Bonds and in either event, only after the Commission delivers, or causes the Dissemination Agent to deliver, to the MSRB written notice to such effect. This Agreement shall be in full force and effect from the date hereof and shall continue in effect so long as any Bonds are outstanding.

Section 4.9. Binding Effect. This Agreement shall inure to the benefit of and shall be binding upon the Commission, the Trustee and the Dissemination Agent and their respective successors and assigns.

[REMAINDER OF THIS PAGE LEFT BLANK; SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, PASSAIC VALLEY SEWERAGE COMMISSIONERS and THE BANK OF NEW YORK MELLON have caused this Agreement to be executed in their respective names and attested by their duly authorized officers, all as of the date first above written.

PASSAIC VALLEY SEWERAGE COMMISSIONERS

By: _____
GREGORY A. TRAMONTOZZI
Executive Director

**THE BANK OF NEW YORK MELLON,
as Trustee and Dissemination Agent**

By: _____
JANET M. RUSSO
Vice President

[Signature Page to Continuing Disclosure Agreement]

EXHIBIT A
FORM OF NOTICE TO MSRB OF
FAILURE TO FILE FINANCIAL STATEMENTS AND OPERATING DATA

Name of Obligated
Person: PASSAIC VALLEY SEWERAGE COMMISSIONERS

Name of Bond Issue: Passaic Valley Sewerage Commissioners
Sewer System Bonds, Series J

Date of Issuance: _____, 2020
CUSIP Number: _____

NOTICE IS HEREBY GIVEN that the Passaic Valley Sewerage Commissioners (the "Commission") has not provided Financial Statements and Operating Data with respect to the above-referenced bonds (the "Bonds") as required by the Continuing Disclosure Agreement relating to the Bonds made as of _____, 2020, between the Commission and The Bank of New York Mellon, as Trustee and Dissemination Agent. The Commission anticipates that the Financial Statements and Operating Data will be filed by

Dated:

THE BANK OF NEW YORK MELLON,
as Trustee and Dissemination Agent

By: _____

APPENDIX G

FORM OF APPROVING OPINION OF BOND COUNSEL

*An opinion in substantially the following form
will be delivered at Closing, assuming no
material changes in facts or law*

_____, 2020

Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, New Jersey 07105

Ladies and Gentlemen:

We have examined a record of proceedings relating to the issuance by the Passaic Valley Sewerage Commissioners (the "Commission") of \$_____ aggregate principal amount of its Sewer System Bonds, Series J (the "Series J Bonds" or "Bonds"). The Commission is a public body corporate and politic of the State of New Jersey existing under and by virtue of the provisions of Chapter 14 of Title 58 of the Revised Statutes of New Jersey, and the acts continued thereby, and the acts amendatory thereof and supplemental thereto (collectively, the "Act").

The Bonds are being issued by the Commission pursuant to the provisions of the Act and a resolution of the Commission adopted on May 20, 1971 entitled "Resolution Providing for the Issuance of Bonds of Passaic Valley Sewerage Commissioners and for the Rights of the Holders Thereof, and Authorizing \$23,700,000 Principal Amount Thereof, as amended and supplemented (the "General Bond Resolution"), including as supplemented by Supplemental Resolution No. 17 relating thereto, adopted by the Commission on February 13, 2020 and which became effective on May 9, 2020 ("Supplemental Resolution No. 17" and, together with the General Bond Resolution, the "Resolution"). Capitalized terms used but not otherwise defined herein shall have the meaning ascribed thereto in the Resolution.

The Bonds are dated the date hereof, are issued in fully registered book-entry only form, initially registered in the name of and held by Cede & Co., as nominee of The Depository Trust Company, without coupons, mature on the dates and in the principal amounts, bear interest from their date at the respective rates and payable on such dates and contain such other provisions, all as set forth in the Resolution. The Bonds are subject to redemption prior to maturity on the terms and conditions set forth in the Resolution. The Bank of New York Mellon serves as the Trustee (the "Trustee") and Paying Agent for the Bonds under the Resolution.

The Bonds are being issued for the purpose of providing the funds necessary, together with other available funds of the Commission, to (i) currently refund and legally defease all of the Commission's outstanding Sewer System Bonds, Series F, (ii) pay the costs of the planning, design, acquisition, improvement, renovation, replacement, construction and installation of various capital projects to and for the System, including the acquisition of real property and (iii) pay the costs of issuance of the Bonds.

The System was constructed pursuant to a contract between the Commission and twenty-two municipalities (the "Contracting Municipalities") entered into pursuant to the provisions of the Act and under which the Contracting Municipalities paid to the Commission the costs of constructing the System and were allotted the right to use certain percentages of the total capacity of the System. Pursuant to the Act, the Commission leases from time to time capacity not used by the Contracting Municipalities to various municipal users of the System, and has also entered into contracts with various contracting agencies for the use of capacity of the System. The contracts and leases with the Contracting Municipalities, lessees and contracting agencies (collectively, the "Users") provide that the Commission will, in January of each year, make an annual estimate of the costs and expenses for the maintenance, repair and operation of the System during such year and apportion those estimated costs and expenses among the Users on the basis of the relative amount of sewerage discharged into the System by each User during the preceding year. The Act further provides that each User will pay to the Commission its allocated share of such estimated costs and expenses apportioned to it in quarterly installments on February 1, May 1, August 1 and November 1 of each year. In addition to paying its allocated share of the annual estimated costs and expenses of the System, each User which uses more than its allotted share of capacity is required to pay stated sums as rentals for the use of such excess capacity. These rentals are collected by the Commission but, as provided in the Act and the Resolution, belong to and are credited to the Contracting Municipalities which use less than their allotted capacity. Such rentals are, to the extent set forth in the Resolution, not part of the System Revenues or other moneys pledged under the Resolution to secure and provide for the payment of the principal or redemption price of and interest on the Bonds.

The Bonds constitute Additional Bonds under the Resolution. Under the terms of the Resolution, the Commission may hereafter authorize and issue Additional Bonds under the Resolution for the purposes and on the terms and conditions set forth in the Resolution. Any such additional Bonds, when issued, will be entitled, equally and ratably with the Bonds and all other Bonds heretofore or hereafter issued and Outstanding under the Resolution, to the benefit, protection and security of the provisions, covenants and agreements of the Resolution, including the pledge of the System Revenues established by the Resolution, except as otherwise set forth in the Resolution.

In rendering the opinions set forth below, we have examined such matters of law and documents, certificates, record and other instruments as we deemed necessary or appropriate to enable us to express the opinions set forth below, including; without limitation, the Act, original counterparts or certified copies of the Resolution and the other documents, certifications, instruments, opinions and records filed with the Trustee in connection with the issuance of the Bonds. We have assumed and relied upon the genuineness of all signatures, the authenticity of

all documents submitted to us as originals and the conformity to the original documents of all documents submitted to us as copies. As to any facts material to our opinions we have, when such facts were not independently established, relied upon the truthfulness, completeness and accuracy of the aforesaid instruments, certificates, opinions, records and other documents without any independent investigation thereof.

Based on the foregoing and subject to the limitations, qualifications and exceptions set forth below, we are of the opinion that:

1. The Commission has been duly created and is validly existing as a public body corporate and politic under the provisions of the Act, with power, among other things, to adopt the Resolution, issue the Bonds and maintain and operate the System.

2. The Commission has the right and power to adopt the Resolution and the Resolution has been duly and lawfully adopted by the Commission, is in full force and effect, is valid and binding upon the Commission and is enforceable in accordance with its terms, and no other authorization for the Resolution is required.

3. The Bonds have been duly authorized and issued by the Commission in accordance with the Act and the provisions of the Resolution, are valid and binding general obligations of the Commission enforceable in accordance with their terms and the terms of the Resolution, and are entitled to the benefit, protection and security of the Resolution and the Act.

4. The Resolution creates the valid pledge that it purports to create of the System Revenues to secure the payment of the principal or redemption price of and interest on all Bonds, including the Bonds Outstanding under the Resolution, subject only to the provisions of the Resolution permitting the application of the System Revenues for the purposes and on the terms and conditions set forth in the Resolution.

5. The Bonds constitute Additional Bonds under the Resolution, and are equally and ratably entitled to the benefits, protection and security of the Resolution along with all other Bonds heretofore issued and Outstanding under the Resolution.

6. The Commission has good right and lawful authority to maintain and operate the System and to collect from the Users of the System the costs and expenses of the maintenance, repair and operation of the System, including the principal of and interest on the Bonds becoming due prior to the end of each year, and any other sums which the Commission may determine or the provisions of the Resolution may require, be set aside during any year as a reserve to secure the payment of the principal or redemption price of and interest on the Bonds.

7. Each User of the System is required by law and has the power to pay, in each year, to the Commission its allocable share, determined as provided in the Act, of the costs and expenses of the maintenance, repair and operation of the System, including the principal or redemption price of and interest on the Bonds becoming due prior to the end of each year. Pursuant the Act, the obligation of each Contracting Municipality and other municipal User of the System to pay, in each year, to the Commission its allocable share of the Commission's Operating

Expenses allocable to the payment of the principal or redemption price of and interest on the Bonds is a valid, binding, direct and general obligation of such Contracting Municipality or other municipal User of the System and unless payable from other sources, is payable from the levy of *ad valorem* taxes, unlimited as to rate and amount, upon all of the taxable property located within such Contracting Municipality or other municipal User of the System in an amount sufficient to pay its allocable share of the principal or redemption price of and interest on the Bonds.

The Internal Revenue Code of 1986, as amended (the "Code") establishes certain requirements which must be met at the time of, and on a continuing basis subsequent to, the issuance and delivery of the Bonds in order for interest on the Bonds to be and remain excluded from gross income for Federal income tax purposes under the Code. Noncompliance with such requirements could cause interest on the Bonds to be included in gross income for Federal income tax purposes retroactive to the date of issuance and delivery of the Bonds. The Commission has covenanted to comply with any continuing requirements that may be necessary to preserve the exclusion from gross income for purposes of federal income taxation of interest on the Bonds under the Code.

8. Under existing statutes, regulations, rulings and court decisions and assuming continuing compliance by the Commission with the requirements of the Code described in the preceding paragraph, interest on the Bonds is not includable in gross income for Federal income tax purposes and is not treated as a tax preference item under Section 57 of the Code for purposes of computing the Federal alternative minimum tax for individuals and corporations; *provided, however*, that such interest is included in the adjusted current earnings of a corporation for purposes of the Federal alternative minimum tax imposed on corporations.

9. Under current law, the interest on the Bonds and any **gain on** the sale of the Bonds are not includable in gross income under the New Jersey Gross Income Tax Act.

Except as stated above in Paragraphs 8 and 9, we express no opinion as to any Federal, state or local tax consequences of the ownership or disposition of the Bonds.

We express no opinion as to the effect, if any, on the tax status of interest paid or to be paid on the Bonds as a result of any action hereafter taken or not taken in reliance upon an opinion of other counsel.

The foregoing opinions in Paragraphs 2 and 3 above are qualified to the extent that the enforceability of the Resolution and the Bonds may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws now or hereafter enacted by any state or by the Federal government affecting the enforcement of creditors' rights generally and general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or at law) and the valid exercise of the sovereign police powers of the State of New Jersey and the constitutional power of the United States of America.

Attention is called to the fact that we have not been requested to examine and have not examined any documents or information relating to the Commission other than the certified copies of the proceedings and proofs referred to hereinabove, and no opinion is expressed as to

any financial or other information, or the adequacy thereof, that has been or may be supplied to any purchaser of the Bonds. We express no opinion herein as to the accuracy, adequacy or sufficiency of the Official Statement of the Commission pertaining to the offering of the Bonds.

The above opinions expressed herein are limited to and based upon the laws and judicial decisions of the State of New Jersey and the Federal laws and judicial decisions of the United States of America as of the date hereof, and are subject to any amendment, repeal or other modification of the applicable laws or judicial decisions that served as the basis for our opinions or to any laws or judicial decisions hereafter enacted or rendered.

Our engagement by the Commission with respect to the opinions expressed herein does not require, and shall not be construed to constitute, a continuing obligation on our part to notify or otherwise inform the addressee hereof of the amendment, repeal or other modification of the applicable laws or judicial decisions that served as the basis for this opinion letter or of any laws or judicial decisions hereafter enacted or rendered that impact on this opinion letter.

Very truly yours,

DECOTIIS, FITZPATRICK, COLE & GIBLIN, LLP

APPENDIX H
REFUNDED BONDS

Appendix H

REFUNDED BONDS

**PASSAIC VALLEY SEWERAGE COMMISSION
(State of New Jersey)**

SEWER SYSTEM BONDS, SERIES F

\$37,060,000 TERM BONDS due December 1, 2032 CUSIP: 702826JF6

Date	Sinking Fund Payments	Principal Amount to be Refunded	Interest Rate	Redemption Date	Redemption Price
12/1/26	4,910,000	4,910,000	2.500%	8/26/20	100
12/1/27	5,035,000	5,035,000	2.500%	8/26/20	100
12/1/28	5,160,000	5,160,000	2.500%	8/26/20	100
12/1/29	5,290,000	5,290,000	2.500%	8/26/20	100
12/1/30	5,420,000	5,420,000	2.500%	8/26/20	100
12/1/31	5,555,000	5,555,000	2.500%	8/26/20	100
12/1/32	5,690,000	5,690,000	2.500%	8/26/20	100