

**APPLICATION OF
THE PROVIDENCE WATER SUPPLY BOARD FOR
AUTHORITY TO BORROW FROM THE DRINKING WATER
STATE REVOLVING FUND IN AN AMOUNT OF
\$14,700,000**

January 2019

D-19-_____



January 10, 2019

Luly Massaro,
Clerk of the Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

The Hon. Jorge O. Elorza
Mayor

Ricky Caruolo
General Manager

RE: Application of Providence Water for Authority to Borrow up to
\$14,700,000 from the RIIB Docket No. D-19-_____

BOARD OF DIRECTORS

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Member

Carissa R. Richard
Secretary

William E. O'Gara, Esq.
Legal Advisor

Dear Ms. Massaro:

Enclosed for filing are an original and four copies of Providence Water's request for authority to borrow up to \$14,700,000 from the RI Infrastructure Bank.

Providence Water respectfully requests an expedited review of the enclosed application. If you have any questions, contact me at 521-6300 ext.7238, or our Attorney Michael McElroy, Esq., at 351-4100.

Providence Water Supply Board


Nancy E. Parrillo
Senior Manager of Finance

MEMBER

Rhode Island Water Works Assn.
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125 Dupont Drive
Providence, RI 02907

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cc: R. Caruolo
G. Giasson
P. Pallozzi
M. Deignan-White
A. Krea
K. Grande, Esq.
M. McElroy, Esq.
C. Hetherington, Esq.
File

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PROVIDENCE WATER SUPPLY BOARD

Application for Authority to Borrow from the Rhode Island Infrastructure Bank in an amount
of \$14,700,000

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STATE OF RHODE ISLAND
DIVISION OF PUBLIC UTILITIES AND CARRIERS

IN RE: PROVIDENCE WATER SUPPLY BOARD

DOCKET NO. D-19-__

R.I.G.L. § 39-3-15
APPLICATION OF THE PROVIDENCE WATER SUPPLY BOARD
FOR AUTHORITY TO BORROW FROM
THE RHODE ISLAND INFRASTRUCTURE BANK

In the above-entitled cause, the Providence Water Supply Board represents that:

1. Providence Water was created in 1940 by Chapter 832 of the Public Laws of the State of Rhode Island.
2. Providence Water seeks to borrow from the Drinking Water State Revolving Fund \$14,700,000.00 primarily for the rehabilitation of water mains and appurtenances at an interest rate not to exceed 5.5%.
3. The borrowing will be provided by the RI Infrastructure Bank, pursuant to a resolution of the Providence Water Supply Board dated August 15, 2018.
6. The loan will be secured by the Providence Water Enterprise Fund Revenues under the Providence Water Supply Board Bond Indenture.
7. The borrowing may reimburse Providence Water for project costs incurred from inception of the project until actual funding date.
8. In accordance with Section 14 of the Rules of Practice and Procedure of the Division of Public Utilities and Carriers, written testimony and supporting exhibits are attached hereto, including the written testimony of Gregg Giasson P.E, Nancy Parrillo, and Maureen Gurghigian of Hilltop Securities.
9. In accordance with Section 14 of the Rules of Practice and Procedure of the Division of Public Utilities and Carriers, a copy of this application has been filed with the Attorney General.

WHEREFORE, the Providence Water Supply Board respectfully requests that the Division of Public Utilities and Carriers authorize and consent to Providence Water borrowing up to \$14,700,000.00 from the Drinking Water State Revolving Fund.

PROVIDENCE WATER SUPPLY BOARD

BY: 
Ricky Caruolo
GENERAL MANAGER

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

Subscribed and sworn before me this 8th day of January, 2018.

Notary Public 
757383
My Commission Expires: 12/11/22

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DIVISION OF PUBLIC UTILITIES AND CARRIERS

IN RE: PROVIDENCE WATER SUPPLY BOARD : Docket No. D-19-_____
APPLICATION FOR BORROWING AUTHORITY

NOTICE OF FILING AND PUBLIC HEARING

Pursuant to the provisions of the R.I.G.L. §39-3-15 and §39-3-17, the Division of Public Utilities and Carriers (the "Division") will conduct a public hearing on _____ at _____ in a hearing room of the Division of Public Utilities and Carriers, located at 89 Jefferson Boulevard, Warwick, Rhode Island. The hearing may continue thereafter from day to day and time to time as required.

At this hearing, the Division will consider the propriety of an application filed by the Providence Water Supply Board seeking consent and approval to obtain financing in the amount of \$14,700,000 million through revenue bonds to be sold by RI Infrastructure Bank for the Rhode Island Safe Drinking Water State Revolving Fund. The proceeds from the sale of the bonds will be used to clean, line, and/or replace water mains located throughout the Providence Water distribution system.

The application is on file and may be examined at the office of the Division and at the office of the Providence Water Supply Board, 125 Dupont Drive, Providence, Rhode Island.

Reference is also made to Chapters 39-1, 39-3 and 42-35 of the Rhode Island General Laws; specifically Sections 39-1-7, 39-1-8, 39-1-11, 39-1-12, 39-1-16, 39-1-18, 39-1-20, 39-3-15, 39-3-17, 42-35-8, and 42-35-10. The Division of Public Utilities and Carriers is accessible to the handicapped. Individuals requesting interpreter services for the hearing impaired must notify the Clerk's office at 780-2107 seventy-two hours in advance of hearing date.

Macky McCleary, Administrator

_____, 2019

Certificate of Service

I hereby certify that a true copy of the Application of the Providence Water Supply Board for Authority to borrow from the RI Infrastructure Bank in an amount of \$14,700,000, with all supporting documentation, was mailed by first class mail, postage prepaid, to the Attorney General, State of Rhode Island, 150 South Main Street, Providence, RI 02903, Attention: Christy Hetherington, Esq., Chief of the Regulatory Unit, on January 11, 2019.



Mary L. Deignan-White
Senior Manager of Regulatory
125 Dupont Drive
Providence, RI 02907
401-521-6300 Ext.7217
MaryDW@Provwater.com

STATE OF RHODE ISLAND
DIVISION OF PUBLIC UTILITIES AND
CARRIERS

IN RE: PROVIDENCE WATER SUPPLY BOARD DOCKET NO. D-19-_____

STATEMENT IN ACCORDANCE WITH R.I.G.L. § 39-3-17

Xaykham Khamsyvoravong, Chairman, and Carissa R. Richard, Secretary,
Providence Water Supply Board, after being duly sworn, hereby make the following
statement in accordance with R.I.G.L. § 39-3-17:

1. Providence Water Supply Board has filed with the Rhode Island Division of Public Utilities and Carriers an Application to Borrow from the Rhode Island Infrastructure Bank in the amount of Fourteen Million, Seven Hundred Thousand dollars (\$14,700,000).
2. The debt will be incurred primarily for the purpose of the rehabilitation of water mains and appurtenances within the system.
2. The total estimated project costs including cost of issuance, loan origination, etc., that will be borrowed are not to exceed Fourteen Million, Seven Hundred Thousand dollars (\$14,700,000).
3. Attached hereto is the latest Audited Financial Statement of the Providence Water Supply Board, showing the assets and liabilities of the utility.



Xaykham Khamsyvoravong, Chairman



Carissa R. Richard, Secretary

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

Subscribed and sworn before me this 8th day of January, 2019.



Notary Public #757383
My Commission Expires: 12/11/22

Testimony

of

NANCY E. PARRILLO

before the

RI DIVISION OF PUBLIC UTILITY AND CARRIERS

IN SUPPORT OF APPLICATION FOR AUTHORIZATION TO BORROW
FROM THE RHODE ISLAND INFRASTRUCTURE BANK IN AN AMOUNT
UP TO \$14,700,000

for

PROVIDENCE WATER SUPPLY BOARD

December, 2018

Docket No. D-19- _____

1 Providence Water Supply Board

2 Testimony of

3 Nancy E. Parrillo

4

5 **Q. Please state your full name and title.**

6 A. Nancy E. Parrillo, Senior Manager for the Providence Water Supply Board (Providence
7 Water).

8 **Q. How long have you been employed at Providence Water?**

9 A. I have been employed at Providence Water since April 2015.

10 **Q. Please describe your education and work experience.**

11 A. I graduated from Wheaton College with a Bachelor of Arts Degree with a major in
12 Economics, and from Bryant University with a Masters of Business Administration
13 Degree, majoring in Finance. I was previously employed as the Chief Financial Officer of
14 the Rhode Island Turnpike and Bridge Authority. Prior to that, I was employed by Tatum
15 LLC, a financial services consultant for four and one half (4 ½) years. I also served as
16 Chief Financial Officer of the Massachusetts Water Pollution Abatement Trust, the
17 Massachusetts State Revolving Fund, from 1999 to 2005, and I served as Chief Financial
18 Officer for the South Essex Sewerage District from 1994 to 1999.

19 **Q. What is the purpose of your testimony?**

20 A. To provide information in support of Providence Water's application to borrow up to \$14.7
21 million from the Rhode Island Infrastructure Bank (RIIB). The funds will be used to
22 continue Providence Water's work on improvements to our distribution system and
23 appurtenances, focusing on rehabilitation of water mains, transmission lines, service lines

1 and valves, and related expenses throughout the Providence Water system in accordance
2 with our agreement with the RI Department of Health (RIDOH).

3 **Q. Is this amount sufficient to cover the construction costs?**

4 A. This amount of \$14.7 million is estimated to be sufficient to cover the construction costs
5 for this portion of the project as well as the cost of issuance, origination fee to the RIIB,
6 and required debt service reserve fund. Based on the estimated proforma debt service
7 schedules that were calculated based on current market factors (see **Exhibit IV**), we are
8 estimating a total principal amount of \$14.7 million. However, this amount is subject to
9 change at the time the bonds are sold and we need to be sure we net the appropriate
10 construction fund amount, so we are seeking authority to borrow up to \$14.7 million.

11 **Q. What is the source of funds for payment of the debt service?**

12 A. In order to pay the debt service, Providence Water will use rate revenue to pay the debt
13 service. Because of the structure of the repayment schedules by the RIIB, Providence
14 Water does not need to ask for a rate increase to cover the initial repayments as the transfer
15 of rate revenue to the Restricted Infrastructure Replacement Fund is sufficient until such
16 time as Providence Water files its next rate filing with the PUC.

17 **Q. What will be the impact to ratepayers from this borrowing?**

18 A. The increase will not impact customers at this time. Any impact to the customer base will
19 be in conjunction with our next rate filing.

20 **Q. Have you addressed the requirements of RIGL 39-3-17 regarding the approval of the
21 financing by the Providence Water Board and the City of Providence?**

22 A. Yes, attached as **Exhibit I** is a Certificate of the Secretary of the Providence Water Supply
23 Board stating that at the August 15, 2018 Board Meeting, the Board authorized the General

1 Manager to seek approval of the Providence City Council for financing from the RI
2 Infrastructure Bank for an amount not to exceed \$14.7 million. Also, attached as **Exhibit**
3 **II**, is an ordinance approved by the City on November 1, 2018 that authorizes the
4 borrowing from the RI Infrastructure Bank for an amount not to exceed \$14.7 million.

5 **Q. Have you presented a proforma capital structure showing the effect of the bond**
6 **issuance as required by Section 14 of the Rules of Practice and Procedure of the**
7 **Division?**

8 Yes, a present and proforma capital structure showing the effects of the bond issue is shown
9 at **Exhibit III**. Our projected debt to net property, plant and equipment (“debt to plant”)
10 with this issue would be 33.47% (This percentage will change with asset values capitalized
11 at year end). Our financial advisor has indicated that rating agencies consider a ratio of
12 debt to plant less than 40% to be low and of 40% to 60% to be moderate.

13 **Q. How will the proceeds of the bond be utilized?**

14 A. As shown on **MG-1** of Maureen Gurghigian’s testimony, the estimated \$14.7 million of
15 available bond proceeds will be applied to:

16 ~ \$1,470,000 will be deposited with the trustee for a debt reserve fund; this represents one
17 year’s debt service cost.

18 ~ A 1% loan origination fee of \$147,000 will be paid to RI Infrastructure Bank.

19 ~ An estimated \$272,000 will be paid for costs of issuance incurred by Providence Water;
20 this includes legal, rating and financial consulting fees.

21 ~The remaining funds totaling approximately \$12.9 million will be available for funding
22 the work to be performed.

1 These numbers are subject to change on the date of the sale, but these are close estimates
2 assuming the market is approximately the same as it is today.

3 The issuance of the bonds by RI Infrastructure Bank is anticipated in early spring of 2019.

4 **Q. What are the terms of the financing?**

5 A. The bonds will be issued under the Trust Indenture dated March 5, 2008. There will be a
6 Supplemental Indenture issued which relates to these bonds. In this filing, Maureen
7 Gurchigian, our financial consultant with HilltopSecurities, a division of HilltopSecurities,
8 Inc. provides testimony and additional information on the bond issuance and debt service
9 requirements. The general terms of the borrowing are:

10 ~ An estimated \$14.7 million, 20-year term borrowing through the RI Infrastructure Bank.

11 ~ Bonds will be funded through the Safe Drinking Water State Revolving Fund (SDWSRF)

12 and will have an interest rate subsidy of 25%.

13 ~ The interest rate of the loan will be based on Providence Water's AA- rating, less a 25%

14 discount. An annual administrative fee of .5% of the outstanding loan balance will

15 be paid to RI Infrastructure Bank. The estimated effective interest rate is

16 approximately 3.211% (**see Exhibit IV**). The projected interest rate does not

17 include the .5% annual administrative fee of RI Infrastructure Bank.

18 **Q. What is the security for the bonds?**

19 A. The bonds will be secured with a revenue pledge by the Providence Water Enterprise Fund

20 Revenues under the Providence Water Bond Indenture.

21 **Q. Has Providence Water received a commitment letter from the RI Infrastructure**
22 **Bank?**

23 A. Yes it has. See **Exhibit V**.

1 Q. **Has Providence Water received a Certificate of Approval from the RI Department of**
2 **Health?**

3 A. Yes. The Certificate of Approval was received from the RI Department of Health on April
4 25, 2008. It is attached as **Exhibit VI**.

5 Q. **Is Providence Water seeking expedited consideration of this matter?**

6 A. Yes. The current date of issuance of the bonds by the RIIB is late March of 2019, therefore,
7 Providence Water is asking for approval from the Division no later than February 20, 2019
8 so that we will be included in that bond issue.

9 Q. **Does this conclude your testimony?**

10 A. Yes.

11

12

13

14

15



*RESOLUTION
OF THE
PROVIDENCE WATER SUPPLY BOARD*

The Hon. Jorge O. Elorza
Mayor
Ricky Caruolo
General Manager

A Resolution of the City of Providence Water Supply Board expressing the intention of the Board to reimburse expenditures from the proceeds of the Notes, Bonds, or Loans for certain Infrastructure Improvements and to provide an effective date.

BOARD OF DIRECTORS

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Michael J. Correia
Councilperson

Lawrence J. Mancini
Ex-Officio

Cristen L. Raucci, Esq.
Member

Kerri Lynn Thurber
Member

Carissa R. Richard
Secretary

William E. O'Gara, Esq.
Legal Advisor

WHEREAS, the City of Providence Water Supply Board (Board) is an agency of the City of Providence, Rhode Island and owns and operates a Water Supply system (System); and

WHEREAS, the Board desires to make certain improvements to the Board's distribution system and appurtenances thereto, including but not limited to the cleaning, relining, repair and replacement of water mains, transmission lines, service lines and valves (Project); and

WHEREAS, it is the intent of the Board to obtain financing from the RI Infrastructure Bank in an amount not to exceed fourteen million, seven hundred twenty seven thousand, nine hundred five dollars (\$14,727,905.00) for the Project.

NOW, THEREFORE, BE IT RESOLVED:

❖ That the Board authorizes the General Manager to seek a bond ordinance from the Providence City Council authorizing borrowing and/or any other funding avenues for the Project.

❖ This resolution shall take effect upon passage.

The above and foregoing was duly adopted and approved at a meeting of the City of Providence Water Supply Board as held on August 15, 2018 by vote of the members of the Providence Water Supply Board present.

MEMBER

Rhode Island Water Works Assn.
New England Water Works Assn.
American Water Works Assn.
Water Research Foundation

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Providence, RI 02907

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Xaykham Khamsyvoravong, Chairman
Providence Water Supply Board



Carissa R. Richard, Secretary
Providence Water Supply Board

City of Providence
STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

CHAPTER 2018-77

No. 554 **AN ORDINANCE OF THE CITY OF PROVIDENCE APPROVING IMPROVEMENTS TO THE PROVIDENCE WATER SUPPLY BOARD'S DISTRIBUTION SYSTEM AND APPURTENANCES THERETO, INCLUDING, BUT NOT LIMITED TO THE CLEANING, RELINING, REPAIR AND REPLACEMENT OF WATER MAINS, TRANSMISSION LINES, SERVICE LINES AND VALVES, AND ALL ATTENDANT EXPENSES AND APPROVING THE FINANCING THEREOF BY THE ISSUANCE OF WATER REVENUE BONDS AND NOTES THEREFOR IN AN AMOUNT NOT TO EXCEED \$14,700,000.00**

Approved November 20, 2018

Be it ordained by the City of Providence:

SECTION 1. The sum of Fourteen Million Seven Hundred Thousand Dollars (\$14,700,00) is appropriated for improvements to the Providence Water Supply Board ("Providence Water") distribution system and appurtenances thereto, including but not limited to cleaning, relining, repair and replacement of water mains, transmission lines, service lines and valves (the "Project"), including funding a debt service reserve fund and costs of issuance. The period of usefulness of the improvements financed as part of the Project is expected to be not less than forty (40) years.

SECTION 2. In accordance with Chapter 46-12.8 of the Rhode Island General Laws, the City Treasurer and the Mayor are hereby authorized to borrow an amount not exceeding Fourteen Million Seven Hundred Thousand, Dollars (\$14,700,000) from the Rhode Island Infrastructure Bank, and to evidence such loan, such officers are hereby authorized to issue and refund on behalf of the City, in an amount not exceeding Fourteen Million Seven Hundred Thousand Dollars (\$14,700,00) water revenue bonds (the "Bonds") of the City, at one time, or from time to time in order to meet the foregoing appropriation.

SECTION 3. The said officers from time to time may issue and refund not exceeding \$14,700,000 interest bearing or discounted water revenue notes (the "Notes") in anticipation of the issue of said Bonds.

SECTION 4. The Bonds and Notes shall be payable solely from revenues of the Providence water supply system. The City may issue bonds, notes, or other obligations on a parity with these Bonds. The manner of sale, amount, denominations, maturities, conversion or registration privileges, interest rates, medium of payment, and other terms, conditions and details of the Bonds or Notes may be fixed by the officers authorized to sign the Bonds or Notes. The net debt of the City is not affected by the issuance of the Bonds or Notes and the Bonds and Notes authorized hereby will be within all debt and other limitations prescribed by the Constitution and the laws of Rhode Island.

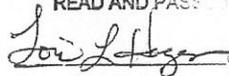
SECTION 5. Pending the issuance of the Bonds under Section 2 hereof or pending or in lieu of the issue of Notes under Section 3 hereof, the General Manager of Providence Water may expend funds from the Water Fund of the City for the purposes specified in Section 1 hereof. Any advances made under this section shall be repaid without interest from the proceeds of the Bonds or Notes issued hereunder or from the proceeds of applicable federal or state assistance or from other available funds.

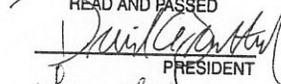
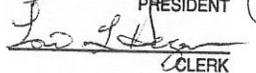
SECTION 6. The City Treasurer, the Mayor and the General Manager of Providence Water are also authorized, empowered and directed, on behalf of the City, to: (i) execute, acknowledge and deliver a Supplemental Indenture (the "Supplemental Indenture") by and between the City and U. S. Bank, National Association, as trustee (the "Trustee") amending and supplementing the Trust Indenture dated June 5, 2008 by and between the City and the Trustee (as supplemented, the "Indenture") relating to the Bonds and any and all other loan agreements, documents, including disclosure documents for investors, certificates or instruments necessary to effectuate such borrowing; (ii) amend, modify or supplement the Indenture, the Bonds or Notes and any and all other loan agreements, documents, certificates or instruments at any time and from time to time, in such manner and for such purposes as such officers shall deem necessary, desirable or advisable; (iii) direct the Trustee with regard to investments of trust funds pursuant to the Trust Indenture, and (iv) do and perform all such other acts and things deemed by such officers to be necessary, desirable or advisable with respect to any matters contemplated by this Ordinance.

SECTION 7. The City Treasurer, the Mayor and the General Manager of Providence Water are hereby authorized to deliver the Bonds or Notes to the purchaser and said officers are hereby authorized and instructed to take all actions, on behalf of the City and Providence Water, necessary to ensure that interest on the Bonds or Notes will be excludable from gross income for federal income tax purposes and to refrain from all actions which would cause interest on the Bonds or Notes to become subject to federal income taxes.

SECTION 8. The Director of Finance, the Mayor and the General Manager of Providence Water are authorized to take all actions necessary to comply with federal tax and securities laws including Rule 15c2-12 of the Securities and Exchange Commission (the "SEC Rule") and to execute and deliver one or more Disclosure Certificates in connection with the Bonds or Notes in the form as shall be deemed advisable by the Director of Finance, the Mayor and the General Manager of Providence Water in order to comply with the SEC Rule. The City hereby covenants and agrees that it will comply with and carry out all of the provisions of the Disclosure Certificates, as they may be amended from time to time. Notwithstanding any other provision of this Ordinance or the Bonds or Notes, failure of the City or Providence Water to comply with a Disclosure Certificates shall not be considered an event of default; however, any Bondholder or Noteholder may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the City or Providence Water to comply with its obligations under this Section and under the Disclosure Certificate.

SECTION 9. This Ordinance shall take effect upon passage.

IN CITY COUNCIL
 NOV 01 2018
 FIRST READING
 READ AND PASSED
 CLERK

IN CITY COUNCIL
 NOV 15 2018
 FINAL READING
 READ AND PASSED
 PRESIDENT
 CLERK

I HEREBY APPROVE.

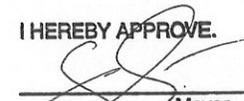

 _____ Mayor
 Date: 11/20/18


EXHIBIT III

PROVIDENCE WATER
CAPITALIZATION
6/30/2018

		<u>Due</u>	<u>Interest Rate</u>	<u>Actual Outstanding (1)</u>	<u>Pro-Forma Amount</u>
Long Term Debt:					
Clean Water Revenue Bonds 2002	(2)	9/1/2021	3.61%	\$ 637,249	\$ 637,249
Clean Water Revenue Bonds 2008A	(3)	9/1/2029	2.85%	23,613,000	23,613,000
ARRA Stimulus Bonds 2009	(4)	10/2/2015-9/1/30	.041 - 3.14%	7,100,250	7,100,250
Clean Water Watershed Bonds 2012	(5)	9/1/2032	.012 - 3.24%	2,361,000	2,361,000
Clean Water Watershed Bonds 2013	(6)	9/1/2033	.019 - 2.53%	3,480,000	3,480,000
Clean Water Revenue Bonds 2013	(7)	9/1/2034	.022 - 2.63%	21,855,000	21,855,000
Clean Water Revenue Bonds 2014	(8)	9/1/2034	.022 - 3.01%	6,997,000	6,997,000
Clean Water Revenue Bonds 2015	(10)	9/1/2035	.024 - 2.74%	28,693,000	28,693,000
Clean Water Revenue Bonds 2017	(11)	9/1/2036	.012 - 2.64%	16,271,095	16,271,095
Clean Water Revenue Bonds 2019	(11)	9/1/1938	2.28 - 3.38%	14,700,000	14,700,000
Clean Water Revenue Bonds 2008 (ESWD)	(12)	9/1/2028	3.00%	120,000	120,000
Clean Water Revenue Bonds 2009A (ESWD)	(12)	9/1/2024	3.15%	166,666	166,666
Clean Water Revenue Bonds 2013A (ESWD)	(12)	9/1/2033	.012 - 2.64%	476,349	476,349
Clean Water Revenue Bonds 2019	(13)	9/1/1938	2.28 - 3.38%	-	14,700,000
Total Bonds				\$ 126,470,609	\$ 141,170,609
Total Capitalization				\$ 126,470,609	\$ 141,170,609
Total Assets (Unaudited)	(9)			\$ 482,182,966	\$ 496,882,966
Debt/Total Assets				26.23%	28.41%
Net Utility Plant	(9)			\$ 407,026,016	\$ 421,726,016
Debt/Net Utility Plant				31.07%	33.47%

- (1) Includes long term and current amounts.
- (2) Borrowing 12/04/01 (WCWDS Improvements) from WCWDS Funds.
- (3) Borrowing 05/19/08 CWFA08a for Various IFR Projects from IFR Funds.
- (4) Borrowing 9/09 CWFA09 for Various Projects from ARRA Stimulus Funds.
- (5) Borrowing 6/12 CWFA for Watershed Acquisition paid from WQPF.
- (6) Borrowing 6/12 CWFA for Watershed Acquisition paid from WQPF.
- (7) Borrowing 05/06/13 CWFA13 for Main Replacements & Appurtenances.
- (8) Borrowing 12/04/14 CWFA14 for Main Replacements & Appurtenances.
- (9) From Unaudited Balance Sheet Amounts as of 6/30/18
- (10) Borrowing 12/02/2015 RIIB for Central Operations Facility.
- (11) Borrowing 5/10/2017 RIIB for Water Main Rehabilitation / Replacement Project.
- (12) Borrowing by the East Smithfield Water District (ESWD) assumed by Providence Water when ESWD merged with Providence Water Jan. 13, 2017.
- (13) Borrowing scheduled for spring 2019 for Main Replacements & Appurtenances.

Exhibit IV

PROVIDENCE WATER	
Comparison of Interest Rates	
	Interest Rate
Market Rate (AIC)	4.696%
Total Interest Payments	\$ 6,901,187
Subsized Rate (AIC)	3.211%
Total Interest Payments	\$ 4,835,320
Savings:	
Interest Rate	1.485%
Interest Payments	\$ 2,065,867
Interest Rate Savings/Market Rate	31.623%

Prepared by HilltopSecurities



235 Promenade Street, Suite 119
 Providence, Rhode Island 02908
 riib.org

December 3, 2018

Mr. Ricky Caruolo
 General Manager
 Providence Water Supply Board
 125 Dupont Drive
 Providence, RI 02907

RE: Providence Water Supply Board – up to \$14,700,000 Drinking Water State Revolving Fund Loan for drinking water infrastructure improvement projects

Dear Mr. Caruolo,

I am pleased to inform you that the Board of Directors of Rhode Island Infrastructure Bank (Bank), pursuant to policies and procedures adopted in accordance with the Safe Drinking Water Act Amendments of 1996 and Chapter 46-12.8 of the Rhode Island General Laws, has approved the October 15, 2018 application of the Providence Water Supply Board (the Borrower) at the Bank's November 19, 2018 Board Meeting. The Bank shall provide financial aid in the form of a loan on the terms stated below, in an amount not to exceed \$14,700,000 for a term not to exceed 20 years after project completion.

This approval is subject to the Borrower meeting the following terms, that:

- 1) all projects to be funded appear on the Department of Health's (DOH) Project Priority List (PPL) and have Certificates of Approval (COA) issued;
- 2) the loan comply with all federal, state and Bank laws, rules and regulations;
- 3) the loan and debt service requirements be approved by any applicable regulatory Agency;
- 4) a revenue pledge satisfactory to the Bank be accepted;
- 5) a satisfactory loan agreement be signed by all parties to the transaction;
- 6) the loan will be made subject to availability of funds as related to the Bank's capacity; and, that the loan will be made subject to ranking on DOH's PPL.

TERMS AND CONDITIONS

1) Division of Public Utilities and Carriers

Prior to entering into a loan agreement, the Borrower must receive approval from the Division of Public Utilities and Carriers for entering into long-term financing with the Bank, if such approval is required by law, rule, or regulation.

2) Certificate of Approval

Prior to disbursement of funds by the Bank, the Bank must be in receipt of COA by the Rhode Island Department of Health (DOH) of the Borrower's proposed project(s), pursuant to Title 46-12.8 of the Rhode Island General Laws, and rules and regulations promulgated



thereunder.

3) Loan Agreement

There will be a loan agreement (the Agreement) with the Borrower outlining the specific terms and conditions of the Bank's loan program, as more generally set forth below and in the Agreement, including the loan (the Loan) to the Borrower. The Borrower's repayment obligation to the Bank under the Agreement will be evidenced by a Bond(s) of the Borrower outlining the Loan's specific terms and conditions (the Bonds). The Bonds shall be in fully marketable form, accompanied by documentation, in form and substance satisfactory to the Bank, and an opinion, in form and substance satisfactory to the Bank, of nationally recognized bond counsel satisfactory to the Bank as to its valid authorization, execution, delivery and enforceability, as well as its Federal and state tax consequences, including, as applicable, an opinion that the bonds are not private activity bonds within the meaning of Section 141 of the Internal Revenue Code of 1986, as amended (the Internal Revenue Code). The general provisions of the Agreement, which will be more fully set forth prior to the time of the pricing of the loan by the Bank will include (without limitation) the following provisions:

(a) Borrowing Rate

The stated interest rate on the Borrower Bond, which is the Borrower's market rate (the Market Rate), is the prevailing market tax-exempt interest rate for issuers of comparable creditworthiness to the Borrower, as determined by the Bank on the advice of the Financial Advisor after consultation with the Borrower. The subsidized interest rate for the Loan is 75% of the Market Rate (the Subsidized Interest Rate). The borrower will be obligated by the Borrower Bond to pay the Market Rate, but will be billed only for the Subsidized Interest Rate. If the Borrower or other borrowers of the Bank should default in timely payment of debt service on the Loan or on the loans to such other borrowers of the Bank, the Bank may require the Borrower to pay up to the Market Rate on the Borrower Bond.

Interest is to be calculated based on a 360-day year and twelve thirty-day months, and may be capitalized during construction. Interest payments are semi-annually on March 1 and September 1.

(b) Amortization

Amortization will begin at a mutually agreed upon date, but in no case later than September 1 after completion of the construction of the projects. Principal payments will be made annually on September 1 and the schedule of payments will be structured to meet the debt service and financial assistance needs of the Borrower.

(c) Final Maturity

Loans shall mature up to twenty years after the completion of the funded projects.

(d) Prepayments

A Loan may be prepaid by the Borrower at any time but may be subject to a prepayment penalty based on the cost of reinvesting the prepayment, the cost of prepaying outstanding bonds of the Bank or any other negative financial impact to the Bank.

(e) Security

The loan will have a pledge of (a) general revenues and/or water system user fee revenues; and (b) may be secured by any assets and upon such other terms and conditions the Bank and Borrower deem appropriate to protect the interest of the other participants in the loan programs of the Bank; bondholders; other creditors of the Bank; or the finances of the Bank.

4) Construction Progress Payments

Progress payments for each construction project will be made through the Construction Proceeds Fund (CPF). Loan proceeds will be transferred to the CPF for the benefit of the Borrower based upon approved Requisition Forms submitted to the Bank. Upon receipt of the Requisition Form, the Bank will verify: a) that a COA has been issued by DOH; b) that the vendor is identified in the contract; and c) that there is sufficient availability in the CPF to make the payment. Payments will be made directly to the vendor and/or the Borrower for reimbursements by the Bank, and a "paid" stamped copy of the Requisition Form will be sent to the Borrower and DOH. DOH will perform periodic project inspections to a) monitor construction progress; b) verify eligibility of construction costs under the program; and c) ensure that construction is in conformity with Plans and Specifications. DOH will perform periodic inspections to a) monitor construction progress; b) verify eligibility of construction costs under the program and c) ensure that construction is in conformity with Plans and Specifications. DOH will provide a copy of the inspection report to the Bank. Any adverse conditions will be reported to the Bank who will suspend further payments until the adverse conditions have been rectified. DOH will perform a final project inspection before the final payment is made by the Bank.

5) Reporting Requirements

The Borrower will be required to provide information to the Bank during the life of the Loan. These are:

- (a) a copy of the annual audited financial statements of the Borrower's water system in accordance with Generally Accepted Government Accounting Standards, annually within nine months of end of fiscal year.
- (b) unless included as a part of the annual budget furnished pursuant to item (c) or the audited financial statements furnished pursuant to item (a), an analysis of operating



revenues and expenses, including without limitation, a description of the status of all revenues securing the Revenue Bond and of any operating expenses in excess of budget, annually within nine months of the end of fiscal year.

- (c) a copy of the annual budget of the Borrower's water system, within fifteen days of its adoption.
- (d) unless included as a part of the annual budget furnished pursuant to item (c) or the audited financial statements furnished pursuant to item (a), a schedule of current and projected short-term and long-term debt service secured by water system revenues, annually with the aforesaid budget.
- (e) unless included as a part of the annual budget furnished pursuant to item (c) or the audited financial statements furnished pursuant to item (a), a schedule of capital replacement reserves, annually with the aforesaid budget.
- (f) copies of reports submitted to DOH, the federal Environmental Protection Agency (EPA) and any other regulatory agency relating to any project financed by the Bank or the operation thereof, simultaneously with such submission.
- (g) such other information or reports as and when the Bank may reasonably require.

6) Compliance with State and Federal Law

The Borrower must comply with all applicable state laws and regulations. Recipients of loans must also comply with all requirements of the Federal Safe Drinking Water Act, as amended and regulations issued thereunder, in addition to any other applicable Federal laws and regulations (see attached: Davis-Bacon prevailing wage requirements and EPA Guidance on Use of American Iron and Steel, as applicable).

In addition, the Borrower must agree to take all action, or refrain from taking any action, that would cause interest on any obligations of the Bank to be included, for federal income tax purposes, in the gross income of the holders of such obligations.

7) Fees

An origination fee of the greater of \$1,000 or one percent (1%) of the principal amount of the Loan will be payable to the Bank by the Borrower at the time of the Loan's closing. All other costs incidental to the Borrower's role in the transaction (i.e., legal fees, financial advisory fees, bond insurance premiums and the like, will be paid by the Borrower). The Bank will charge an annual service fee of one-half of one percent (0.5%) of the Loan's outstanding principal, payable semi-annually at each interest payment date. A late payment fee will be charged for every 15 days that a payment is late of five percent (5%) of the amount of the late payment.



8) Modifications

Where deemed appropriate by the Bank and the Borrower, waiver or variation of any provisions herein may be made or additional requirements may be added.

9) Merger

Once the Agreement, the Bond and all other closing documents, in form and substance satisfactory to the Bank, associated with the making of the Loan (collectively, the "Closing Documents") are executed, the terms of this letter shall be merged with those of the Closing Documents. The terms of the Closing Documents will govern the extension of the Loan to the Borrower. To the extent that any provisions contained in this letter are inconsistent with the definitive provisions contained in the Closing Documents, the terms of the Closing Documents shall control.

10) Beneficiaries

This letter shall constitute a binding commitment between the Bank and the Borrower but no third party shall have any rights arising hereunder and the Borrower shall indemnify and hold the Bank harmless from all claims arising from or in connection with this letter, the Loan or the project financed thereby. In any case, the Bank's liability under this letter shall be limited to the amount held in the Borrower's CPF from time to time.

Two copies of this letter are enclosed. Please sign both and return one original copy to this Bank at 235 Promenade Street, Suite 119, Providence, RI 02908 and keep one original for the City's records.

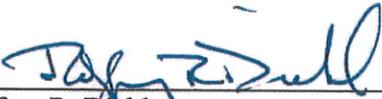


235 Promenade Street, Suite 119
Providence, Rhode Island 02908
riib.org

I would like to take this opportunity to thank you for your participation with the Bank. Please be assured that every effort will be made to get the lowest total cost for your long-term capital needs. If you have any questions, please do not hesitate to call me.

Very truly yours,

RHODE ISLAND INFRASTRUCTURE BANK

By: 
Jeffrey R. Djehl
Executive Director and CEO

Accepted this 5th day of December, 2018

By:  for Ricky Caruolo

Title: Deputy General Manager/Executive Engineer
Providence Water Supply Board

Name and Address of Legal Counsel and/or Bond Counsel to the Borrower

cc: Carlene Newman – RI DOH
Christopher Vitale, Esq., Bank Counsel

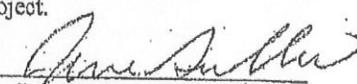


Department of Health
 Three Capitol Hill
 Providence, RI 02908-509;
 TTY: 711
 www.health.ri.gov

DWSRF CERTIFICATE OF APPROVAL

Providence Water has met the program requirements of the Drinking Water State Revolving Fund (DWSRF) for the proposed Replacement of Lead Services and Replace or Reline Water Mains project comprised of drawings and specifications prepared by Providence Water and is eligible to apply for an SRF loan from the Rhode Island Clean Water Finance Agency for various aspects of the project. The project consists of the replacement of approximately 19,000 service connections and relining or replacement of approximately 75,000 feet of water mains. The estimated project cost of up to \$100,000,000.00 includes either copper or polyethylene service connections, curb stops, curb boxes, fittings, valving, new piping, cement lining, fire hydrants and appurtenances. Providence Water has certified that it will comply with the requirements of applicable State and Federal laws in the application package. The following conditions detail certain specific requirements for this construction project:

1. Providence Water is responsible for obtaining any other necessary permits including a **RIPDES permit if the water used to flush and disinfect the piping system is discharged to a storm drain** or approvals from any Federal or State agency with authority over the project or project area.
2. All Construction related costs incurred prior to July 29, 2007 are ineligible for DWSRF Program Participation.
3. Short-term construction related impacts shall be mitigated by utilizing standard sedimentation and erosion control methods during construction.
4. All applicable architectural/engineering reports and plans are to be submitted upon their availability.
5. The project may occur over a nine (9) year period and that additional loans may be secured with time over the course of the project. Therefore a certified copy of a resolution of the governing body of the public water system directing the CEO to submit an application for DWSRF assistance shall be submitted to the Rhode Island Clean Water Finance Agency (copy to be submitted HEALTH) each time an additional loan is requested to finance the replacement of lead services and the relining or replacing water mains project.


 June Swallow, P.E., Chief
 Office of Drinking Water Quality

4/25/08
 DATE

Project Name: Replace Lead Services - Replace or Line Water Mains
 Project Number: DWSRF-08-15

cc: Rhode Island Clean Water Finance Agency
 Rhode Island WBE/MBE compliance office



Department of Health
Three Capitol Hill
Providence, RI 02908-5097
TTY: 711
www.health.ri.gov

Division of Drinking Water Quality
Drinking Water State Revolving Fund (DWSRF) Program

Categorical Exclusion

The Office of Drinking Water Quality has reviewed a proposed replacement lead services, and water main rehabilitation/ replacement project submitted by Providence Water and has concluded that the project qualifies for a CATEGORICAL EXCLUSION in accordance with the requirements of RIGL 46-12.8 and the "Rules and Regulations pertaining to the Drinking Water State Revolving Fund", dated March 1998. The proposed project will not impact the environment either by itself or in combination with other projects, and the information provided has met the statutory intent of the Federal Clean Water Act environmental review requirements and is sufficient to issue a CATEGORICAL EXCLUSION.

Project Name: Replace Lead Services, Replace or Reline Water Mains

DWSRF Program Number: DWSRF 08-15

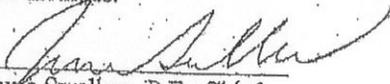
Project Location: Providence Water's service area within the cities of Providence, Cranston, Johnston, and North Providence, RI.

Project Description: By EPA Regulations Providence Water is consequently required to replace 7% of the total number of lead service lines annually up until the time all (25,600) the lead service lines are replaced or until such time in accordance with the Lead and Copper Rule they meet the "Lead Action Level", and are no longer required to replace lead services at the current rate and regulatory terms and conditions. In-kind water main replacement or water main relining is also part of Providence Water's Project.

Anticipated Environmental Impacts: Impacts will be minor and short term in duration (i.e. erosion, dust, noise, air quality, and traffic).

Specific Requirements: 1) A RIPDES permit be obtained if the water used to flush the new main is to be discharged to the storm drain system.

2) Short-term excavation related impacts shall be mitigated by utilizing standard sedimentation and erosion control methods. Fugitive dust related impacts shall be mitigated by using standard dust control methods.


Julie Swallow, P.E., Chief
Office of Drinking Water Quality

2/15/08
DATE



Department of Health
Three Capitol Hill
Providence, RI 02908-509;
TTY: 711
www.health.ri.gov

DWSRF CERTIFICATE OF APPROVAL

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5. The project may occur over a nine (9) year period and that additional loans may be secured with time over the course of the project. Therefore a certified copy of a resolution of the governing body of the public water system directing the CEO to submit an application for DWSRF assistance shall be submitted to the Rhode Island Clean Water Finance Agency (copy to be submitted HEALTH) each time an additional loan is requested to finance the replacement of lead services and the relining or replacing water mains project.


June Swallow, P.E., Chief
Office of Drinking Water Quality

4/25/08
DATE

Project Name: Replace Lead Services – Replace or Line Water Mains
Project Number: DWSRF-08-15

cc: Rhode Island Clean Water Finance Agency
Rhode Island WBE/MBE compliance office

STATE OF RHODE ISLAND DIVISION OF PUBLIC UTILITIES AND CARRIERS

DOCKET No. 19 - _____

ATTESTATION UNDER RULE 14
OF THE RULES OF PRACTICE AND PROCEDURE
OF THE DIVISION OF PUBLIC UTILITIES AND CARRIERS

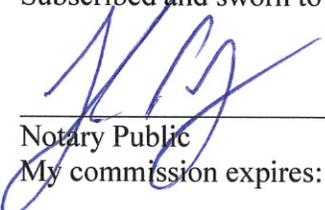
I, Nancy E. Parrillo, in conformance with Rule 14 of the Rules of Practice and Procedure of the Division of Public Utilities and Carriers, hereby attest under oath that the facts contained in my direct testimony with exhibits and supporting documents are true and correct to the best of my knowledge, information, and belief.



Nancy E. Parrillo

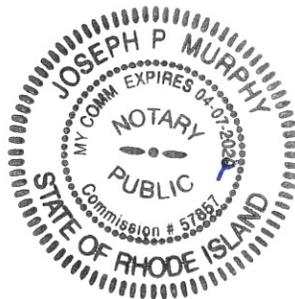
STATE OF RHODE ISLAND
PROVIDENCE COUNTY

Subscribed and sworn to me this 10th day of JANUARY, 2019.



Notary Public

My commission expires: 4-7-2022



Testimony

of

GREGG M. GIASSON, PE

before the

RI DIVISION OF PUBLIC UTILITIES AND CARRIERS

IN SUPPORT OF APPLICATION FOR AUTHORIZATION TO BORROW FROM THE
DRINKING WATER STATE REVOLVING FUND IN AN AMOUNT UP TO \$14,700,000

for

PROVIDENCE WATER

December 2018

1 **Q. Please state your name and your position.**

2 A. My name is Gregg M. Giasson and I am the Deputy General Manager of
3 Operations/Executive Engineer for the Providence Water Supply Board. I have general
4 oversight of the Engineering, Water Supply and Transmission & Distribution Departments.

5

6 **Q. Please describe your educational background and work experience.**

7 A. I obtained a Masters of Science in Environmental Engineering from Worcester Polytechnic
8 Institute in 2001 and a Bachelor of Science in Civil Engineering from Tufts University in
9 1992. I have worked for the Providence Water Supply Board for six years, the first two years
10 as the Senior Director of Operations and the last four years as the Deputy General Manager
11 of Operations/Executive Engineer. From 2008 to 2012, I worked for the Pawtucket Water
12 Supply Board as the Assistant Chief Engineer/Chief of Operations. Prior to Pawtucket, I
13 worked at the consulting firm Camp, Dresser & McKee for 12 years where I worked on a
14 variety of drinking water projects as both a project engineer and project manager. I am a
15 Registered Professional Engineer in the State of Rhode Island.

16

17 **Q. What is the primary use of the funds from this borrowing?**

18 A. The funds for this borrowing will primarily be used for distribution water main rehabilitation.

19

20 **Q. What is the method for rehabilitation of the distribution water mains?**

21 A. Providence Water utilizes two methods of distribution water main rehabilitation; (1)
22 complete replacement, or (2) cleaning and lining.

1 The replacement of water mains involves replacing the existing main in its entirety.
2 Cleaning & lining involves the scraping of the existing main, and the relining of the main
3 with cement mortar. The method of rehabilitation for a particular main depends on factors
4 such as; (1) the condition of the main, (2) the location of the main (urban area versus rural
5 area), and (3) location and amount of other utilities.

6

7 **Q. How many miles of main does Providence Water plan on rehabilitating each year?**

8 A. Since 1997, Providence Water has rehabilitated approximately 81 miles of water main in our
9 distribution system (See **Exhibit GMG-1**). The amount of main rehabilitated per year
10 increased significantly as part of the Bilateral Compliance Agreement made with the Rhode
11 Island Department of Health (RIDOH) in 2013. In addition, a good portion of the water main
12 in our distribution system is either at or beyond its useful life. Consequently, on a perpetual
13 basis, Providence Water will attempt to rehabilitate a minimum of 10 miles of water main per
14 year. As shown in **Exhibit GMG-1**, the cost per foot to rehabilitate water main varies. This
15 is due to several factors, including but not limited to the following:

16 (1) the type of rehabilitation (replacement versus cleaning and lining);

17 (2) the amount of other utilities in the roadway;

18 (3) the amount of pavement restoration and police details;

19 (4) contractor availability and current economic conditions;

20 (5) the location of the work (urban area versus rural area); and

21 (6) the amount and type of services (copper versus lead).

1 As part of the design process, Providence Water analyzes the area where the main
2 rehabilitation is taking place and determines the best method for minimizing the cost per
3 foot.

4

5 **Q. Is Providence Water still under a Bilateral Compliance Agreement with the RIDOH?**

6 A. Yes. Attached as **Exhibit GMG-2** is a copy of the Bilateral Compliance Agreement (BCA)
7 between RIDOH and Providence Water. The BCA was executed in August of 2018. The
8 BCA is a result of Providence Water exceeding the action limit (AL) for lead in 2017. The
9 BCA requires Providence Water to spend \$17,000,000 in FY 2018, \$17,000,000 in FY 2019
10 and \$18,000,000 in FY 2020 on water main rehabilitation.

11

12 **Q. Does Providence Water still replace lead service lines?**

13 A. Yes. Providence Water will replace lead services as part of our main rehabilitation work. In
14 addition, outside of main rehabilitation work, Providence Water will replace the public side
15 (from the water main to the curb stop) of a lead service if a customer replaces their side of a
16 lead service (from the curb stop to the meter).

17

18 **Q. Mr. Giasson, does that conclude your testimony?**

19 A. Yes, it does

Exhibit GMG-1
Main Rehabilitation FY1997 through FY2016

<u>Fiscal Year</u>	<u>Total Main Rehabilitation Cost</u>	<u>Total Main Replaced (Feet)</u>	<u>Total Main Replaced (Miles)</u>	<u>Cost per foot</u>
1997	\$770,100	7,700	1.5	\$100
1998	\$2,061,231	16,963	3.2	\$122
1999				
2000				
2001	\$365,998	1,759	0.3	\$208
2002	\$188,352	2,063	0.4	\$91
2003				
2004				
2005	\$225,521	2,943	0.6	\$77
2006	\$1,198,643	4,989	0.9	\$240
2007				
2008	\$1,132,446	4,417	0.8	\$256
2009	\$1,141,087	6,825	1.3	\$167
2010	\$1,449,485	7,330	1.4	\$198
2011	\$8,603,842	39,141	7.4	\$220
2012	\$6,732,891	19,499	3.7	\$345
2013	\$8,690,291	35,275	6.7	\$246
2014	\$13,929,440	45,553	8.6	\$306
2015	\$11,430,705	55,102	10.4	\$207
2016	\$15,665,467	67,205	12.7	\$233
2017	\$12,317,225	40,273	7.6	\$306
2018	\$20,830,078	71,500	13.5	\$291
Totals	\$106,732,801	428,537	81.1	\$249

Exhibit GMG-2

DEPARTMENT OF HEALTH
CENTER FOR DRINKING WATER QUALITY

vs.

CITY OF PROVIDENCE

PWS ID# 1592024

BILATERAL COMPLIANCE AGREEMENT

WHEREAS, the Department of Health (RIDOH) has responsibility for safe drinking water and regulatory authority over public water systems in the state of Rhode Island; and

WHEREAS, the City of Providence public drinking water system (Providence Water) supplies water to people in the state of Rhode Island; and

WHEREAS, RIDOH drinking water regulations in accordance with USEPA standards require water testing for lead contamination; and

WHEREAS, Providence Water samples taken in accordance with RIDOH regulations *and* EPA standards have demonstrated a lead level which exceeds the established action level and triggers a lead service line (LSL) replacement program whereby seven percent (7%) of the service lines (SL), as determined in 2005, must be replaced annually; and

WHEREAS, Providence Water was up to date through calendar year 2011 on its 7% SL replacements; and

WHEREAS, concerns have been raised about the effectiveness of partial LSL replacement in reducing lead exposure through water and the abatement of lead contained in water supplied by Providence Water; and

WHEREAS, potentially more effective ways to reduce lead exposure through water and the abatement of lead contained in water supplied by Providence Water have been tentatively identified, including optimized treatment, a system-wide unidirectional flushing program, and an extensive infrastructure program consisting of cleaning, lining, and main replacement of the estimated 50 to 55% of the distribution system that is composed of unlined cast iron pipe; and

WHEREAS, RIDOH has a lead abatement program designed to address the issue of lead reaching the citizenry of Rhode Island;

NOW, THEREFORE, RIDOH and Providence Water agree to the following:

1. RIDOH will grant Providence Water a stay during the 2018 season on its 7% SL replacement requirement. In lieu of LSL replacement, Providence Water shall continue/initiate the following activities:
2. Providence Water will continue consultation with its expert advisory panel to evaluate corrosion control treatment in the Providence Water's water system, including consideration of simultaneous compliance issues. Costs of convening the panel, such as travel and hotel accommodations, shall be borne by the Providence Water Supply Board. The panel shall continue to be composed of representatives from academia, and water supply professionals; its composition shall not change except with the approval of RIDOH.
3. Providence Water shall continue optimization of corrosion control with the approved partial system orthophosphate treatment pilot project.
 - a) Due to the influence of additional pilot project samples on representative compliance sampling, two 90th percentile calculations for lead and copper will be reported, both inclusive and exclusive of the orthophosphate pilot project samples, and the higher value of the two 90th percentile calculations will be considered for compliance purposes.
 - b) Providence Water shall produce monthly progress reports on the status of the orthophosphate treatment demonstration project including all water quality parameter data associated with the project according to the approved sampling plan. The reports shall also include water main coupons and SL sample harvesting plans, pipe scaling progress, and scaling analyses from coupons and samples within the demonstration area as they become available. The reports shall be submitted on the 27th of the following month.
 - c) If reports indicate measurable mitigation of lead exposure is being achieved at the taps of homes within the orthophosphate treatment pilot project area, Providence Water shall begin development of 30% engineering design plans for system-wide implementation of treatment no later than December 31, 2018. The orthophosphate pilot project's effectiveness of reducing lead at the taps and timeline for completion of this task shall be determined by RIDOH with supporting documentation provided by Providence Water and the expert advisory panel discussed in Item 2.
 - d) The 30% engineering design plans for system-wide orthophosphate treatment implementation shall be submitted by September 30, 2019.
 - e) RIDOH shall be provided an annual update on all activity related to corrosion control by Providence Water. The annual corrosion control report for 2018 shall be submitted by February 1st, 2019.
4. Until such time as corrosion control has been deemed optimized, Providence Water shall remain on standard monitoring, as specified in the *Rules and Regulations Pertaining to Public Drinking Water* [R46-13-DWQ] (Regulations), Section 6.86 (a) through (d), and Water Quality Parameter monitoring as specified in Section 6.87(a) through (c). Providence Water shall also continue to meet the requirements regarding public education as specified in the Regulations, Section 6.85, and reporting requirements as specified in Section 6.90.
5. Providence Water shall initiate and/or continue measures to address the condition of Providence Water's distribution system, which is believed to be contributing to the presence of lead in the water. These measures shall include but not be limited to:
 - a) A system-wide unidirectional flushing program (UDF). An updated schedule and implementation plan for UDF shall be submitted to RIDOH for approval no later than July 1, 2019. The UDF plan will be aggressive in approach and shall include at least 90 miles per year. The plan shall also include the number of total miles and percentage of distribution system flushed as of present, and information on the zones within the UDF program.

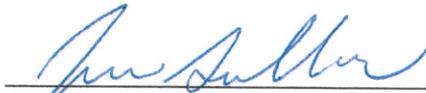
- b) Providence Water shall comply with the terms of the approved Infrastructure Replacement Plan regarding main rehabilitation and replacement, which is understood to mean unlined cast iron mains, for the State fiscal years 2018, 2019, and 2020, in the amounts of \$17,000,000 (FY2018), \$17,000,000 (FY2019), and \$18,000,000 (FY2020).
6. Prior to commencing scheduled or emergency system repairs or water main infrastructure replacement work which requires partial or full LSL replacements during 2018, Providence Water shall comply with the provisions of Section 6.84(d), regarding notification and education. Also, Providence Water shall provide NSF/ANSI-certified point-of-use water pitcher treatment units and one replaceable filter to affected residents who may experience short-term elevated lead levels in drinking water as a result of a partial or full LSL replacement. Affected residents shall also be notified as soon as possible of the interest free loan opportunities for full LSL replacement and, at a minimum, as soon as a work schedule for SL replacement has been identified.
7. Outside of the LSL replacements which shall take place under system repairs, Providence Water shall use best efforts to solicit and conduct additional full LSL replacements. Providence Water shall prioritize such best efforts in areas with the greatest numbers of vulnerable populations including day care centers and schools. A detailed progress report to solicit and conduct full LSL replacements shall be submitted to RIDOH annually with the first report due February 1st, 2019, and include the following items:
 - a) Include feasibility subreport to RIDOH on the process and obstacles involved in implementing a municipal ordinance requiring full LSL replacement upon sale, demolition, or replacement of buildings in the cities of Providence and Cranston. This subreport shall include evaluating how other communities have developed and implemented similar ordinances.
 - b) Include feasibility subreport to RIDOH on implementing a full LSL replacement plan at no cost to the homeowner via principal forgiveness, grant monies, housing and urban development monies, or other means. The subreport shall include evaluating how other communities and public water systems have provided full LSL replacements at no cost to the homeowner.
 - c) Hold annual outreach meeting with municipalities served by Providence Water. Outreach shall include the progress of Providence Water and other municipalities in implementing LSL replacement plans, including demonstrated successes in obtaining monies and implementation of such plans. Outreach to municipalities shall also include educational information on how municipalities can take advantage of existing programs and monies to implement comprehensive LSL replacement plans. A subreport detailing this outreach meeting shall be included in each annual progress report.
 - d) Include subreport on comprehensive promotional efforts and utilization of the \$1,250,000 granted by the Public Utilities Commission & Rhode Island Infrastructure Bank to conduct private LSL replacement at 0% interest financing over the course of three years. This subreport shall include a list of all promotional materials with distribution dates and a summary of the number of participants, and their service locations by municipality, that have successfully received SL replacement under this program. The initial progress report shall include the total number of SL replacements that have been performed under this program to date.
 - e) Include subreport on the number of public side LSL replacements that have been conducted in the previous 12 months, in each progress report. The initial annual progress report shall include a subreport on the number of public side LSLs that have been replaced to date.
 - f) Consumers discovered to have private LSLs shall be issued written notification of their SL's composition, provided with public education materials, information regarding Providence Water's free lead sampling program, and the financial opportunities available for replacement, within 30 days of discovery. Currently known private LSLs shall be issued this notification and materials by September 1, 2018. A subreport of these notifications shall be included in each annual progress report.

- g) Known non-lead private SLs that have a public LSL shall be identified and prioritized for public LSL replacement as soon as possible but no later than 24 months. Newly discovered SLs that fit this description shall also be replaced as soon as possible but no later than 24 months. A subreport of the number of these sites identified, and those scheduled for replacement shall be included in the progress reports.
8. Providence Water shall implement a survey of all private side SLs to identify or confirm plumbing material composition, beginning October 1, 2018. Providence Water shall survey the number of private SLs, equal to the number of water meters that Providence Water replaces or inspects, annually. Results of these surveys, including material composition of plumbing and the corresponding street address, shall be submitted to RIDOH in the form of a summary report by February 1st, 2019 and annually thereafter. The initial report shall include all current private SLs. Plumbing material composition in the initial report shall be reported as either "suspected lead service line" for buildings constructed before 1940, "plumbing material not yet determined" for buildings constructed after 1940, "known lead service line" or "known non-lead service line" accordingly. Private side SLs, surveyed during meter replacement/inspection after October 1, 2018, shall be identified as either "known lead service line" or "known non-lead service line". Instances where plumbing material composition cannot be determined during inspection or replacement shall be identified as "suspected lead" for buildings constructed before 1940 and "plumbing material could not be determined" for buildings constructed after 1940. The initial summary report shall also include the number of all private LSL replacements that have occurred to date.
 9. By March 1, 2019, Providence Water shall provide all individual lead & copper compliance sampling results and locations online in an approved, electronic, and searchable format, accessible by the public. By March 1, 2019, all individual lead & copper compliance sampling results shall be posted online within 72 hours of certification of the results from the laboratory. By March 1, 2019, Providence Water shall also include all known and suspected private SL plumbing material composition in Providence Water's current "Lead Service Location Map" and it shall be updated annually as private SL surveys are performed.
 10. By September 1, 2018, Providence Water shall establish a prominent weblink, to a primary webpage for all information regarding lead in drinking water, on the Providence Water website homepage. The weblink must be as prominent as the major weblinks on the current homepage, e.g. "Pay your water bill", "Customer service", "Report a problem". The primary lead in drinking water webpage shall prominently display the most recent 90th percentile lead results and the LCR lead action level, as well as the required health effects language associated with lead. The primary lead in drinking water webpage shall also include a prominently displayed weblink to the "Lead Service Location Map". After Item 9 of this document has been completed, a weblink to the online lead results shall also be located on the primary lead in drinking water webpage. Lastly, Providence Water shall include information regarding the ongoing orthophosphate treatment evaluation under the "Corrosion Control" section of Providence Water's website.
 11. Providence Water's annual Consumer Confidence Report (CCR) for 2019, and subsequent CCRs, shall include a prominently displayed weblink to Providence Water's primary lead in drinking water webpage on the first page of the CCR. The 2019 CCR (calendar year 2018) and subsequent CCRs shall report the highest of two 90th percentile calculations for lead and copper, one inclusive and one exclusive of the orthophosphate pilot project samples.
 12. Should Providence Water, after having been given notice of any alleged deficiencies, and opportunity to cure any such deficiencies in performance relating to this agreement or fail to meet the requirements of items one (1) through eleven (11) above, an administrative fine calculated by RIDOH shall be paid.
 13. Should Providence Water feel that the requirements of this Bilateral Consent Agreement cannot be met within budget, time or managerial constraints, and that the terms need to be modified, Providence Water shall notify this office immediately, and request a meeting at which a detailed justification of the requested modification shall be presented, including a description of the efforts made to comply with the terms as written.
 14. This Bilateral Consent Agreement shall be renegotiated and updated by March 31, 2019, to reflect changes to the Safe Drinking Water Act "Lead and Copper Rule" that may or may not be promulgated by the EPA, and any other changes in circumstances that may necessitate altering this Agreement.

This Bilateral Consent Agreement is satisfactory and accepted by both parties. The terms of this Agreement shall become effective upon signing by both parties.


Ricky Caruolo
Providence Water
PWS#1592024

8/8/18
(Date)


June Swallow, P. E., Chief
R.I. Center for Drinking Water Quality

8/8/18
(Date)

TESTIMONY

of

MAUREEN E. GURGHIGIAN

before the

RI DIVISION OF PUBLIC UTILITIES AND CARRIERS

IN SUPPORT OF PROVIDENCE WATER SUPPLY BOARD'S
APPLICATION FOR AUTHORIZATION TO BORROW
FROM THE DRINKING WATER STATE REVOLVING FUND
IN AN AMOUNT
NOT TO EXCEED \$14,700,000

December 2018

Docket No. D-19-

**PROVIDENCE WATER SUPPLY BOARD
TESTIMONY OF
MAUREEN E. GURGHIGIAN
December 2018**

1 **Q: Please state your name and business address.**

2 A: My name is Maureen E. Gurghigian and I am a Managing Director at Hilltop
3 Securities Inc. (“HilltopSecurities”) in the Lincoln, Rhode Island branch office.

4
5 **Q: Please state your duties at HilltopSecurities.**

6 A: I am a member of the firm’s public finance department and the lead financial
7 advisor in Rhode Island providing municipal advisory services to state, local and
8 regional government agencies for infrastructure projects in the water, wastewater,
9 education and transportation sectors among others primarily in Rhode Island,
10 Connecticut and Maine. I have supervisory responsibility for HilltopSecurities’
11 involvement with borrowings by numerous public agencies and approximately 20
12 Rhode Island municipalities. Our office assists clients with the origination of more
13 than \$800 million in public financing issues annually.

14
15 **Q: Please describe your qualifications and experience.**

16 A: I have more than 30 years’ experience in the public finance field. I hold a Masters
17 Degree in business administration from the University of Rhode Island. I am a
18 registered Municipal Principal with the Municipal Securities Rulemaking Board,
19 holding the following licenses: Series 52, Series 53 and Series 63, as well as the
20 Series 50, Municipal Advisor Representative License. Prior to joining First
21 Southwest, the predecessor firm to HilltopSecurities, in 2001, I worked in public
22 finance for Fleet Bank and/or Fleet Securities for sixteen years. From 1993 through
23 2000, I served as Manager of New England Public Finance and Investment Banking
24 at Fleet Securities, Inc. Before joining Fleet, I spent eight years in Rhode Island
25 State Government, including four years as Director of the Governor’s Policy Office
26 under then Governor J. Joseph Garrahy.

27
28 **Q: Have you previously testified before the Public Utilities Commission and**
29 **Division of Public Utilities and Carriers?**

**PROVIDENCE WATER SUPPLY BOARD
TESTIMONY OF
MAUREEN E. GURGHIGIAN
December 2018**

1 A: Yes, I have provided testimony before the Public Utilities Commission
2 (“Commission”) and the Division of Public Utilities and Carriers (“Division”) on
3 behalf of the Kent County Water Authority, the Narragansett Bay Commission,
4 Woonsocket Water Division, Pawtucket Water Supply Board, the City of Newport,
5 Water Division and the Providence Water Supply Board (“Providence Water”).
6

7 **Q: Please describe your role in this proceeding.**

8 A: I am providing assistance to Providence Water and its financing team with respect
9 to the issuance of debt through Rhode Island Infrastructure Bank (“RIIB”). I have
10 been asked by Providence Water to provide information on the debt service
11 requirements for its proposed borrowing, and to respond to related questions.
12

13 **Q: Please discuss Providence Water’s financing plans.**

14 A. As set forth in its Application for Approval of Borrowing Authority, Providence
15 Water seeks to obtain a loan in the amount of up to fourteen million and seven
16 hundred thousand dollars (\$14,700,000). It is expected that the loan will be funded
17 through revenue bonds sold by RIIB under the Rhode Island Safe Drinking Water
18 State Revolving Fund (DWSRF). The loan will finance continued improvements to
19 the distribution system including but not limited to the cleaning, relining, repair and
20 replacement of water mains, transmission lines, service lines, and valves, and all
21 attendant expenses (the “Project”). Nancy Parrillo has described the Project in her
22 testimony, and I will provide the details of the financing for the Project.
23

24 **Q. Can you explain how the financing will work for the \$14,700,000 borrowing?**

25 A. Yes. Providence Water has borrowed from the State Revolving Fund in the past.
26 This loan will be similar to those previously approved by the Division. In
27 accordance with the Safe Drinking Water Act Amendments of 1996, the State of
28 Rhode Island has created a Drinking Water State Revolving Fund administered by
29 RIIB to provide financial assistance to water suppliers. This fund uses federal
30 capitalization grants and state matching funds to provide subsidized (25% below

**PROVIDENCE WATER SUPPLY BOARD
TESTIMONY OF
MAUREEN E. GURGHIGIAN
December 2018**

1 market-rate) loans to water suppliers for qualifying projects listed on the Project
2 Priority List maintained by the Department of Health. RIIB receives capitalization
3 grants from the federal government, state match and sells bonds in the public
4 market to obtain capital to make loans to its drinking water borrowers pursuant to
5 loan agreements. This project has been identified in Providence Water's capital
6 program, and is listed on the Department of Health's Project Priority List.
7 Therefore, this project qualifies for a subsidized DWSRF loan through RIIB.
8

9 **Q: What is the term of this borrowing and the applicable interest rate?**

10 A. The term is approximately 20 years from the projected completion of construction.
11 The expected interest cost will reflect a subsidized rate of 25% off the current
12 market rates. Based upon market conditions as of December 5, 2018, it is
13 anticipated that the interest rate on the loan will not exceed a market rate of 4.696%,
14 which would result in a projected subsidized rate of approximately 3.211%.
15

16 **Q: How will the funds from this borrowing be disbursed?**

17 A: Approximately \$12,958,000 will be available for Project funds, approximately
18 \$1,470,000 will be set aside in the debt service reserve fund, and approximately
19 \$272,000 is allocated for costs of issuance, including rating agency fees, bond
20 counsel, financial advisor and trustee fees, and the origination fee.
21

22 **Q: What are the applicable schedules and deadlines for this financing?**

23 A: This borrowing will be done when RIIB sells its revenue bonds for the DWSRF,
24 which is anticipated to take place in the first or second quarter of 2019. RIIB
25 requires that all borrower approvals be in place prior to mailing the RIIB
26 Preliminary Official Statement.
27

28 **Q: What is the projected schedule of debt service for the contemplated new**
29 **borrowings?**

PROVIDENCE WATER SUPPLY BOARD
TESTIMONY OF
MAUREEN E. GURGHIGIAN
December 2018

1 A. The projected debt service for the new borrowings is displayed in Schedule MG-1.
2 For the \$14,700,000 debt, annual debt service is expected to increase by
3 approximately \$1,050,000 per year at the projected interest rates. This amount is
4 subject to change based upon the actual project costs, draw schedule and prevailing
5 interest rates at the time of borrowing.

6

7 **Q: Does this complete your testimony?**

8 A: Yes it does.

MG-1

**Rhode Island Infrastructure Bank
Safe Drinking Water Revolving Fund Loan, 2019
Rates as of 12/5/2018 + 100bps - Preliminary/Subject to Change**

Loan Debt Service

Providence WSB - \$14.7 (AA Rated, Revenue Pledge)

Date	Principal	Loan Rate	(1) Interest	Net Fees @ 0.500%	Total Fees & Interest	Net Fees, Capl. & Interest	Total Net Debt Service	Annual Net Debt Service & Fees
04/10/19								-
09/01/19	533,000.00	2.280%	35,704.95	5,911.42	41,616.37	41,616.37	574,616.37	574,616.37
03/01/20	-	-	106,465.06	17,626.67	124,091.73	124,091.73	124,091.73	-
09/01/20	547,000.00	2.350%	135,658.40	22,460.00	158,118.40	158,118.40	705,118.40	829,210.13
03/01/21	-	-	196,667.43	32,560.83	229,228.26	229,228.26	229,228.26	-
09/01/21	563,000.00	2.410%	209,412.60	34,050.00	243,462.60	243,462.60	806,462.60	1,035,690.86
03/01/22	-	-	202,628.45	32,642.50	235,270.95	235,270.95	235,270.95	-
09/01/22	579,000.00	2.510%	202,628.45	32,642.50	235,270.95	235,270.95	814,270.95	1,049,541.90
03/01/23	-	-	195,362.00	31,195.00	226,557.00	226,557.00	226,557.00	-
09/01/23	597,000.00	2.590%	195,362.00	31,195.00	226,557.00	226,557.00	823,557.00	1,050,114.00
03/01/24	-	-	187,630.85	29,702.50	217,333.35	217,333.35	217,333.35	-
09/01/24	615,000.00	2.680%	187,630.85	29,702.50	217,333.35	217,333.35	832,333.35	1,049,666.70
03/01/25	-	-	179,389.85	28,165.00	207,554.85	207,554.85	207,554.85	-
09/01/25	635,000.00	2.750%	179,389.85	28,165.00	207,554.85	207,554.85	842,554.85	1,050,109.70
03/01/26	-	-	170,658.60	26,577.50	197,236.10	197,236.10	197,236.10	-
09/01/26	656,000.00	2.830%	170,658.60	26,577.50	197,236.10	197,236.10	853,236.10	1,050,472.20
03/01/27	-	-	161,376.20	24,937.50	186,313.70	186,313.70	186,313.70	-
09/01/27	677,000.00	2.920%	161,376.20	24,937.50	186,313.70	186,313.70	863,313.70	1,049,627.40
03/01/28	-	-	151,492.00	23,245.00	174,737.00	174,737.00	174,737.00	-
09/01/28	701,000.00	2.980%	151,492.00	23,245.00	174,737.00	174,737.00	875,737.00	1,050,474.00
03/01/29	-	-	141,047.10	21,492.50	162,539.60	162,539.60	162,539.60	-
09/01/29	725,000.00	3.100%	141,047.10	21,492.50	162,539.60	162,539.60	887,539.60	1,050,079.20
03/01/30	-	-	129,809.60	19,680.00	149,489.60	149,489.60	149,489.60	-
09/01/30	751,000.00	3.180%	129,809.60	19,680.00	149,489.60	149,489.60	900,489.60	1,049,979.20
03/01/31	-	-	117,868.70	17,802.50	135,671.20	135,671.20	135,671.20	-
09/01/31	779,000.00	3.240%	117,868.70	17,802.50	135,671.20	135,671.20	914,671.20	1,050,342.40
03/01/32	-	-	105,248.90	15,855.00	121,103.90	121,103.90	121,103.90	-
09/01/32	808,000.00	3.290%	105,248.90	15,855.00	121,103.90	121,103.90	929,103.90	1,050,207.80
03/01/33	-	-	91,957.30	13,835.00	105,792.30	105,792.30	105,792.30	-
09/01/33	838,000.00	3.300%	91,957.30	13,835.00	105,792.30	105,792.30	943,792.30	1,049,584.60
03/01/34	-	-	78,130.30	11,740.00	89,870.30	89,870.30	89,870.30	-
09/01/34	870,000.00	3.300%	78,130.30	11,740.00	89,870.30	89,870.30	959,870.30	1,049,740.60
03/01/35	-	-	63,775.30	9,565.00	73,340.30	73,340.30	73,340.30	-
09/01/35	903,000.00	3.300%	63,775.30	9,565.00	73,340.30	73,340.30	976,340.30	1,049,680.60
03/01/36	-	-	48,875.80	7,307.50	56,183.30	56,183.30	56,183.30	-
09/01/36	938,000.00	3.310%	48,875.80	7,307.50	56,183.30	56,183.30	994,183.30	1,050,366.60
03/01/37	-	-	33,351.90	4,962.50	38,314.40	38,314.40	38,314.40	-
09/01/37	973,000.00	3.340%	33,351.90	4,962.50	38,314.40	38,314.40	1,011,314.40	1,049,628.80
03/01/38	-	-	17,102.80	2,530.00	19,632.80	19,632.80	19,632.80	-
09/01/38	1,012,000.00	3.380%	17,102.80	2,530.00	19,632.80	19,632.80	1,031,632.80	1,051,265.60
	<u>14,700,000.00</u>		<u>4,835,319.74</u>	<u>755,078.92</u>	<u>5,590,398.66</u>	<u>5,590,398.66</u>	<u>20,290,398.66</u>	<u>20,290,398.66</u>

(1) Interest during construction is calculated based on the timing of expected draws and the overall weighted average loan rate of 3.020%.

(2) Minimum principal amortization is required before Construction Fund is completely drawn.

PROVIDENCE WATER
Comparison of Interest Rates

	Interest Rate
Market Rate (AIC)	4.696%
Total Interest Payments	\$ 6,901,187
Subsized Rate (AIC)	3.211%
Total Interest Payments	\$ 4,835,320
Savings:	
Interest Rate	1.485%
Interest Payments	\$ 2,065,867
Interest Rate Savings/Market Rate	31.623%

Prepared by HilltopSecurities



**RESOLUTION
OF THE
PROVIDENCE WATER SUPPLY BOARD**

A Resolution of the City of Providence Water Supply Board expressing the intention of the Board to reimburse expenditures from the proceeds of the Notes, Bonds, or Loans for certain Infrastructure Improvements and to provide an effective date.

The Hon. Jorge O. Elorza
Mayor

Ricky Caruolo
General Manager

WHEREAS, the City of Providence Water Supply Board (Board) is an agency of the City of Providence, Rhode Island and owns and operates a Water Supply system (System); and

BOARD OF DIRECTORS

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Joseph D. Cataldi
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Member

Kerri Lynn Thurber
Member

Carissa R. Richard
Secretary

William E. O'Gara, Esq.
Legal Advisor

WHEREAS, the Board desires to make certain improvements to the Board's distribution system and appurtenances thereto, including but not limited to the cleaning, relining, repair and replacement of water mains, transmission lines, service lines and valves (Project); and

WHEREAS, it is the intent of the Board to borrow funds in an amount, not to exceed fourteen million, seven hundred twenty seven thousand, nine hundred five dollars (\$14,727,905.00) for the Project.

NOW, THEREFORE, BE IT RESOLVED:

❖ This Resolution is an affirmative action of the Board towards the issuance of Bonds, Notes, or Loans through the RI Infrastructure Bank and/or other funding avenues. This resolution constitutes the Board's declaration of official intent pursuant to Treasury Regulation 1.150-2 to reimburse the Board's funds and accounts for certain infrastructure expenditures paid on or after the date which is sixty (60) days prior to the date of this resolution but prior to the issuance of the Bonds, Notes, or Loans.

❖ That the Board authorizes the General Manager to borrow through the Rhode Island Infrastructure Bank and/or any other funding avenues for the Project.

❖ This resolution shall take effect upon passage.

The above and foregoing was duly adopted and approved at a meeting of the City of Providence Water Supply Board as held on August 15, 2018 by vote of the members of the Providence Water Supply Board present.

MEMBER

Rhode Island Water Works Assn.
New England Water Works Assn.
American Water Works Assn.
Water Research Foundation

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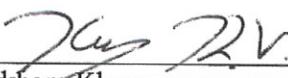
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Xaykham Khamsyvoravong, Chairman
Providence Water Supply Board



Carissa R. Richard, Secretary
Providence Water Supply Board

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PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)

FINANCIAL STATEMENTS

FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
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Independent Auditors' Report

To the Board of Directors of
Providence Water Supply Board

Report on the Financial Statements

We have audited the accompanying financial statements of Providence Water Supply Board (Water Supply Board) of the City of Providence, Rhode Island, as of and for the years ended June 30, 2017 and 2016, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America 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 auditors consider 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.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Water Supply Board as of June 30, 2017 and 2016 and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

Presentation

As discussed in Note 1, the financial statements of the Water Supply Board are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the business-type activities of the City of Providence that are attributable to the transactions of the Water Supply Board. They do not purport to, and do not, present fairly the financial position of the City of Providence as of June 30, 2017 and 2016, the changes in its financial position, or where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 7 and the pension schedules on pages 30 through 32 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 29, 2017, on our consideration of the Water Supply Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Water Supply Board's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Water Supply Board's internal control over financial reporting and compliance.

Blum, Shapiro & Company, P.C.

Cranston, Rhode Island
December 29, 2017

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017 AND 2016**

The management of the Providence Water Supply Board (the Water Supply Board) offers readers of our financial statements the following narrative overview and analysis of our financial activities for the years ended June 30, 2017 and 2016.

Financial Statements

Our financial statements are prepared using proprietary fund (enterprise fund) accounting that uses the same basis of accounting as private-sector business enterprises. Under this method of accounting an economic resources measurement focus and the accrual basis of accounting are used.

Revenue is recorded when earned and expenses are recorded when incurred. The financial statements include statements of net position, statements of revenues, expenses and changes in net position, and statements of cash flows. These statements are followed by notes to the financial statements.

- The statements of net position present information on the assets and liabilities, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Water Supply Board is improving or deteriorating.
- The statements of revenues, expenses and changes in net position report the operating and nonoperating revenues and expenses of the Water Supply Board for the fiscal year with the difference - the net income or loss - being combined with any capital contributions to determine the change in net position for the fiscal year. That change combined with the previous year-end net position total reconciles to the net position at the end of the fiscal year.
- The statements of cash flows report cash and cash equivalents activity for the fiscal year resulting from operating activities, noncapital financing activities, capital and related financing activities, and investing activities. The net result of these activities added to the beginning of the year cash balance reconciles to the cash and cash equivalents balance at the end of the fiscal year.

PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017 AND 2016

Condensed Financial Information

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total current assets	\$ 54,554,469	\$ 54,703,458	\$ 55,703,859
Total long-term assets	391,547,959	360,983,066	317,261,613
Total assets	<u>446,102,428</u>	<u>415,686,524</u>	<u>372,965,472</u>
Deferred outflows of resources	<u>4,739,191</u>	<u>6,348,674</u>	<u>1,156,442</u>
Total current liabilities	11,953,738	13,183,282	13,498,670
Total long-term liabilities	170,282,008	157,876,249	123,484,780
Total liabilities	<u>182,235,746</u>	<u>171,059,531</u>	<u>136,983,450</u>
Deferred inflows of resources	<u>786,585</u>	<u>178,623</u>	<u>-</u>
Net position:			
Net investment in capital assets	273,631,269	256,129,467	239,087,594
Restricted fund	41,155,297	37,233,166	36,145,168
Unrestricted fund	<u>(46,967,278)</u>	<u>(42,565,589)</u>	<u>(38,094,301)</u>
Total Net Position	<u>\$ 267,819,288</u>	<u>\$ 250,797,044</u>	<u>\$ 237,138,461</u>
Total operating revenue	\$ 71,778,075	\$ 69,209,492	\$ 69,231,217
Total operating expenses	45,438,116	44,687,516	43,179,067
Depreciation	10,327,272	10,673,384	11,313,363
Total operating expenses including depreciation	<u>55,765,388</u>	<u>55,360,900</u>	<u>54,492,430</u>
Operating income	16,012,687	13,848,592	14,738,787
Nonoperating expense	(2,622,675)	(673,210)	(1,811,838)
Capital grants and contributions	<u>405,252</u>	<u>483,201</u>	<u>1,098,257</u>
Change in Net Position	<u>\$ 13,795,264</u>	<u>\$ 13,658,583</u>	<u>\$ 14,025,206</u>

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017 AND 2016**

Financial Highlights

During the year, the Water Supply Board had operating revenues that exceeded operating expenses by \$16.0 million. These are primarily due to rate relief to support the continued commitment to the replacement of aging infrastructure, careful management of operating costs, and unexpended revenues allocated for restricted funds. Total assets were \$450.8 million, up \$28.8 million from last year's total assets of \$422.0 million. Current assets, principally cash, decreased by \$0.15 million, and net plant increased by \$30.6 million.

The Water Supply Board's net position totaled \$267.8 million at June 30, 2017, an increase of \$17.0 million from June 30, 2016. The increase is the result of unexpended revenue allocated for restricted funds. Also, reflected in the change to our net position is net operating income of \$16.0 million, net nonoperating expenses of \$2.6 million, and capital contributions of \$.39 million.

The Water Supply Board's net position totaled \$250.8 million at June 30, 2016, an increase of \$13.66 million from June 30, 2015. The increase is the result of unexpended revenue allocated for restricted funds. Also reflected in the change to our net position is net operating income of \$13.8 million, net nonoperating expenses of \$0.67 million, and capital contributions of \$0.40 million.

The Water Supply Board's total operating revenues were \$71.8 million for fiscal year 2017 which was a slight increase over the prior year. One reason for the increase is the 8.5% rate increase approved by the RI Public Utilities Commission (PUC) effective February 17, 2017. The rate increase would result in approximately \$1.9 million in additional revenue in fiscal year 2017. Also, as of January 13, 2017, the Water Supply Board merged with the East Smithfield Water District (ESWD). ESWD historically has been a wholesale customer of the Water Supply Board. The merger resulted in an additional 2,400 retail customers. This addition of retail customers could result in potential retail revenue of approximately \$700,000 per year compared to \$410,000 revenue as a wholesale customer.

The Water Supply Board's total operating revenues were \$69.2 million for fiscal year 2016, which is consistent with the prior year. Total operating expenses of the water system amounted to \$55.4 million, which is a slight increase over the prior year's amount of \$54.5 million. Fiscal year 2016 nonoperating revenue consisted of interest income amounting to \$404,534 and other revenue which is derived from a tax relief payment agreement between the Water Supply Board and the Town of Foster. The agreement called for the Town of Foster to reimburse the Water Supply Board a total of \$1.6 million plus interest over the next 10 years. Nonoperating expense of \$2.7 million was principally interest expense on long-term debt. Capital grants and contributions in fiscal year 2016 amounted to \$0.48 million.

**PROVIDENCE WATER SUPPLY BOARD
 (AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
 MANAGEMENT'S DISCUSSION AND ANALYSIS
 JUNE 30, 2017 AND 2016**

Capital Assets and Debt Administration

Capital Assets:

At June 30, 2017, the Water Supply Board had \$390.1 million invested in various capital assets, including land, buildings and improvements, transmission and distribution mains, reservoirs, services, hydrants and appurtenances, machinery and equipment, and construction work in progress. This amount represents a net increase in capital assets of \$30.7 million, or 8.5%, over the prior year.

At June 30, 2016, the Water Supply Board had \$359.7 million invested in various capital assets. This amount represented a net increase of \$42.4 million, or 13.4%, over the previous year.

Major project expenditures in fiscal year 2017 included (in millions):

*	Central Operating Facility	\$	12.92
*	Replace/upgrade Water Mains	\$	12.32
*	Replace sand filters	\$	2.17
*	102" & 78" Aqueducts - Investigation/rehabilitation	\$	1.34
*	GIS System and Asset Management System	\$	0.70
*	Pre-treatment Pilot - Scale Evaluation	\$	0.69
*	Replace lead services	\$	0.44
*	Replace fire hydrants	\$	0.43
*	Plant Influent and Aerator Rehabilitation	\$	0.39
*	Replace Blow-offs	\$	0.36
*	Unidirectional Flushing (UDF) Program Development	\$	0.30
*	Treatment Process and Water Quality Studies	\$	0.30
*	Treatment Plant Architectural Upgrades	\$	0.25
*	Computer/IT Equipment Virtualization	\$	0.21
*	Chlorine Room Monorail and Scales Replacement	\$	0.21
*	Replace Distribution Valves	\$	0.20
*	Renewable Energy Feasibility Study	\$	0.15
*	Water Main Tie-ins	\$	0.13
*	Various Pumping and Storage Improvements	\$	0.12
*	Fruit Hill Pumping Station Upgrades	\$	0.11

The Water Supply Board's fiscal year 2017 capital budget included project expenditures of \$34.38 million for infrastructure and capital projects. The major projects were: continuation of the renovation of the new central operation facility, water main replacements and upgrades, treatment plant filter replacements, 102" and 78" aqueducts rehabilitation, installation of a new asset management system, replacement of lead services and aging fire hydrants, plant influent and aerator upgrades, replacement and upgrade of aging computer infrastructure, and upgrades to aging pump stations. The majority of infrastructure projects are financed on a pay-as-you-go, cash basis from rate revenues. Some major projects were funded from bond proceeds issued through the Rhode Island Infrastructure Bank (RIIB) in fiscal year 2017. New major capital investments that will benefit ratepayers for many years are generally funded with long-term debt financing.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017 AND 2016**

Debt:

At June 30, 2017, the Water Supply Board had \$116.7 million in bonds and notes outstanding versus \$103.5 million in the previous year. This represented an increase of \$13.2 million or 12.7%. Providence Water Supply Board sought and received approval from the RI Division of Public Utilities (the Division) to borrow \$16.272 million from the RI Infrastructure Bank to finance the replacement and rehabilitation of water mains in the distribution system. The new \$16.272 million was issued in May of 2017, and the necessary rates were approved by the PUC as a part of the new rates approved in February of 2017.

At June 30, 2016, the Water Supply Board had \$103.5 million in bonds and notes outstanding versus \$78.2 million in the previous year. This represented an increase of \$25.4 million, or 32.4%. This increase was a result of a new bond issue in the amount of \$30 million to finance the new Central Operations Facility.

Subsequent Events

In October of 2017, Providence Water Supply Board officially opened its doors of its new Central Operation Facility to the public. The facility is located at 125 Dupont Drive in Providence.

Union Contract

The labor force of the Water Supply Board, with the exception of management, is covered by a union contract which is effective for the period of July 1, 2016 through June 30, 2018.

Contacting Providence Water's Financial Management

This financial report is designed to provide our customers, investors and creditors with a general overview of the Providence Water Supply Board's finances and to illustrate the Providence Water Supply Board's accountability for the monies it receives. If you have questions about this report or need additional financial information, please contact the Finance Department at the Providence Water Supply Board, 125 Dupont Drive, Providence, RI 02907.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
STATEMENTS OF NET POSITION
JUNE 30, 2017 AND 2016**

	<u>2017</u>	<u>2016</u>
Assets:		
Current unrestricted assets:		
Cash and cash equivalents	\$ 1,324,140	\$ 2,364,040
Accounts receivable, net of allowance for uncollectible accounts of \$1,223,168 in 2017 and \$1,242,827 in 2016	6,817,315	6,696,642
Accounts receivable - unbilled	2,633,646	2,843,801
Inventory	570,693	569,051
Other assets	113,716	
Total current unrestricted assets	<u>11,459,510</u>	<u>12,473,534</u>
Current restricted assets:		
Cash and cash equivalents	42,887,926	42,041,914
Accounts receivable	75,251	60,571
Notes receivable - short term	131,782	127,439
Total current restricted assets	<u>43,094,959</u>	<u>42,229,924</u>
Total current assets	<u>54,554,469</u>	<u>54,703,458</u>
Capital assets:		
Land	24,113,598	23,836,137
Building and improvements	117,974,309	103,048,502
Improvements other than buildings	339,975,131	326,348,497
Machinery and equipment	32,722,062	31,999,221
Scituate Reservoir Project	18,681,695	18,681,695
Construction in progress	85,556,950	73,252,031
	<u>619,023,745</u>	<u>577,166,083</u>
Less accumulated depreciation and amortization	228,652,391	217,491,404
Total capital assets, net	<u>390,371,354</u>	<u>359,674,679</u>
Other noncurrent assets:		
Notes receivable - long term	<u>1,176,605</u>	<u>1,308,387</u>
Deferred Outflows of Resources:		
Pension-related deferred outflows of resources	<u>4,739,191</u>	<u>6,348,674</u>
Total assets and deferred outflows of resources	<u>450,841,619</u>	<u>422,035,198</u>

The accompanying notes are an integral part of the financial statements

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
STATEMENTS OF NET POSITION (CONTINUED)
JUNE 30, 2017 AND 2016**

	<u>2017</u>	<u>2016</u>
Liabilities:		
Current:		
Current portion of long-term debt	\$ 5,391,621	\$ 3,892,845
Due to City of Providence General Fund	743,174	643,624
Accounts payable	1,029,991	1,049,299
Accrued liabilities	2,849,290	2,600,756
	<u>10,014,076</u>	<u>8,186,524</u>
Amounts to be paid from current restricted assets:		
Due to Water Resources Board	304,847	360,017
Accounts payable	1,634,815	4,636,741
	<u>1,939,662</u>	<u>4,996,758</u>
Total current liabilities	<u>11,953,738</u>	<u>13,183,282</u>
Noncurrent liabilities:		
General revenue bonds	111,348,464	99,652,367
Net pension liability	50,302,544	50,365,882
Other post employment benefit obligations payable	8,631,000	7,858,000
Total noncurrent liabilities	<u>170,282,008</u>	<u>157,876,249</u>
Total liabilities	<u>182,235,746</u>	<u>171,059,531</u>
Deferred Inflows of Resources:		
Pension-related deferred inflows of resources	<u>786,585</u>	<u>178,623</u>
Net Position:		
Net investment in capital assets	273,631,269	256,129,467
Restricted	41,155,297	37,233,166
Unrestricted	<u>(46,967,278)</u>	<u>(42,565,589)</u>
Total Net Position	<u>\$ 267,819,288</u>	<u>\$ 250,797,044</u>

The accompanying notes are an integral part of the financial statements

PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
Operating Revenues:		
Charges for services:		
Water sales:		
General customers	\$ 49,599,264	\$ 47,413,514
Other local water suppliers	17,007,836	16,929,522
Fire protection services	2,421,070	2,322,938
Maintenance charges and other revenue	2,749,905	2,543,518
Total operating revenues	<u>71,778,075</u>	<u>69,209,492</u>
Operating Expenses:		
Source of supply	2,705,585	2,785,157
Pumping operations	878,433	755,951
Water treatment	7,591,065	7,376,945
Transmission and distribution	6,213,933	6,158,189
Charge for services provided by other City departments	839,167	839,167
Customer accounts and service	4,111,085	3,738,236
Administrative and general	15,937,492	16,014,991
Depreciation	10,327,272	10,673,384
Property taxes - other local governments	7,161,356	7,018,880
Total operating expenses	<u>55,765,388</u>	<u>55,360,900</u>
Operating Income	<u>16,012,687</u>	<u>13,848,592</u>
Nonoperating Revenue (Expense):		
Interest income	279,905	404,534
Interest expense and other	(2,902,580)	(2,682,272)
Other revenues		1,604,528
Net nonoperating expense	<u>(2,622,675)</u>	<u>(673,210)</u>
Capital Grants and Contributions	<u>405,252</u>	<u>483,201</u>
Change in Net Position	13,795,264	13,658,583
Net Position Acquired via Merger	3,226,980	-
Net Position - Beginning of Year	<u>250,797,044</u>	<u>237,138,461</u>
Net Position - End of Year	<u>\$ 267,819,288</u>	<u>\$ 250,797,044</u>

The accompanying notes are an integral part of the financial statements

PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
Cash Flows from Operating Activities:		
Receipts from customers	\$ 72,135,913	\$ 71,148,337
Payments to vendors	(26,927,557)	(24,401,681)
Payments to employees	(18,331,135)	(17,785,511)
Net cash provided by (used in) operating activities	<u>26,877,221</u>	<u>28,961,145</u>
Cash Flows from Capital and Related Financing Activities:		
Acquisition and construction of capital assets	(37,488,692)	(53,086,450)
Interest and issuance costs paid on debt	(2,902,580)	(2,682,272)
Principal payments on long-term debt	(3,944,684)	(4,628,807)
Proceeds from long-term debt	16,272,095	30,000,000
Proceeds from note receivable	127,439	168,702
Capital grants	405,252	483,201
Net cash provided by (used in) capital and related financing activities	<u>(27,531,170)</u>	<u>(29,745,626)</u>
Cash Flows from Investing Activities:		
Investment income (loss)	279,905	404,534
Cash acquired through merger	180,156	
Net cash provided by (used in) investing activities	<u>460,061</u>	<u>404,534</u>
Net Increase (Decrease) in Cash and Cash Equivalents	(193,888)	(379,947)
Cash and Cash Equivalents - Beginning of Year	<u>44,405,954</u>	<u>44,785,901</u>
Cash and Cash Equivalents - End of Year	\$ <u>44,212,066</u>	\$ <u>44,405,954</u>
Unrestricted Cash and Cash Equivalents	\$ 1,324,140	\$ 2,364,040
Restricted Cash and Cash Equivalents	<u>42,887,926</u>	<u>42,041,914</u>
	\$ <u>44,212,066</u>	\$ <u>44,405,954</u>
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:		
Operating income (loss)	\$ 16,012,687	\$ 13,848,592
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:		
Depreciation	10,327,272	10,673,384
Provision for doubtful accounts	19,659	4,251
Changes in assets and liabilities:		
(Increase) decrease in accounts receivable	410,094	185,708
(Increase) decrease in inventories	46,036	257,479
(Increase) decrease in other assets		300,455
(Increase) decrease in deferred outflows of resources	1,624,539	(5,192,232)
Increase (decrease) in due to other funds	99,550	(750,798)
Increase (decrease) in accounts payable and accrued expenses	(2,970,744)	1,171,374
Increase (decrease) net pension liability	(63,338)	7,097,309
Increase (decrease) OPEB obligation	773,000	1,187,000
Increase (decrease) in deferred inflows of resources	598,466	178,623
Net Cash Provided by (Used in) Operating Activities	\$ <u>26,877,221</u>	\$ <u>28,961,145</u>

The accompanying notes are an integral part of the financial statements

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
NOTES TO FINANCIAL STATEMENTS**

1. NATURE OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

A. REPORTING ENTITY

The Providence Water Supply Board, an enterprise fund of the City of Providence, (the Water Supply Board) was created in 1940 by Chapter 832 of the Public Laws of the State of Rhode Island. Membership of the Water Supply Board is comprised of four persons appointed by the Mayor, who serve for four-year staggered terms and two City Council members elected by the City Council who serve during their four-year City Council term. The Finance Director of the City of Providence also serves as an ex-officio Water Supply Board member.

The Water Supply Board provides water supply services through metered sales in Providence and parts of the surrounding communities of North Providence, Johnston and Cranston. The Water Supply Board also sells water to other local water supply systems on a wholesale basis. The Water Supply Board's source of water supply is the Scituate Reservoir, located in the Town of Scituate, Rhode Island, and five tributary reservoirs.

B. SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The Water Supply Board is considered an enterprise fund of the City of Providence (the City). The operations of the Water Supply Board are accounted for with a separate set of self-balancing accounts organized on a Proprietary Fund type (Enterprise Fund) basis.

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

The Water Supply Board utilizes the accrual basis of accounting, under which revenues are recognized when earned and expenses are recognized when incurred regardless of the timing of the related cash flows.

Regulations and Operations

The Water Supply Board is subject, as to rates and other matters, to the regulatory authority of the State of Rhode Island Public Utilities Commission (PUC).

Cash Equivalents

The Water Supply Board considers all highly liquid instruments with an original maturity of three months or less, when purchased, to be cash equivalents.

Investments

The Water Supply Board accounts for investments at fair values, which are established by quoted market prices in active markets that are accessible at the measurement date for identical, unrestricted assets. Fair value is defined as the price that two parties are willing to pay to acquire an asset or settle a liability in an orderly transaction in the market place.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
NOTES TO FINANCIAL STATEMENTS**

Inventory

Inventory, consisting of materials and supplies, is valued at the lower of average cost or market using the first-in, first-out method.

Capital Assets, Depreciation and Amortization

Capital assets owned by the Water Supply Board are stated at cost and are defined as assets with an initial cost of more than \$3,000 and an estimated useful life in excess of 1 year. Depreciation and amortization is provided over the estimated useful lives using the straight-line method. The estimated useful lives are as follows:

Building, source of supply structures and improvements	5-75 years
Improvements other than buildings	3-75 years
Equipment	3-50 years

Depreciation expense is not reflected for construction in progress until such time as it is placed in service. Assets under capital leases are amortized under the Water Supply Board's normal depreciation policies for similar assets.

Restricted Funds for Construction of Assets

Restricted funds for construction of assets represent unexpended revenue bond proceeds obtained specifically for construction of water facilities, as well as revenues restricted for capital improvements by the PUC. These funds are included in restricted assets.

Capital Contributions

Capital contributions consist of property and equipment paid for by customers for water installations. Once the installation is complete, the property and equipment transfers to the Water Supply Board at fair value.

Impact Fees

The impact fees assessment was established in 1996 when the Water Supply Board acquired the water distribution system in the City of Cranston. As part of the agreement for the acquisition, the Water Supply Board assumed all operation obligation, benefits and assets, and debt service related to the water distribution system, and created an impact fee agreement with the City of Cranston. In accordance with the City of Cranston ordinance, impact fee for the water system improvement must be set aside by the City of Cranston and paid to the Water Supply Board or deducted from the debt services the Water Supply Board pays to the City of Cranston.

The impact fee is assessed by the City of Cranston based on the agreement with the Water Supply Board. If new water systems facilities are required to serve areas where no water system presently exists, the Water Supply Board will collect a subdivision processing fee, and the City of Cranston will collect a water impact fee for the benefit of the Water Supply Board as follows: 1) residential \$1,352 per unit; 2) industrial and commercial \$6,003 per acre. The Water Supply Board in turn agreed to use the said impact fee solely for the purpose of construction of new water system facilities required to serve areas where no water system presently exists. In 2017, the \$75,250 in fees that had been collected was recognized by the Water Supply Board as revenue.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
NOTES TO FINANCIAL STATEMENTS**

Revenues, Operating Revenues and Expenses

Revenues include amounts billed and unbilled to all customers, including those customers outside the City of Providence. All billed charges are based on rates approved by the PUC. Revenues for unbilled amounts to general customers are estimated based on billing amounts subsequent to year end. The Water Supply Board distinguishes operating revenues and expenses from nonoperating. Operating revenues result from charges to customers for water and related services. Operating expenses include the cost of operations, maintenance, sales and service, administrative expenses and depreciation. All revenues and expenses not meeting this definition are reported as nonoperating or capital contributions.

Concentration of Credit Risk

The Water Supply Board's financial instruments that are exposed to concentrations of credit risk consist primarily of accounts receivable. Exposure to losses on receivables is principally dependent on each customer's financial condition. Concentration of credit risk with respect to receivables is limited due to the large number of customers. The Water Supply Board monitors its exposure for credit losses and maintains allowances for anticipated losses.

Use of Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Compensated Absences

Employees accumulate sick leave hours for subsequent use or for payment upon retirement. Sick leave and vacation may be carried forward into the following calendar year, but not to exceed 135 days and 30 days, respectively.

Vested sick leave and accumulated vacation leave are recorded as expenses and liabilities as the benefits accrue to employees.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position can report deferred outflows of resources. Deferred outflow of resources represents a consumption of net position that applies to a future period which will not be recognized as an outflow of resources (expense) until that later date. At June 30, 2017, the Water Supply Board reports deferred outflows related to pension in the statement of net position. A deferred outflow of resources related to pension results from differences between expected and actual experience, changes in assumptions or other inputs. These amounts are deferred and included in pension expense in a systematic and rational manner over a period equal to the average of the expected remaining service lives of all employees that are provided with benefits through the pension plan (active employees and inactive employees).

**PROVIDENCE WATER SUPPLY BOARD
 (AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
 NOTES TO FINANCIAL STATEMENTS**

In addition to liabilities, the statement of net position can report deferred inflows of resources. Deferred inflows of resources represent the acquisition of net position that applies to a future period and which will not be recognized as an inflow of resources (revenue) until a later date. A deferred inflow of resources related to pension results from differences between expected and actual experience, changes in assumptions or other inputs. These amounts are deferred and included in pension expense in a systematic and rational manner over a period equal to the average of the expected remaining service lives of all employees that are provided with benefits through the pension plan (active employees and inactive employees).

2. RESTRICTED ASSETS

The State of Rhode Island enacted the Public Drinking Water Protection Act of 1987 (the Act) that empowers suppliers of public drinking water to levy a surcharge (the surcharge) of one cent (\$0.01) per hundred gallons of water for all customers. The surcharge has been amended several times since 1987. The last increase was on July 1, 2002, when the surcharge increased to \$0.0292 per hundred gallons of water for all customers. Of those collected funds, the Water Supply Board will retain 36.1% of the surcharge in its Water Quality Protection Fund, remit 57.0% to the State Water Resources Board and retain 6.9% for general operations. The funds collected in the Water Quality Protection Fund are to be expended in the following manner:

- at a minimum, 55% of the funds are to be spent for the acquisition of land or land rights or physical improvements to acquired land to protect the quality of the raw water of the water supply system;
- 35% may be used to acquire a fee simple interest or a conservation restriction that directly protects the quality and safety of the public drinking water supply; and
- 0% may be used by the supplier for any purpose relating to its operations.

The restricted investments are pooled with the cash and cash equivalents and investments of other funds maintained by the City of Providence. The earnings from investments are allocated in proportion to each fund's balance.

3. CASH

The following is a summary of cash and investments:

	<u>2017</u>	<u>2016</u>
Cash and cash equivalents	\$ 1,324,140	\$ 2,364,040
Restricted cash and cash equivalents	<u>42,887,926</u>	<u>42,041,914</u>
	<u>\$ 44,212,066</u>	<u>\$ 44,405,954</u>

Responsibility for custodial credit risk of deposits, investment risk, interest rate risk and concentration of investments rests with the City. However, the deposits for the Water Supply Board are supported by collateralization agreements with its main banking institutions. These agreements collateralize the deposits at 102%. Of the cash and cash equivalent balances of \$43,503,382, \$250,000 is covered by Federal Deposit Insurance Corporation (FDIC) insurance and \$1,081,140 is the balance is covered by the collateral agreements.

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4. CAPITAL ASSETS

The following is a summary of the activity in capital assets as of June 30, 2017:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Assets Acquired via Merger</u>	<u>Disposals/ Transfers</u>	<u>Ending Balance</u>
Capital assets not being depreciated:					
Land	\$ 23,836,137	\$ 277,461	\$	\$	\$ 24,113,598
Scituate Reservoir Project	18,681,695				18,681,695
Construction in progress	73,252,031	53,131,450	11,532	40,838,063	85,556,950
Total capital assets not being depreciated	<u>115,769,863</u>	<u>53,408,911</u>	<u>11,532</u>	<u>40,838,063</u>	<u>128,352,243</u>
Capital assets being depreciated:					
Buildings and improvements	103,048,502	14,925,807			117,974,309
Sewer and infrastructure	326,348,497	9,429,143	4,197,491		339,975,131
Equipment	31,999,221	562,893	159,948		32,722,062
Total capital assets being depreciated	<u>461,396,220</u>	<u>24,917,843</u>	<u>4,357,439</u>	<u>-</u>	<u>490,671,502</u>
Less accumulated depreciation for:					
Buildings and improvements	66,803,907	5,146,827			71,950,734
Sewer and infrastructure	122,031,894	4,621,228	733,335		127,386,457
Equipment	28,655,603	559,217	100,380		29,315,200
Total accumulated depreciation	<u>217,491,404</u>	<u>10,327,272</u>	<u>833,715</u>	<u>-</u>	<u>228,652,391</u>
Total capital assets being depreciated, net	<u>243,904,816</u>	<u>14,590,571</u>	<u>3,523,724</u>	<u>-</u>	<u>262,019,111</u>
Capital Assets, Net	<u>\$ 359,674,679</u>	<u>\$ 67,999,482</u>	<u>\$ 3,535,256</u>	<u>\$ 40,838,063</u>	<u>\$ 390,371,354</u>

The following is a summary of the activity in capital assets as of June 30, 2016:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Disposals/ Transfers</u>	<u>Ending Balance</u>
Capital assets not being depreciated:				
Land	\$ 22,613,760	\$ 1,222,377	\$	\$ 23,836,137
Scituate Reservoir Project	18,681,695			18,681,695
Construction in progress	55,087,340	71,876,564	53,711,873	73,252,031
Total capital assets not being depreciated	<u>96,382,795</u>	<u>73,098,941</u>	<u>53,711,873</u>	<u>115,769,863</u>
Capital assets being depreciated:				
Buildings and improvements	84,679,611	18,368,891		103,048,502
Sewer and infrastructure	311,430,903	14,917,594		326,348,497
Equipment	31,586,324	412,897		31,999,221
Total capital assets being depreciated	<u>427,696,838</u>	<u>33,699,382</u>	<u>-</u>	<u>461,396,220</u>
Less accumulated depreciation for:				
Buildings and improvements	61,474,932	5,328,975		66,803,907
Sewer and infrastructure	117,431,723	4,600,171		122,031,894
Equipment	27,911,365	744,238		28,655,603
Total accumulated depreciation	<u>206,818,020</u>	<u>10,673,384</u>	<u>-</u>	<u>217,491,404</u>
Total capital assets being depreciated, net	<u>220,878,818</u>	<u>23,025,998</u>	<u>-</u>	<u>243,904,816</u>
Capital Assets, Net	<u>\$ 317,261,613</u>	<u>\$ 96,124,939</u>	<u>\$ 53,711,873</u>	<u>\$ 359,674,679</u>

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5. LONG-TERM DEBT

Long-term debt activity for the years ended June 30, 2017 and 2016, was as follows:

	2017					Due Within One Year
	Beginning Balance	Additions	Assumption of Debt via Merger	Reductions	Ending Balance	
Bonds payable:						
Revenue bonds	\$ 103,545,212	\$ 16,272,095	\$ 867,462	\$ 3,944,684	\$ 116,740,085	\$ 5,391,621
Long-Term Liabilities	\$ 103,545,212	\$ 16,272,095	\$ 867,462	\$ 3,944,684	\$ 116,740,085	\$ 5,391,621

	2016				Due Within One Year
	Beginning Balance	Additions	Reductions	Ending Balance	
Bonds payable:					
Revenue bonds	\$ 78,174,019	\$ 30,000,000	\$ 4,628,807	\$ 103,545,212	\$ 3,892,845
Long-Term Liabilities	\$ 78,174,019	\$ 30,000,000	\$ 4,628,807	\$ 103,545,212	\$ 3,892,845

The following is a summary of bonds and notes outstanding at June 30, 2017 and 2016:

Description	Amount of Interest Rate (%)	Outstanding June 30, 2017	Outstanding June 30, 2016
Safe Drinking Water Bonds (CWFA FY2002)	3.61%	\$ 783,429	\$ 924,704
Scituate Reservoir Project (PPBA FY 2011)	5.40%	225,688	368,258
Safe Drinking Water Bonds (CWFA FY2008)	2.85%	25,181,000	26,703,000
Safe Drinking Water Bonds (CWFA FY2010)	.0410% to 3.14%	7,062,250	7,458,250
Safe Clean Water Bonds (CWFA FY2012)	.072% to 3.26%	2,492,000	2,621,000
Safe Clean Water Bonds (CWFA FY2013)	.019% - 2.53%	3,662,000	3,842,000
Safe Drinking Water Bonds (CWFA FY2013)	.022% - 2.63%	22,913,000	23,960,000
Safe Drinking Water Bonds (CWFA FY2013)	.022% - 3.01%	7,334,000	7,668,000
Safe Drinking Water Bonds (CWFA FY2015)	.022% - 3.01%	29,999,000	30,000,000
Safe Drinking Water Bonds (CWFA FY2017)	.022% to 1.95%	16,272,095	
East Smithfield Water District DWSRF Bonds Series 2009A (RIIB- FY2009 Bond)	3.51%	187,940	205,836
East Smithfield Water District DWSRF Loan Series 2009A (RIIB- FY2009 Loan)	3.00%	130,000	140,000
East Smithfield Water District DWSRF Bond Series 2014A (RIIB- FY2014 Bond)	1.30% - 3.43%	497,683	521,626

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Scheduled principal maturities of long-term debt are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>ARRA / SRF Principal Forgiveness</u>	<u>Interest and Fees</u>	<u>Total</u>
2018	\$ 5,391,621	\$ (277,765)	\$ 2,917,119	\$ 8,030,975
2019	6,077,425	(327,357)	2,953,432	8,703,500
2020	6,124,590	(333,541)	2,830,469	8,621,518
2021	6,263,502	(341,025)	2,696,875	8,619,352
2022	6,406,834	(348,269)	2,552,819	8,611,384
2023-2027	33,652,289	(1,859,937)	9,699,384	41,491,736
2028-2032	33,276,208	(1,969,833)	5,198,632	36,505,007
2033-2037	<u>19,547,616</u>	<u>(1,109,630)</u>	<u>1,149,422</u>	<u>19,587,408</u>
Total	\$ <u>116,740,085</u>	\$ <u>(6,567,357)</u>	\$ <u>29,998,153</u>	\$ <u>140,170,881</u>

6. TRANSACTIONS WITH CITY OF PROVIDENCE, RHODE ISLAND

The City of Providence performs various services for the Water Supply Board including certain accounting, personnel and cash management services and working capital support. The total billing to the Water Supply Board for services performed amounted to \$839,167 for each of the years ended June 30, 2017 and 2016. This amount is established by the City, approved by the Water Supply Board and ultimately approved by the PUC. The Water Supply Board also provides services to various City funds and departments, the charges for which have been included as revenue in the accompanying financial statements. Included within the due to City of Providence General Fund balance on the statements of net position are the related balances due for the services described above. The balance also includes payments for pension and post-employment benefits. The total balance due to the City of Providence General Fund at June 30, 2017 and 2016, totaled \$743,174 and \$643,624, respectively.

7. LINE OF CREDIT

The Water Supply Board opened a line of credit with Century Bank of \$5,000,000 in 2013. This line of credit is used for infrastructure replacement and renewed annually per the agreement terms. The balance as of June 30, 2017 and 2016 was \$-0-.

8. COMMITMENTS AND CONTINGENCIES

Risk Management

The Water Supply Board has a complete comprehensive insurance program protecting all facilities, employees and liability claims.

The Water Supply Board is subject to various claims and litigation that arise in the ordinary course of its operations. Legal counsel and management are of the opinion that the Water Supply Board's liabilities in such cases, if decided adversely to the Water Supply Board, would not materially affect the financial statements.

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Union Contract

The labor force of the Water Supply Board, with the exception of management, is covered by a union contract, which is effective for the period July 1, 2016 to June 30, 2018.

Lead Service Replacement Program

The Environmental Protection Agency (EPA) Lead and Copper Rule (the Rule) requires that systems monitor drinking water at the customer tap. In accordance with the Rule, if after corrosion control optimization is implemented, lead concentrations exceed an action level of 15 ppb in more than 10% of customer taps sampled, the system is required to replace lead service lines under its ownership. The regulations require that the utility must replace annually 7% of the total amount of lead services in the system. In accordance with EPA requirements, the Rhode Island Department of Health (RIDOH) found that the Water Supply Board exceeded the lead action level on September 30, 2006 (the date of conclusion of that monitoring period) and was required to begin the annual replacement of 7% of its 25,600 lead services. Because of lead-time in gearing up for an undertaking of this magnitude, RIDOH and the Water Supply Board agreed to a compliance schedule that fulfilled the intent of the regulation whereby 14% of the lead services were to be replaced over the two-year period ending September 30, 2008 and 7% annually thereafter.

By September 2010, the Water Supply Board exceeded the lead service replacement requirement by over 2,200 services and as a result of being approximately one year ahead of the regulatory required pace, we were informed by RIDOH that the mandated replacements of lead service could be suspended until October 2011.

During this period, various concerns were raised about the effectiveness of partial lead service replacements, the persistence of lead levels in the water, and the difficulty of finding a proven solution for reducing the levels. In June 2012 the RIDOH, in concert with the EPA, agreed to enter into a consent agreement with the Water Supply Board, which granted a stay of the lead service replacement requirement for construction season 2012. As part of the agreement, RIDOH and the EPA required that the Water Supply Board convene a panel of national water quality experts, to include regulators, water professionals and members of academia, to recommend studies and/or treatment modifications with the objective of reducing lead levels in the water. In 2013, the Water Supply Board was granted a stay of the lead services replacement requirement for the 2013 construction season.

In April 2014, RIDOH granted the Water Supply Board a stay of the lead service replacement requirement for the 2014 construction season. By consent order the City of Providence is required to:

1. Continue with the consultation with its expert panel to evaluate corrosion control treatment in the system.
2. Conduct studies to examine alternative treatment schemes for optimization of corrosion control.
3. Continue a unidirectional flushing program.
4. Continue to rehabilitate and replace unlined cast iron mains that are usually found to be problematic in terms of both water quality and delivery capacity.

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Even though the lead service replacement program is temporarily suspended, lead services are still replaced in conjunction with the water main replacement program. Lead services are also replaced on an ongoing basis where customers are voluntarily replacing their private side lead services. Lead services continue to be replaced in areas of local and state road resurfacing projects, and on projects initiated by private or outside entities. The Water Supply Board's own crews replace lead services that are found to be leaking. The replacement work is subject to all of the EPA regulatory notification, testing and reporting requirements.

Since inception of the reporting of the IFR program and the lead service replacement program to the RIPUC (July 1, 1996), the Water Supply Board has replaced 17,456 lead services to the end of fiscal year 2017 (June 30, 2017) at a cost of \$56,316,773.

9. DEFINED BENEFIT PENSION PLANS

Substantially all employees of the Water Supply Board participate in the Employees' Retirement System of the City of Providence (ERS or the Plan), a defined-benefit, single-employer plan. Water Supply Board employees participating in the Plan are eligible to retire at age 55 if hired prior to July 1, 2004, at age 60 if hired between July 1, 2004 and June 30, 2009, at age 62 with 10 years of service if hired on or after July 1, 2009 or at any age after 25 years of service if hired prior to July 1, 1995, or at any age after 30 years of service if hired on or after July 1, 1995. The total retirement allowance is equal to an annuity, which is the actuarial equivalent of accumulated contributions at the time of retirement, plus a pension, which when added together either; 1) equals 1/40 of final compensation for each year of total service up to 20 years and 1/50 of final compensation for each year of service in excess of 20 years if hired prior to July 1, 1996 or; 2) equals 1/50 of final compensation for each year of total service credited if hired on or after July 1, 1996. These benefit provisions and all other requirements are established by City ordinance.

ERS is governed by an Employee Retirement Board provided by the Providence Home Rule Charter. The ERS consists of elected officials, management and employee representation and provides for establishing rules and regulations and is responsible for the administration and operation of the City employee retirement system. The Board has the discretion and authority to interpret the Plan and to determine the eligibility and benefits of participants and beneficiaries pursuant to the provisions of the Plan. On all such matters, the decision of a majority of the then members of the Board shall govern and be binding upon the employer, participants and beneficiaries.

Membership of the ERS plan for the Water Supply Board consisted of the following at June 30, 2017, the date of the latest actuarial valuation:

Inactive plan members or beneficiaries currently receiving benefits	167
Inactive employees entitled to but not yet receiving benefits	27
Active employees	236
 Total	 430

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The Plan's investment policy in regard to the allocation of invested assets is established and may be amended by the City. It is the policy of the City to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension Plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the asset allocation as of June 30, 2017:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic equity	39.25%
International developed markets equity	13.25
International emerging markets equity	1.50
Core fixed income	29.00
Hedge fund, GTAA, risk parity	13.00
Private equity	4.00
	<u>100.00%</u>

The total pension liability was determined by an actuarial valuation as of June 30, 2016 and rolled forward to June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50%
Salary increases	3.50% per year, before reflecting increases due to longevity
Investment rate of return	8.00%, net of pension plan investment expense, including inflation

For the year ended June 30, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 12.2%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The long-term expected rate of return on Plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target allocation as of June 30, 2017 are summarized as follows:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity	39.25%	6.44%
International developed markets equity	13.25	7.40
International emerging markets equity	1.50	9.42
Core fixed income	29.00	2.02
Hedge fund, GTAA, Risk parity	13.00	3.75
Private equity	4.00	10.47
	<u>100.00%</u>	

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Contributions

Class A members and police officers are required to contribute 8% of their salary to the Plan. Class B members, other than police officers, are required to contribute 9.5% of their salary to the Plan. Water Supply Board employees are Class A members. The Mayor and City Council contribute to the Plan at a rate of \$350 per year. Additionally, the City shall contribute from time to time amounts sufficient with the contributions of elected officials to provide the special pensions granted to them. The Water Supply Board's contributions to the ERS for the years ended June 30, 2017, 2016 and 2015 were \$3,636,754, \$3,615,102 and \$3,212,354, respectively.

Investment Policy

The City policy for pension investments is under the oversight of the Board of Investment Commissioners (the Board). The Board contracts with an investment advisory firm and approves any new investment vehicles presented by the consultant. The Board follows all applicable state statutes and Section 17-189 of the City Ordinance, which states, "The Board of Investment Commissioners is authorized and empowered to execute the disposition and investment of the funds which are within its control in any securities and investments as would be acquired by prudent persons of discretion and intelligence in these matters, who are seeking a reasonable income and the preservation of their capital."

Net Pension Liability

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.

The components of the net pension liability of the Retirement System for the Water Supply Board were as follows:

	June 30, 2017	June 30, 2016
Total pension liability	\$ 67,816,389	\$ 67,406,877
Plan fiduciary net position	<u>17,513,845</u>	<u>17,040,995</u>
Net Pension Liability	<u>\$ 50,302,544</u>	<u>\$ 50,365,882</u>
Plan fiduciary net position as a percentage of the total pension liability	25.83%	25.28%

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Changes in the Net Pension Liability for the Water Supply Board

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances as of June 30, 2016	\$ 67,406,877	\$ 17,040,995	\$ 50,365,882
Changes for the year:			
Service cost	1,017,119		1,017,119
Interest on total pension liability	5,172,289		5,172,289
Differences between expected and actual experience	579,761		579,761
Change from inputs in proportionate share	(1,181,115)	(298,595)	(882,520)
Employer contributions		3,636,754	(3,636,754)
Member contributions		573,624	(573,624)
Net investment income		1,752,168	(1,752,168)
Benefit payments, including refund to employee contributions	(5,178,542)	(5,178,542)	-
Administrative expenses		(12,559)	12,559
Net Changes	<u>409,512</u>	<u>472,850</u>	<u>(63,338)</u>
Balances as of June 30, 2017	<u>\$ 67,816,389</u>	<u>\$ 17,513,845</u>	<u>\$ 50,302,544</u>

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances as of June 30, 2015	\$ 60,131,939	\$ 16,863,406	\$ 43,268,533
Changes for the year:			
Service cost	941,053		941,053
Interest on total pension liability	5,130,041		5,130,041
Differences between expected and actual experience	(223,279)		(223,279)
Change from inputs in proportionate share	3,875,236	1,086,733	2,788,503
Effect of assumptions changes or inputs	3,083,805		3,083,805
Employer contributions		3,615,102	(3,615,102)
Member contributions		615,760	(615,760)
Net investment income		401,320	(401,320)
Benefit payments, including refund to employee contributions	(5,531,918)	(5,531,918)	-
Administrative expenses		(9,408)	9,408
Net Changes	<u>7,274,938</u>	<u>177,589</u>	<u>7,097,349</u>
Balances as of June 30, 2016	<u>\$ 67,406,877</u>	<u>\$ 17,040,995</u>	<u>\$ 50,365,882</u>

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Additional information as of the latest actuarial valuation follows:

Valuation Date	July 1, 2016
Actuarial cost method	Individual entry age method
Amortization cost method	Approximate level percent of payroll-open
Remaining amortization period	25 years
Asset valuation method	5-year smoothed market value
Actuarial assumptions: Investment rate of return	8.0%
Inflation rate	3.5%
Projected salary increases	3.5% per year before reflecting increases due to longevity compensation
Cost of living adjustments	No COLA for next 7 years, 3% thereafter

Mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table for Males or Females, as appropriate, with no assumed pre-retirement mortality or turnover.

Mortality rates for healthy retirees were based on RP-2014 Employee and Healthy Annuitant Mortality Tables with MP-2014 improvement projections backed out to a base year of 2006 and projected generationally with Scale BB2D, set forward 1-year post-retirement for Class A employees and the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables with MP-2014 improvement projections based out to a base year of 2006 and projected generationally with Scale BB2D, set forward 1-year post-retirement for Class B employees. Disabled retiree mortality rates were based on RP-2014 Blue Collar Healthy Annuitant Mortality Table with MP-2014 improvement projections backed out to a base year of 2006 and projected generationally with Scale BB2D, set forward 3 years.

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2017 was 8.00%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that the City of Providence’s contributions will be made at the actuarially determined contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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

The following presents the net pension liability of the Retirement System, calculated using the discount rate of 8.00%, as well as what the System’s net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate at June 30, 2017:

	<u>1% Decrease (7.00%)</u>	<u>Discount (8.00%)</u>	<u>1% Increase (9.00%)</u>
Net pension liability	\$ 57,842,478	\$ 50,302,544	\$ 43,990,393

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The following presents the net pension liability of the Retirement System, calculated using the discount rate of 8.00%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate at June 30, 2016:

	<u>1% Decrease (7.00%)</u>	<u>Discount (8.00%)</u>	<u>1% Increase (9.00%)</u>
Net pension liability	\$ 57,962,738	\$ 50,365,882	\$ 44,011,621

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

For the years ended June 30, 2017 and 2016, the Water Supply Board recognized pension expense of \$5,294,710 and \$5,698,801, respectively.

At June 30, 2017, the Water Supply Board reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 496,962	\$ 131,620
Changes of assumptions	1,834,758	
Changes in proportion and differences between employer contributions and proportionate share of contributions	1,868,314	654,965
Net difference between projected and actual earning on pension plan investments	<u>539,157</u>	
	<u>\$ 4,739,191</u>	<u>\$ 786,585</u>

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At June 30, 2016, the Water Supply Board reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 50,616	\$ 178,623
Changes of assumptions	2,492,840	
Changes in proportion and differences between employer contributions and proportionate share of contributions	2,528,207	
Net difference between projected and actual earning on pension plan investments	<u>1,277,011</u>	
	<u>\$ 6,348,674</u>	<u>\$ 178,623</u>

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

Year Ending June 30:

2018	\$ 1,462,683
2019	1,462,681
2020	1,165,433
2021	<u>(138,191)</u>
	<u>\$ 3,952,606</u>

Payable to the Plan

At June 30, 2017, the Water Supply Board had made full payment of the required pension contribution for the year ended June 30, 2017.

10. POST EMPLOYMENT BENEFITS

Plan Description

The Water Supply Board's Post-Employment Medical Benefit Plan is a single-employer defined benefit postretirement health insurance program administered by the City. The City provides for a portion of the lifetime health care benefits to substantially all retired employees and their spouses. Health care benefits are provided through the City's self-insured health insurance program covering both active and retired employees. The Plan does not issue a separate financial report. These benefits are provided for and amended under various provisions of Rhode Island General Law, City Ordinances and the terms of collective bargaining agreements.

**PROVIDENCE WATER SUPPLY BOARD
 (AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
 NOTES TO FINANCIAL STATEMENTS**

OPEB Funding Policy

The contribution requirements of plan members and the City are established and may be amended through provisions of Rhode Island General Law, City Ordinances and through collective bargaining. The required contribution is based on pay as you go financing requirements. The Plan can cover 100% of the costs of the benefit; however, retirees and their spouses are potentially required to fund a portion of the Plan costs depending upon the class an employee has been assigned and their date of hire. Current employee co-share for the retiree health insurance benefit requires a co-share of .01 of final average salary with a maximum limit of \$400.

The following is a current census of the Water Supply Board participants as of July 1, 2016:

Active members	208
Retirees	<u>125</u>
Total	<u><u>333</u></u>

Annual OPEB Cost and Net OPEB Obligation

The Water Supply Board's annual OPEB cost is calculated based on the annual required contribution (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of occurrence of future events. Assumptions include future employment, mortality, and healthcare and other benefit cost trends. Amounts determined regarding the funded status of the Plan and the annual required contributions of the employer are subject to continual revision as accrual results are compared with past expectations and new estimates are made about the future.

The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following table shows the components of the Water Supply Board's annual OPEB cost for the year, the amount actually contributed to the plan and changes in the Water Supply Board's net OPEB obligation:

Annual required contribution	\$ 1,326,000
Interest on net OPEB obligation	314,000
Adjustment to annual required contribution	<u>(286,000)</u>
Annual OPEB cost	1,354,000
Contributions made	<u>581,000</u>
Increase in net OPEB obligation	773,000
Net OPEB obligation - beginning of year	<u>7,858,000</u>
Net OPEB Obligation - End of Year	<u><u>\$ 8,631,000</u></u>

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
NOTES TO FINANCIAL STATEMENTS**

The Water Supply Board's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for June 30, 2015, 2016 and 2017 were is presented below:

<u>Year Ended June 30,</u>	<u>Annual Required Contribution</u>	<u>Actual Contribution</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
2017	\$ 1,326,000	\$ 581,000	43.8%	\$ 8,631,000
2016	1,841,000	678,000	36.8%	7,858,000
2015	1,774,000	507,000	28.6%	6,671,000

Projections of the benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the June 30, 2016 actuarial valuation, the projected unit credit method was used. The actuarial assumptions included a 4.0% rate of return (net of administrative expenses), which is a blended rate of the expected long-term investment returns on plan assets and on the employer's own investments calculated based on the funded level of the plan at the valuation date, and an annual healthcare cost trend rate of 7.5% initially, reduced by decrements of .5% to an ultimate rate of 4.5% after six years. Both rates included a 3.5% inflation assumption. The actuarial value of the assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five-year period. The UAAL is being amortized as a level percentage of projected payrolls on an open basis. The remaining amortization period at June 30, 2016, was 30 years.

The Water Supply Board's share of annual funding progress is presented below:

Share of Amortization Component:	
Actuarial Accrued Liability as of July 1, 2016	\$ 17,887,885
Assets at Market Value	-
Unfunded Actuarial Accrued Liability (UAAL)	<u>\$ 17,887,885</u>
Funded Ratio	<u>0.00%</u>
Covered Payroll	<u>\$ 12,504,937</u>
UAAL as a Percentage of Covered Payroll	<u>143.05%</u>

The historical schedules of employer contributions and funding progress for the Program are included in the City of Providence, Rhode Island's basic financial statements.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
NOTES TO FINANCIAL STATEMENTS**

11. MERGER

On January 13, 2017, the Providence Water Supply Board and the East Smithfield Water District combined in a government merger. Subsequent to the merger, the East Smithfield Water District ceased to exist, and their operations have been absorbed into, and provided by, the Providence Water Supply Board. The initial opening balances of East Smithfield Water District's assets, deferred outflows of resources, liabilities, deferred inflows of resources and net position, as of the beginning of the period, were determined on the basis of the carrying values reported in the separate financial statements of East Smithfield Water District as of June 30, 2016, as follows:

Assets:		Liabilities:	
Current assets:		Current liabilities:	
Cash and cash equivalents	\$ 177,367	Accounts payable and accrued liabilities	142,875
Restricted cash and cash equivalents	2,789	Current portion of long-term notes payable	51,839
Receivables, net	354,951	Total current liabilities	<u>194,714</u>
Inventories	47,678		
Total current assets	<u>582,785</u>	Noncurrent liabilities:	
		Notes payable, net	<u>815,623</u>
Capital assets:		Total liabilities	<u>1,010,337</u>
Sewer and infrastructure	4,168,626		
Equipment	188,813	Deferred Inflows of Resources:	
Construction in progress	11,532	Changes in pension plan assumptions	<u>9,496</u>
	<u>4,368,971</u>		
Less accumulated depreciation	833,715	Net Position:	
Total noncurrent assets	<u>3,535,256</u>	Net investment in capital assets	2,667,794
		Restricted for net pension asset	113,716
Other assets:		Restricted for qualified assistance fund	2,789
Net pension asset	<u>113,716</u>	Unrestricted	<u>442,681</u>
		Total Net Position	<u>\$ 3,226,980</u>
Total assets	<u>4,231,757</u>		
Deferred Outflows of Resources:			
Differences between expected and actual experience	11,011		
Net difference between projected and actual earnings on pension plan investments	699		
Contributions made subsequent to the measurement date	3,346		
Total deferred outflows of resources	<u>15,056</u>		

12. SUPPLEMENTAL DISCLOSURES TO STATEMENTS OF CASH FLOWS

There was no cash paid in exchange for the assets and liabilities of the East Smithfield Water District acquired by the Water Supply Board during the fiscal year ended June 30, 2017 (See Note 11).

**PROVIDENCE WATER SUPPLY BOARD
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
LAST FOUR FISCAL YEARS***

	2017	2016	2015	2014
Total pension liability:				
Service cost	\$ 1,017,119	\$ 941,053	\$ 854,182	\$ 893,162
Interest	5,172,289	5,130,041	5,509,989	4,946,549
Differences between expected and actual experience	579,761	(223,279)	79,253	
Change from difference in proportionate share	(1,181,115)	3,875,236		
Changes of assumptions	(5,178,542)	3,083,805	40,391	(4,973,233)
Benefit payments, including refunds of member contributions	409,512	(5,531,918)	(4,663,093)	866,478
Net change in total pension liability	67,406,877	7,274,938	1,820,722	866,478
Total pension liability - beginning	67,816,389	60,131,939	58,311,217	57,444,739
Total pension liability - ending	<u>67,816,389</u>	<u>67,406,877</u>	<u>60,131,939</u>	<u>58,311,217</u>
Plan fiduciary net position:				
Contributions - employer	3,636,754	3,615,102	3,212,354	2,945,209
Contributions - member	573,624	615,760	1,037,505	911,508
Net investment income	1,752,168	401,320	331,724	1,210,438
Change from difference in proportionate share	(298,595)	1,086,733		
Benefit payments, including refunds of member contributions	(5,178,542)	(5,531,918)	(4,663,093)	(4,973,233)
Administrative expense	(12,559)	(9,408)	(9,367)	(71,955)
Net change in plan fiduciary net position	472,850	177,589	(90,877)	21,967
Plan fiduciary net position - beginning	17,040,995	16,863,406	16,954,283	16,932,316
Plan fiduciary net position - ending	<u>17,513,845</u>	<u>17,040,995</u>	<u>16,863,406</u>	<u>16,954,283</u>
Net Pension Liability - Ending	<u>\$ 50,302,544</u>	<u>\$ 50,365,882</u>	<u>\$ 43,268,533</u>	<u>\$ 41,356,934</u>
Plan fiduciary net position as a percentage of the total pension liability	25.83%	25.28%	28.04%	29.08%
Covered-employee payroll	\$ 12,980,186	\$ 13,096,208	\$ 11,900,000	\$ 11,900,000
Net pension liability as a percentage of covered-employee payroll	387.53%	384.58%	363.60%	347.54%

***Notes:**

1. The amounts presented for each fiscal year were determined as of a June 30 measurement date prior to the fiscal year end.
2. This schedule is intended to show information for 10 years - additional years will be displayed as they become available.

PROVIDENCE WATER SUPPLY BOARD
 SCHEDULE OF EMPLOYER CONTRIBUTIONS
 LAST FOUR FISCAL YEARS*

	2017	2016	2015	2014
Actuarially determined contribution	\$ 3,636,754	\$ 3,615,102	\$ 3,212,354	\$ 2,945,209
Contributions in relation to the actuarially determined contribution	3,636,754	3,615,102	3,212,354	2,945,209
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 12,980,186	\$ 13,096,208	\$ 12,930,447	\$ 11,900,000
Contributions as a percentage of covered-employee payroll	28.02%	27.60%	24.84%	24.75%

Notes to Schedule

Valuation date: July 1, 2016
 Measurement date: June 30, 2017
 Actuarially determined contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported

Methods and assumptions used to determine contribution rates:
 Actuarial cost method: Entry Age Normal Cost Method
 Amortization method: Level dollar for the 1995 deferral liability and increasing 3.5% per year for the remaining unfunded liability. 26 years remaining as of July 1, 2014 (17 years remaining as of July 1, 2014 for the 1995 deferral).
 Remaining amortization period: Market value of assets as reported by the City less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected market return and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.

Inflation: 3.50%
 Salary increases: 3.50% per year before reflecting increases due to longevity compensation
 Investment rate of return: 8.25%, net of pension plan investment and administrative expenses, including inflation.
 Cost of living adjustments: 10-year freeze as of January 1, 2013 and 3% thereafter.
 Benefit changes: There have been no changes in benefit provisions since GASB 67/68 implementation.
 Assumption changes: The following changes were effective July 1, 2015:
 The investment return assumption was lowered from 8.25% to 8.00%.
 The mortality assumption for Class A nondisabled participants was changed from the RP-2000 Combined Healthy Mortality Table projected 21 years with Scale AA to the RP-2014 Employee and Healthy Annuitant Mortality Tables with MP-2014 improvement projections backed out to a base year of 2006 and projected generationally with Scale BB2D, set forward one year post-retirement.

The mortality assumption for Class B nondisabled participants was changed from the RP-2000 Combined Healthy Blue Collar Mortality Table projected 21 years with Scale AA to the REP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables with MP-2014 improvement projections backed out to a base year of 2006 and projected generationally with Scale BB2D, set forward one year post-retirement.
 The mortality assumptions for disabled participants was changed from the RP-2000 Combined Healthy Mortality Table set forward three years to the RP 2014 Blue Collar Healthy Annuitant Mortality Table with MP-2014 improvement projections backed out to a base year of 2006 and projected generationally with Scale BB2D, set forward three years.

*Note - This schedule is intended to show information for ten years - additional years will be displayed as they become available.

**PROVIDENCE WATER SUPPLY BOARD
 SCHEDULE OF INVESTMENT RETURNS
 LAST FOUR FISCAL YEARS***

	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	12.20%	2.60%	5.56%	14.04%

***Notes:**

1. The amounts presented for each fiscal year were determined as of a June 30 measurement date prior to the fiscal year end.
2. This schedule is intended to show information for 10 years - additional years will be displayed as they become available.

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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 Board of Directors
Providence Water Supply Board

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 the Providence Water Supply Board (the Water Supply Board), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Water Supply Board's basic financial statements, and have issued our report thereon dated December 29, 2017.

Internal Control over Financial Reporting

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

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Water Supply Board'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 result of that testing, and not to provide an opinion on the effectiveness of the Water Supply Board'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 Water Supply Board's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Blum, Shapiro & Company, P.C.

Cranston, Rhode Island
December 29, 2017