

APPLICATION OF

THE PROVIDENCE WATER SUPPLY BOARD FOR

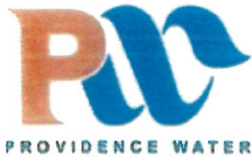
AUTHORITY TO BORROW FROM THE DRINKING WATER

STATE REVOLVING FUND IN AN AMOUNT OF UP TO

\$1,000,000

February 2018

D-18-_____



February 9, 2018

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
\$1,000,000 from the RIIB Docket No. D-18-_____

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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 \$1,000,000 from the RI Infrastructure Bank.

The enclosed application does not include the Department of Health's rules and regulations for the Drinking Water State Revolving Fund or the RI Infrastructure Bank loan policies and procedures. However, we will provide these items if the Division so advises.

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

An EPA WaterSense Partner

(401) 521-6300

125 Dupont Drive
Providence, RI 02907

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cc: R. Caruolo
G. Giasson
P. Pallozzi
M. Deignan-White
K. Grande, Esq.
M. McElroy, Esq.
L. Wold, 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 up to \$1,000,000

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STATE OF RHODE ISLAND
DIVISION OF PUBLIC UTILITIES AND CARRIERS

IN RE: PROVIDENCE WATER SUPPLY BOARD

DOCKET NO. D-18-__

R.I.G.L. § 39-3-15
APPLICATION OF THE PROVIDENCE WATER SUPPLY BOARD
FOR AUTHORITY TO BORROW FROM
THE RHODE ISLAND CLEAN WATER FINANCE AGENCY
IN AN AMOUNT NOT TO EXCEED \$1,000,000

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

1. The PW 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 Rhode Island Infrastructure Bank in an amount not to exceed \$1,000,000 for the Providence Water Private Side Lead Service Replacement Loan Program with an interest rate not to exceed 0%.
3. The borrowing will be provided by the RI Infrastructure Bank, pursuant to a resolution of the Providence Water Supply Board dated November 15, 2017.
4. The loan will be secured by repayments of loans made to Providence Water by customers participating in the Providence Water Private Side Lead Service Replacement Loan Program, deposited as revenue into the Providence Water Restricted Fund.
5. The borrowing may reimburse Providence Water for project costs incurred from inception of the project until actual funding date.
6. 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., Deputy General Manager/Executive Engineer and Nancy Parrillo, Senior Manager - Finance .
7. 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 the borrowing from the Rhode Island Infrastructure Bank in an amount not to exceed \$1,000,000.

PROVIDENCE WATER SUPPLY BOARD

BY: 
Ricky ~~Canolo~~
GENERAL MANAGER

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

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

Notary Public 
757383
My Commission Expires: 12/11/18

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 not to exceed \$1,000,000, 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: Leo Wold, Esq., Chief of the Regulatory Unit, on February 9, 2018.

A handwritten signature in black ink, appearing to read "Mary L. Deignan-White", with a long horizontal line extending to the right.

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-18-_____

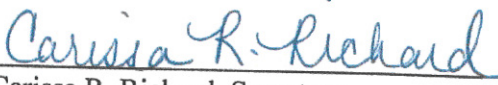
STATEMENT IN ACCORDANCE WITH R.I.G.L. § 39-3-17

Xaykham Khamsyvovong, 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 up to One Million dollars (\$1,000,000).
2. The debt will be incurred primarily for the purpose of supporting the Providence Water Private Side Lead Service Replacement Loan Program.
3. The total estimated project costs including cost of issuance, loan origination, etc., that will be borrowed are not to exceed One Million dollars (\$1,000,000).
4. Attached hereto is the latest Audited Financial Statement of the Providence Water Supply Board, showing the assets and liabilities of the utility.



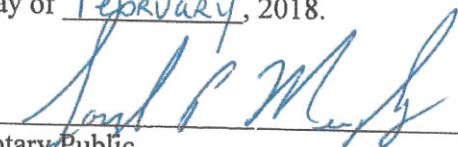
Xaykham Khamsyvovong, Chairman



Carissa R. Richard, Secretary

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

Subscribed and sworn before me this 2nd day of February, 2018.



Notary Public
My Commission Expires: 4-7-18

PROVIDENCE WATER SUPPLY BOARD

Testimony of Nancy E. Parrillo

Before the

RI Division of Public Utilities and Carriers

In support of Providence Water Supply Board's

APPLICATION FOR AUTHORIZATION TO BORROW UP TO
\$1,000,000 FROM THE
RHODE ISLAND INFRASTRUCTURE BANK

February, 2018

Docket No. D-18- _____

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 recently was 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 \$1
21 million from the Rhode Island Infrastructure Bank (RIIB).

22 **Q. What is the purpose for the borrowing?**

1 A. The funds will be used to supplement Providence Water's Private Side Lead Service
2 Replacement Loan Program that was endorsed by the RI Public Utilities Commission
3 (PUC) in its approval of new rates in Docket 4618 finalized in February of 2017.

4 **Q. Please describe this loan program.**

5 A. This loan program is being offered by Providence Water to its customers that are interested
6 in replacing their private side lead service. These will be zero interest loans to the customer
7 with a 3-year repayment schedule.

8 **Q. Who qualifies for these types of loans?**

9 A. Any Providence Water customer wishing to participate in the program.

10 **Q. How does this borrowing from the RIIB correlate with these customer loans?**

11 A. In Docket 4618 that concluded in February of 2017, the PUC approved \$250,000 (per year)
12 in rates to establish a loan program. However, the average cost of replacing a private side
13 lead service is approximately \$2,500. The funding allowed through rates would limit the
14 accessibility to the program to only approximately 70-75 customers per year. The \$1
15 million from the RIIB would allow us to replace additional private side lead services.

16 **Q. What are the terms of the loan from the RIIB?**

17 A. This loan will be a zero interest loan to Providence Water. Debt service payments will be
18 calculated based on requisitions to RIIB for work performed each time requisitions are
19 submitted. Submissions are scheduled on a quarterly basis.

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

21 A. The source of funds for the repayment of the loan will be the repayments by the customers
22 to Providence Water.

23 **Q. Are these funds held separately from Providence Water's Operating Fund?**

1 A. Yes, they are. 1/12th of the \$250,000 allowed in rates is transferred to a separate account
2 at Citizens each month. The funds from this RIIB loan will reimburse Providence Water
3 for the work performed by the contractors on the private side lead services. As the
4 customers repay their loans, the monies will be deposited into this bank account and be
5 available for the repayment of the RIIB debt service.

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

7 A. There will be no impact to the ratepayers as the debt service on the RIIB loan will be repaid
8 with the repayments from the customers in the loan program.

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

10 A. The loans will be secured by a revenue pledge by the Providence Water Enterprise Fund
11 Revenues, specifically the repayments from the customers involved in the loan program.

12 **Q. What recourse does Providence Water have if the customer defaults on the
13 repayments?**

14 A. Providence Water has the authority to place the property into a lien sale to recover any
15 unpaid balance.

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

18 A. Yes, attached as **Exhibit I** is an executed copy of a resolution of the Providence Water
19 Supply Board stating that at the November 15, 2017 Board Meeting, the Board authorized
20 the General Manager to seek approval of the Providence City Council for financing from
21 the RI Infrastructure Bank for an amount not to exceed \$1 million. The Ordinance
22 approving this borrowing has appeared on the City Council agenda and is working its way

1 through the approval process. A copy of the draft Ordinance is included here. Please See
2 **Exhibit II.** The final Ordinance will be forwarded once executed.

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

6 Yes, a present and proforma capital structure showing the effects of the bond issue is shown
7 in **Exhibit III.** Our projected debt to net property, plant and equipment (“debt to plant”)
8 with this issue would be 30.15% (This percentage reflects capitalized assets through June
9 30, 2017.). Our financial advisor has indicated that rating agencies consider a ratio of debt
10 to plant less than 40% to be low (i.e. good) and of 40% to 60% to be moderate.

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

13 A. Yes. Please see **Exhibit IV.**

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

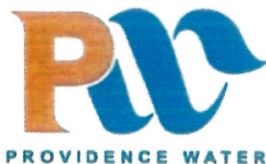
16 A. Yes. The Certificate of Approval was received from the RI Department of Health on
17 August 11, 2017. It is attached as **Exhibit V.**

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

19 A. Yes. This loan program has commenced at Providence Water and there are customers
20 signed up for the work to be done and we expect more to apply. This loan will hopefully
21 allow Providence Water to accommodate all customers that are interested.

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

23 A. Yes.



**RESOLUTION
OF THE
PROVIDENCE WATER SUPPLY BOARD**

A Resolution of the City of Providence Water Supply Board authorizing the General Manager to petition the Division of Public Utilities and Carriers to authorize long term borrowing and to provide an effective date.

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

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

BOARD OF DIRECTORS

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Cristen L. Raucci, Esq.
Member
Kerri Lynn Thurber
Member
Carissa R. Richard
Secretary
William E. O'Gara, Esq.
Legal Advisor

WHEREAS, the Board desires to make certain expenditures related to the Private Side Lead Service Replacement Loan Program (the "Program"); and

WHEREAS, it is the intent of the Board to borrow funds in an amount not to exceed one million dollars (\$1,000,000) for the Program.

NOW, THEREFORE, BE IT RESOLVED:

❖ That the Board authorizes the General Manager to petition the Division of Public Utilities and Carriers to authorize long term borrowing, and to authorize the City and the Board to borrow through the Rhode Island Infrastructure Bank and/or any other funding avenues for the Program.

❖ 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 November 15, 2017 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.
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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

No. **AN ORDINANCE OF THE CITY OF PROVIDENCE APPROVING CONTRACTUAL ARRANGEMENTS WITH THE RHODE ISLAND INFRASTRUCTURE BANK ("RIIB") FOR RIIB TO PROVIDE UP TO \$1,000,000 IN FUNDING FOR A LOAN PROGRAM FOR OWNERS' LEAD SERVICE LINE REPLACEMENTS AND APPROVING THE FINANCING THEREOF BY THE ISSUANCE OF WATER REVENUE BONDS AND NOTES THEREFOR IN AN AMOUNT NOT TO EXCEED \$1,000,000**

Be it ordained by the City of Providence:

BE IT ORDAINED BY THE CITY OF PROVIDENCE THAT:

SECTION 1. A sum not to exceed One Million Dollars (\$1,000,000) is appropriated to fund a loan program for owners' lead service line replacements. The period of usefulness of the improvements financed is expected to be not less than forty (40) years.

SECTION 2. To provide funding for the loan program, 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 One Million Dollars (\$1,000,000) 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 One Million Dollars (\$1,000,000) 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 \$1,000,000 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, to the extent that such Bonds or Notes may be issued on a tax-exempt basis, 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.

EXHIBIT III

**PROVIDENCE WATER
CAPITALIZATION
6/30/2017**

		<u>Due</u>	<u>Interest Rate</u>	<u>Actual Outstanding (1)</u>	<u>Pro-Forma Amount</u>
<u>Long Term Debt:</u>					
RIIB Revenue Bonds 2002	(2)	9/1/2021	3.61%	\$ 783,428	\$ 783,428
RIIB Revenue Bonds 2008A	(3)	9/1/2029	2.85%	25,181,000	25,181,000
ARRA Stimulus Bonds 2009	(4)	10/2/2015-9/1/30	.041 - 3.14%	7,062,250	7,062,250
RIIB Watershed Bonds 2012	(5)	9/1/2032	.012 - 3.24%	2,492,000	2,492,000
RIIB Watershed Bonds 2013	(6)	9/1/2033	.019 - 2.53%	3,662,000	3,662,000
RIIB Revenue Bonds 2013	(7)	9/1/2034	.022 - 2.63%	22,913,000	22,913,000
RIIB Revenue Bonds 2014	(8)	9/1/2034	.022 - 3.01%	7,334,000	7,334,000
RIIB Revenue Bonds 2015	(10)	9/1/2035	.024 - 2.74%	29,999,000	30,000,000
RIIB Revenue Bonds 2017	(11)			16,272,095	17,000,000
RIIB Revenue Bonds 2018	(12)			1,000,000	1,000,000
Debt Assumed by PWSB in ESWD merger				902,000	902,000
Total Bonds				\$ 117,600,773	\$ 118,329,678
Total Capitalization				\$ 117,600,773	\$ 118,329,678
Total Assets (Unaudited)	(9)			\$ 450,734,333	\$ 450,734,333
Debt/Total Assets				26.09%	26.25%
Net Utility Plant	(9)			\$ 390,106,965	\$ 390,106,965
Debt/Net Utility Plant				30.15%	30.33%

(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 6/30/17

(10) Borrowing 12/02/2015 RIIB15 for Central Operations Facility.

(11) Borrowing for next phase of water main repair/replace project

(12) Proposed borrowing to supplement PWSB Private Side Service Replacement Loan Program



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

January 8, 2018

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

RE: Providence Water Supply Board – up to \$1,000,000 Drinking Water State Revolving Fund Loan for its Private Side Lead Pipe Replacement Program

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 application of the Providence Water Supply Board (the Borrower) at the Bank's August 21, 2017 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 \$1,000,000 for a term not to exceed five years. Proceeds of the loan shall be used by the Borrower for its Private Side Lead Pipe Replacement Program, which provides customers of the Borrower with a zero interest loan to replace lead pipes connecting their eligible properties to the Borrower's water system.

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; and,
- 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 (DPUC)

Prior to entering into a loan agreement, the Borrower must receive approval from the DPUC for entering into a long-term financing agreement 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 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 Borrower Bond). 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 interest rate on the Borrower Bond shall be zero percent (0%).

(b) Amortization

Amortization will begin at a mutually agreed upon date, but in no case later than one hundred and twenty (120) days after the loan closing. Principal payments will be made quarterly thereafter, and the schedule of payments will be structured to meet the debt service and financial assistance needs of the Borrower.

(c) Final Maturity

The loan shall mature five years after the loan closing.

(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) 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 9 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 9 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 Board's records.


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. Diehl
Executive Director and CEO

Accepted this 10th day of JANUARY, 2018

By: 
Title: GENERAL MANAGER
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

Interim Davis Bacon Act Guidance

This guidance is intended to supplement Department of Labor (DOL) regulations and the Davis Bacon Terms and Conditions of EPA assistance agreements. In the event of a conflict between the guidance and DOL regulations or the Terms and Conditions of an EPA assistance agreement, the conflicting provision of the Guidance is not binding on DOL or EPA.

I. Introduction

The Davis Bacon Act requires that all contractors and subcontractors performing construction, alteration and repair (including painting and decorating) work under federal or District of Columbia contracts in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage and fringe benefits for the geographic location. Davis Bacon requirements may be extended to federal financial assistance programs by the terms of other statutes (collectively referred to in this guidance as Davis Bacon and Related Acts (DBRA)) establishing or funding the programs. [Compliance Assistance By Law – The Davis-Bacon and Related Acts (DBRA)]. Examples of DBRA at EPA include section 104(g) of CERCLA (Superfund) and Division A, Title XVI, section 1606 of the American Recovery and Reinvestment Act of 2009 (Recovery Act).

EPA assistance agreements subject to DBRA include Terms and Conditions that identify the responsibilities of a recipient for complying with DBRA.

EPA, under regulations in 29 CFR 5.5 [Electronic Code of Federal Regulations:] must ensure that its grant recipients and sub-recipients otherwise subject to the Davis-Bacon provisions must comply with the following:

A) Insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole, or in part, from federal funds or in accordance with guarantees of a federal agency or financed from funds obtained by pledge of any contract of a federal agency to make a loan, grant or annual contribution, contract clauses pertaining to minimum wages.

1) *Minimum wages.* All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor at the following web site [Wage Determinations Online](#), regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. A "wage determination" is the listing of wage and fringe benefit for each *classification* of laborers and mechanics which the Administrator of the Wage and Hour Division of the U.S. Department of Labor has determined to be prevailing in a given area for a particular type of construction (e.g., building, heavy, highway, or residential). The

wage determination (including any additional classification and wage rates) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. ([Department of Labor site](#))

2) *Withholding*. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the regulations, the loan or grant recipient may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3) *Payrolls and basic records*. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. The contractor shall submit weekly for each week in which any contract work is performed, a copy of all payrolls to the recipient, sponsor, or owner. The required weekly payroll information may be submitted in any form desired. A contractor may use Form WH-347 which is available from the [Wage and Hour Division web site](#).

4) *Subcontracts*. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with the requirements above, the requirements identified in the Davis Bacon Terms and Conditions of the EPA assistance agreement, and the contract clauses in 29 CFR 5.5.

B) *Contract Work Hours and Safety Standards Act*. In any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act, the following clauses shall apply:

1) *Overtime requirements*. No contractor or subcontractor for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. The overtime rate of time and one half does not apply to fringe payments. For work in excess of forty hours, fringe payments should continue to be paid on a per hour worked basis.

2) *Violation; liability for unpaid wages; liquidated damages*. In the event of any violation of the clause set forth in paragraph (B) (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States government, for liquidated damages.

3) *Withholding for unpaid wages and liquidated damages*. The recipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work

performed by the contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B) (2) of this section.

4) *Subcontracts*. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (B) (1) through (4) of this section.

C) In any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of 3 three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract.

D) In any contract subject to the Super Fund Program, the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of ten years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. If however, there is litigation, claims, negotiations, audits, cost recovery or other action involving the records, then the contractor or subcontractor must retain the records until the issue related to the records is resolved (which may be longer than ten years).

II. Applicability to EPA Programs

A) Brownfields Direct Cleanup and Revolving Loan Fund Grants.

1. Sites contaminated with hazardous substances. All construction, alteration and repair activity involving the remediation of hazardous substances, including excavation and removal of hazardous substances, construction of caps, barriers, structures which house treatment equipment, and abatement of contamination in buildings, is subject to DBRA.

2. Sites contaminated with Petroleum. DBRA prevailing wage requirement apply when the project includes:

Installing piping to connect households or businesses to public water systems or replacing public water system supply well(s) and associated piping due to groundwater contamination,

Soil excavation/replacement when undertaken in conjunction with the installation of public water lines/wells described above, or

Soil excavation/replacement, tank removal, and restoring the area by paving or pouring concrete when the soil excavation/replacement occurs in conjunction with both tank removal and paving or concrete replacement.

Other cleanup activities at Brownfields sites contaminated by petroleum such as in situ remediation, and soil excavation/replacement and tank removal when not in conjunction with paving or concrete replacement, will normally not trigger DBRA requirements. Unique situations at a site (e.g. unusually extensive excavation or construction of permanent facilities to house pumps and treatment equipment) may trigger DBRA requirements.

B) Leaking Underground Storage Tank (LUST) Program Grants to States.

DBRA applies to LUST agreements when construction contracts are issued by states for: a) Installing piping to connect households or businesses to public water systems or replacing public water system supply well(s) and associated piping due to groundwater contamination, b) Soil excavation/replacement when undertaken in conjunction with the installation of public water lines/wells described above, or c) Soil excavation/replacement, tank removal, and restoring the area by paving or pouring concrete when the soil excavation/replacement occurs in conjunction with both tank removal and paving or concrete replacement. DBRA may also apply in unique circumstances such as LUST sites that require unusually extensive excavation or construction of permanent facilities to house pump and treatment equipment to remove groundwater contamination.

C) DBRA may apply to Superfund Cooperative agreements made to states, political subdivisions, and tribes. Superfund projects may involve construction contracts; work with OGC/ORC to define specific applications.

D) EPA awards Diesel Emission Reduction Act Grants to eligible entities for projects that may involve construction. Recipients, sub grantees, and borrowers using DERA funding for the projects listed above must comply with the Davis Bacon prevailing wage requirements. Most other DERA funded activities, such as other retrofit, repower, and replacement projects do not trigger DBA requirements. If the recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the recipient must discuss the situation with EPA before authorizing work on that site.

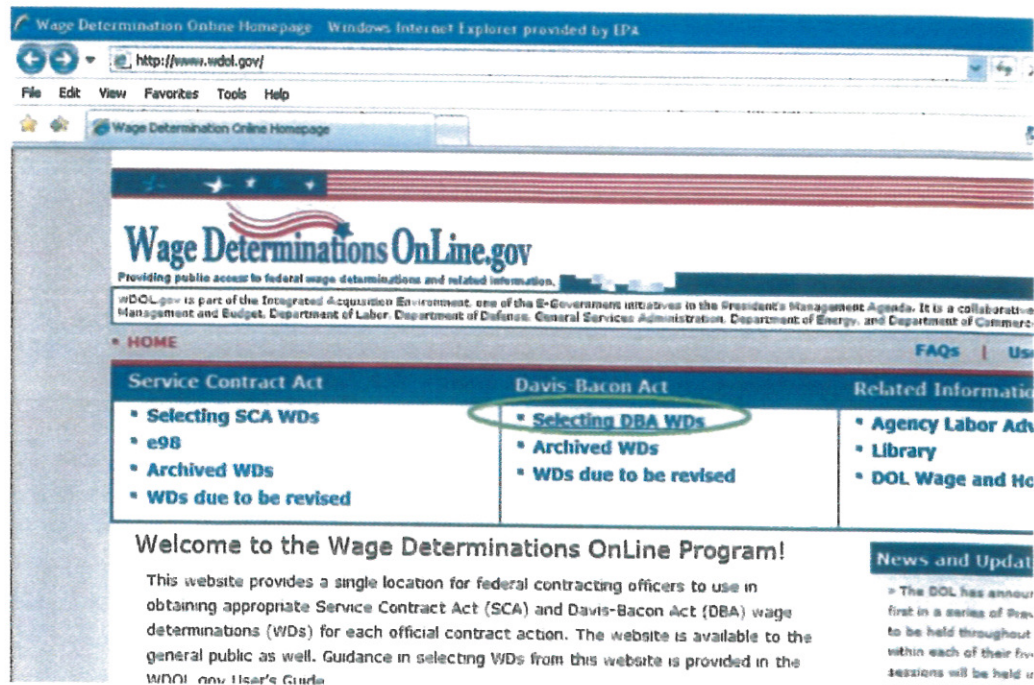
E) EPA awards (CWSRF and DWSRF) capitalization grants to states, which provides loans to municipalities and other eligible entities for eligible projects, including wastewater/drinking water infrastructure projects, estuary projects, and non-point source projects. Under the ARRA, states may also provide grants to eligible entities for these purposes. EPA has determined that Davis-Bacon prevailing wage requirements apply to the construction, alteration, and repair activity of infrastructure, including all construction, alteration and repair activity involving waste water or drinking water treatment plants, that are funded in part or in whole by ARRA funds. All other construction, alteration, and repair activity of infrastructure that is funded through the SRFs ARRA funds, including "Green" projects, non-point source projects, and estuary projects are also subject to DB. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient state before authorizing work on that site.

For sub-recipients that are not governmental entities receiving ARRA assistance under the SRF programs, Davis-Bacon prevailing wage requirements apply to the construction, alteration, and repair activity of infrastructure, including all construction, alteration and repair activity involving waste water or drinking water treatment plants. All other construction, alteration, and repair activity of infrastructure that is funded through the SRFs ARRA funds, including "Green" projects, non-point source projects, and estuary projects are also subject to DB. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient state before authorizing work on that site.

III. Davis Bacon Compliance Procedures

A) Before Contract Award - Once it is determined that Davis Bacon wage rates will apply to a construction contract, the recipient's contracting organization must state in the solicitation that Davis Bacon Prevailing wage rates are applicable, and bid packages must include the current Davis Bacon general wage determination for the area where construction will occur.

To select the prevailing wage rate determination for a specific locality, go to the [Welcome to the Wage Determinations OnLine Program](http://www.wdot.gov)



Then select, "Selecting DBA WDs"

CAUTION: Users should note that the only WDs applicable to a particular solicitation or contract are those that have been incorporated by the contracting officer in that contract action.

Selecting DBA Wage Decisions

Select DBA WD by number:

(Enter WD number in the following format: two letter abbreviation for the state and the number of the WD. For e. NOT VA030003 or MD150 NOT MD030150.)

OR

By Selection criteria beginning with:

State:

County:

Construction Type: (Types of Construction Under DBA)

WD Number:

[Back](#)

Browse by state/territory.

View the latest modifications and at the Davis-Bacon Database.

View the modifications or additions Bacon Wage Determinations due to and published on WDOL.gov.

View Archived Wage Determinations

1) Input the State and County where the construction site is located. Also input the type of construction for the project as Building, Heavy, Highway or Residential.

a) For Brownfields Petroleum cleanup and Leaking Underground Storage Tank (LUST) projects, EPA has determined that when soliciting competitive contracts, awarding new contracts or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments) for installing piping to connect households or businesses to public water systems or replacing public water system supply well(s) and associated piping, including soil excavation/replacement, the recipients shall use the "Heavy Construction" classification.

When soliciting competitive contracts, awarding new contracts, or issuing ordering instruments for soil excavation/replacement, tank removal, and restoring the area by paving or pouring concrete when the soil excavation/replacement occurs in conjunction with both tank removal and paving or concrete replacement at current or former service station sites, hospitals, fire stations, industrial or freight terminal facilities, or other sites that are associated with a facility that is not used solely for the underground storage of fuel or other contaminant the recipient shall use the "Building Construction" classification.

When soliciting competitive contracts, awarding new contracts or issuing ordering instruments for soil excavation/replacement, tank removal, and restoring the area by paving or pouring concrete when the soil excavation/replacement occurs in conjunction with both tank removal and paving or concrete replacement at a facility that is used solely for the underground storage of fuel or other contaminant the recipient shall use the

“Heavy Construction” classification.

Recipients must discuss unique situations that may not be covered by the General Wage Determinations described above with EPA. If, based on discussions with a recipient, EPA determines that DB applies to a unique situation (e.g. unusually extensive excavation) the Agency will advise the recipient which General Wage Determination to use based on the nature of the construction activity at the site.

b) For Brownfield Hazardous Waste Cleanup projects, EPA has determined that when soliciting competitive contracts or issuing ordering instruments to existing contractors for, the excavation and removal of hazardous substances and/or the construction of caps or barriers, recipient shall use the “Heavy Construction” classification.

When soliciting competitive contracts or issuing ordering instruments for the construction of structures which house treatment equipment, and abatement of contamination in buildings (other than residential structures less than 4 stories in height) recipient shall use “Building Construction” classification.

When soliciting competitive contracts or issuing ordering instruments for the abatement of contamination in residential structures less than 4 stories in height, the recipient shall use “Residential Construction” classification.

Recipients must discuss unique situations that may not be covered by the General Wage Classifications described above with EPA. If, based on discussions with a Recipient, EPA determines that DB applies to a unique situation the Agency will advise the recipient which General Wage Classification to use based on the nature of the construction activity at the site.

Note: Depending on the particular EPA program, the Davis Bacon Terms and Conditions may already categorize the construction type that applies.

c) The Terms and Conditions for Brownfields, Recovery Act LUST and Superfund grants contain EPA determinations of construction classification types. Generally, SRF funded construction of wastewater treatment plants is classified as “Heavy Construction” although certain Section 319 (Nonpoint Source Management) and Section 320 (National Estuary Program) projects may have different construction types.

i) **Building Construction** includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be “habitable” to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.

ii) **Highway Construction** includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

iii) **Residential Construction** includes the construction, alteration or repair of single-family houses, apartment buildings of no more than four stories in height. This includes all incidental items such as site work, parking areas, utilities, streets, and sidewalks.

iv) **Heavy Construction** includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.

Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work. This is described in more detail in the DOL All Agency Memos No. 130 and 131.

Also refer to DOL memoranda AAM 130 and 131 if additional guidance is needed in selecting the Construction Type or if multiple types apply. [Department of Labor site](#)

1) Once the State, County and Construction Type are input, the appropriate general wage determination or General Wage Decision for your project will be provided.

Let's assume a construction project for a Brownfields project where excavation and cleanup of hazardous waste is being advertised. The project site is Berks County, Pennsylvania and per the T&Cs is considered "Heavy Construction."

In this particular case four "heavy" general decisions are provided; PA14 for heavy and highway, PA22 for heavy TV/grout sewer clean, PA40 for heavy sewer/water treating plant and PA50 for heavy dredging. Since the decisions related to sewer or dredging don't apply, the PA14 heavy and highway decision would apply. General Decision Number: PA080014 08/28/2009 PA14 in its entirety would be enclosed in the bid documents.

General wage determinations are in effect nationwide for most counties for each general type of construction (building, residential, highway, heavy)

(the following example of a general wage decision has been edited for brevity)

General Decision Number: PA080014 08/28/2009 PA14

Superseded General Decision Number: PA20070014

State: Pennsylvania

Construction Types: Heavy and Highway

Counties: Adams, Berks, Bradford, Carbon, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton,

Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York Counties in Pennsylvania.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS (Excluding Sewer Grouting Projects and Excluding Sewage and Water Treatment Plant Projects)

Modification Number Publication Date

19 06/26/2009
20 07/03/2009
21 07/10/2009
22 07/24/2009
23 08/28/2009

BOIL0013-003 09/30/2008

Rates	Fringes	Rates	Fringes
BOILERMAKER.....		\$ 38.81	25.26

CARP0076-011 05/01/2008

COLUMBIA, MONTOUR, NORTHUMBERLAND, SCHUYLKILL, SNYDER, UNION, the lower part of Luzerne county, Carbon County, Banks, Lusanna, Lehigh, Packer, Kidder townships, and part of Penn Forest

	Rates	Fringes
MILLWRIGHT.....	\$ 26.56	13.02

ELEC0126-001 06/01/2008

Rates Fringes

Line Construction:

(ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, LEBANON, JUNIATA, PERRY AND YORK COUNTIES)

Groundman.....	\$ 19.63	26%+\$5.55
Lineman.....	\$ 34.65	26%+\$5.55
Truck Operator.....	\$ 21.36	26%+\$5.55
Winch Truck Operator.....	\$ 23.10	26%+\$5.55

Line Construction:
(BERKS AND LEHIGH NORTHAMPTON COUNTIES)

Groundman.....\$ 19.99 26%+5.55
Lineman.....\$ 35.28 26%+5.55
Truck Driver.....\$ 21.76 26%+5.55
Winch Truck Operator.....\$ 23.52 26%+5.55

* ENGI0542-004 05/01/2009

Rates Fringes

Power equipment operators:
(HIGHWAY CONSTRUCTION AND WATER LINES CONSTRUCTION
(OFF PLANT SITE))

GROUP 1.....\$ 27.45 16.30
GROUP 1a.....\$ 29.70 16.98
GROUP 2.....\$ 26.27 15.96

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 - Pile drivers, all types of cranes, all types of backhoes, draglines, keystone, all types of shovels ...

Ironworkers:

Projects Over 25 Million
Dollars.....\$ 33.55 22.42
Projects Under 25 Million
Dollars.....\$ 33.05 22.42

Rates Fringes

Laborers:

GROUP 1.....\$ 16.22 11.03
GROUP 2.....\$ 22.84 11.03

LABORERS CLASSIFICATIONS

GROUP 1: Flag person
GROUP 2: Hazardous/Toxic/Asbestos Waste Handler, Lead Paint Handler

PAIN0021-026 05/01/2009

ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, PERRY, AND YORK COUNTIES

Rates Fringes

Painters:

Bridge.....\$ 28.05 8.90
Brush.....\$ 24.05 8.90
Spray, Sandblast.....\$ 25.05 8.90

END OF GENERAL DECISION

3) Sub-recipients and borrowers should refer to their agreement with the prime Recipient or State for any notification or approvals that may be required by their Grantor regarding the selection of wage rate determinations.

For recipients who are non-governmental entities that are receiving grants directly from EPA, the recipient is required to obtain EPA concurrence of the wage determination selected before including the determination in the contract solicitation. In these instances, the EPA Regional Davis Bacon Coordinator (Regional Coordinator) will obtain the necessary construction contract information listed in Appendix A from the Recipient to review and provide Agency concurrence via email. For recipients who are non-governmental entities that are receiving grants from States (e.g. SRF Programs), the recipient is required to obtain State concurrence of the wage determination selected before including the determination in the contract solicitation.

In the event a recipient requires assistance regarding wage determinations, they may contact the EPA

Davis Bacon Regional Coordinator identified in the grant award for direction or assistance.

4) Before bid opening, the wage determination website should be continually monitored by the contracting organization for modifications. Generally, the most current published wage determination at the time of contract award must be incorporated into the contract. A wage determination update issued less than 10 days before bid opening shall be in effect unless there is not a reasonable time to notify all prospective bidders. In these cases the relevant facts should be documented in the contract file

A convenient way to monitor potential wage determination modifications is to sign up for the alert service as shown below.

CAUTION: Users should note that the only WDs applicable to a particular solicitation or contract are those that have been incorporated by the contracting officer in that contract action.

Selecting DBA Wage Decisions

The Wage Determination you have requested is below.

Please scroll down to review the WD carefully to ensure that it is appropriate for the specific contract action.

State: New Jersey
Construction Type: Heavy
County: Union County in New Jersey.
HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	04/24/2009
1	06/05/2009
2	07/03/2009
3	07/24/2009

CARPO006-009 05/01/2009

Printer Friendly Version

[Sign Up for Alert Service](#)

[Find Another WD](#)

[Exit](#)

CAUTION: Users should note that the only WDs applicable to a particular solicitation or contract are those that have been incorporated by the contracting officer in that contract action.

Selecting DBA Wage Decisions

CAUTION: The Alert Service does not relieve the contracting officers of the obligation under DBA and its regulations to use timely received new or revised DBA WDs in contract actions.

Alert Service:

If you wish to be notified of revisions made to this WD, please provide the following information:

Email address:

Alert identifier: (enter contract/solicitation number or create your own):

To set the duration of your Alert Service, please enter a specific date (MM/DD/YYYY):

OR

Select a specific period of time:

Use Above Date

120 days

90 days

45 days

B) After Contract Award - After solicitation, bid opening and contractor selection by the recipient contracting organization, the prevailing wage determination is included in the final construction contract between the recipient, sub recipient or borrower and its contractor.

1) In the event the construction contract is not awarded within 90 days of the bid opening date, any modification to the prevailing wage determination published prior to award of the contract shall be effective and should be included in the award documents, or by modification to the contract documents.

2) In these situations, the contracting organization may request an extension of the 90-day period from the DOL –WHD Administrator. Such request shall be supported by a written finding, which shall include a brief statement of the factual support, that the extension is necessary and proper in the public interest to prevent injustice or undue hardship or to avoid serious impairment in the conduct of government business. The DOL –WHD Administrator will either grant or deny the request for an extension after consideration of all the circumstances.

For non governmental contracting organizations receiving grants directly from EPA, the contracting organization shall provide the completed request to the EPA Regional Coordinator. The Regional Coordinator will then send the completed extension request via cover memorandum to the U. S. Department of Labor for processing. (Reference 29 CFR Part 1, section 1.6 for further direction)

For non profit contracting organizations receiving grants directly from States (e.g. SRF Programs), the contracting organization shall provide the completed request to the State. The State will then send the completed extension request via cover memorandum to the U. S. Department of Labor for processing. (Reference 29 CFR Part 1, section 1.6 for further direction)

3) The DOL-WHD may issue a wage determination after contract award or after the beginning of construction if the contracting organization has failed to incorporate a wage determination in a contract required to contain prevailing wage rates, or has used a wage determination which by its terms or the provisions of Department of Labor regulations clearly does not apply to the contract. The DOL-WHD Administrator may issue a wage determination which shall be applicable to a contract after contract award or after the beginning of construction when it is found that the wrong wage determination has been incorporated in the contract because of an inaccurate description of the project or its location in the request for the wage determination.

Under any of the above circumstances, the organization entering into the contract shall either terminate and re-solicit the contract with the valid wage determination, or incorporate the valid wage determination retroactive to the beginning of construction through supplemental agreement or through change order, *Provided* That the contractor is compensated for any increases in wages resulting from such change. The method of incorporation of the valid wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable procurement law.

4) The organization responsible for awarding and administering the contract shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The organization shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- a) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- b) the classification is utilized in the area by the construction industry; and
- c) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- d) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the recipient (the contracting organization) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the recipient to the DOL on a completed [Conformance Request SF 1444](#)

Recipients should complete the SF 1444 in cooperation with the DB Coordinator and forward the completed form along with the applicable wage determination, by email to Ms. Beverly Mitchell at mitchell.beverly@dol.gov. A Carbon Copy should be sent to Ms. Vanessa Shaw-Jennings, Branch Chief, DOL Branch of Construction Wage Determination at shaw-jennings.vanessa@dol.gov. Concurrently, the recipient should forward a copy of the entire completed request package by email to the EPA DB Coordinator.

Prior to submitting an SF 1444 for an additional wage rate, the recipient should confer with the Regional DOL WHD specialist to determine if it is actually necessary to do so.

DOL will accept SF 1444's for processing via fax, or hard copy.

The DOL-WHD Administrator, or an authorized representative, will approve, modify, or disapprove each additional classification action within 21 days of receipt and so notify the recipient. Upon receipt of the DOL action, the recipient will send a copy of the DOL determination to the EPA DB Coordinator. The EPA DB Coordinator will then contact EPA Headquarters. The EPA may follow-up as deemed appropriate.

Additional assistance can be obtained from [Department of Labor offices](#).

5) In the event a labor classification is not addressed during the construction contract period, the construction contractor, the laborers and mechanics to be employed in the classification (if known), or their representatives, and the recipient (the contracting organization) must complete a Conformance Request SF 1444 that lists the classification and proposed wage rate along with the applicable wage determination and submit the complete package to the [Department of Labor](#).

The procedures described in III.B.4.above should then be followed for processing the SF 1444.

In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the recipient do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the parties will complete the SF 1444, indicate their disagreement at the bottom and forward the form along with the applicable wage determination to DOL.

The procedures described in III.B.4.above should then be followed for processing the SF 1444.

6) The contractor and all subcontractors are responsible for posting the prevailing wage determination at the site of work (which includes all SF 1444 conformances) for the construction project along with the DOL Davis Bacon poster. The poster shall be placed

at the site of the work in a prominent and accessible place where it may be easily seen by employees. [Department of Labor](#)

7) The contractor is required to pay the prevailing wage rates on a weekly basis to laborers and mechanics in accordance with the requirements of 29 CFR 5.5, which are incorporated into the actual construction contract.

a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting organization. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a) (3) (i).

The required weekly payroll information may be submitted in any form desired. [Optional Form WH- 347](#) is available for this purpose from the Wage and Hour Division web site or its successor site. The WH-347 form is particularly suited for this purpose since the reverse side has a statement of compliance where the contractor can sign. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

8) The contracting organization is responsible for receiving and maintaining weekly certified payrolls from the contractor that laborers, mechanics, trades, apprentices and trainees identified in the Davis Bacon wage determination are paid the prevailing wage rate. Periodically the contracting organization is responsible for reviewing certified payrolls to ensure that the prevailing wages and fringe benefits being paid are consistent with the applicable wage determination.

a) It is highly recommended that emphasis be placed on receiving and reviewing certified payrolls by the contracting organization during the first weeks of construction activity. Doing so will help ensure contractor's compliance with paying at least the required Davis Bacon wage rates to laborers and mechanics.

The contracting organization is also responsible to perform periodic employee interviews in confidence to validate the accuracy of certified payrolls for laborers, mechanics, trades, apprentices and trainees.

9) EPA Award Terms and Conditions require that employee interviews be conducted within the first two weeks of the initial payroll and within two weeks of the final payroll for the project, notwithstanding, EPA may authorize an exception to these requirements on a case by case basis when extenuating circumstances justify. (See III.B.12 below)

a) Labor interviews can be documented using a SF 1445 interview form that can be found at the [U.S General Services Administration GSA forms library](#).

10) Recipients must immediately report violations of the DB prevailing wage requirements to the EPA DB Coordinator listed in the assistance agreement and to the appropriate [Department of Labor WHD Office](#).

Typical violations are: misclassification of laborers and mechanics, failure to pay full prevailing wage, including fringe benefits, for all hours worked (including overtime hours), inadequate recordkeeping, such as not counting all hours worked by an individual in two or more classifications during a day, failure to maintain a copy of bona fide apprenticeship program and individual registration documents for apprentices, failure to submit certified weekly payrolls and failure to post the Davis-Bacon poster and applicable wage determination.

The resolution of violations of the DB prevailing wage requirements should be attempted at the lowest possible level by the recipient and contractor. Unresolved or persistent violations should be reported to the Davis Bacon Coordinator and the DOL for further action.

Resolution of potential Davis Bacon violations should be conducted in accordance with [Department of Labor memorandum 182](#).

11) Certified payroll records and labor interviews are required to be retained by the contracting organization and contractor for three years after completion of the construction project.

12) Additions and exceptions to EPA grant awards.

In accordance with 40 CFR 31.6 (Additions and Exceptions) and 40 CFR 30.4 (Deviations), the Director, Grants Administration Division, is authorized to grant the exceptions and the EPA Director is also authorized to approve exceptions, on a class or an individual case basis, to EPA program specific assistance regulations other than those which implement statutory and executive order requirements. EPA may apply less restrictive requirements when awarding small awards, except for those requirements which are statutory. Exceptions on a case-by-case basis may also be made by EPA.

IV Davis Bacon – Additional Resources

Some additional sources of information regarding the requirements and complying with Davis Bacon and Related Acts are:

- 1) [DBRA FAQ's](#)
- 2) [DOL Wage & Hour Division](#)
- 3) [DOL Davis Bacon Fact Sheet](#)
- 4) General Davis Bacon Act requirements and applicability Compliance Assistance By Law – The Davis-Bacon and Related Acts (DBRA)
- 5) [Wage determinations on line](#)
- 6) Selecting the appropriate construction type (see section 4b)
[Wage Determinations online user guide](#)
[Department of Labor site](#)
- 7) Selecting a [wage determination](#)
- 8) [Wage rate posting requirements](#)
- 9) [Performing a review of certified payrolls](#)
- 10) [Conducting labor interviews](#)
- 11) Recommendations for resolving wage rate violations.
[DOL employment law guide](#)
- 12) [Davis Bacon Reference Material](#)
- 13) [Prevailing Wage Resource Book](#)
- 14) DOL wage and hour division offices U.S. Department of Labor — Employment Standards Administration (ESA) — Wage and Hour Division (WHD) — District Office Locations
- 15) [DOL wage and Hour Division ARRA website](#)

Davis Bacon Non Governmental Wage Determination Questionnaire

1. Recipient name
2. Recipient street address, city, state and zip code
3. Recipient telephone and fax
4. Recipient point of contact
5. Recipient point of contact telephone and fax number
6. Recipient point of contact email address
7. EPA Grant Number
8. EPA program
 - a) Hazardous Waste Cleanup construction projects involving the onsite remediation of hazardous substances
 - b) Brownfields Petroleum construction projects involving the onsite cleanup of petroleum
b) contamination
 - c) Diesel Emissions Reduction Act construction activities involving the installation of emissions technology by construction laborers and mechanics onsite when part of a construction contract
9. Construction Project Title
10. Project Solicitation or Contract Number
11. Request for Proposal or Construction Contract Solicitation date
12. Scheduled Bid Opening date
13. Anticipated Construction Contract Execution date
14. Estimated Construction Contract price or cost range.
15. Scheduled Construction Contract start date
16. Construction Contract time duration
17. Street, County and State of construction contract site
18. Construction Type (provided by Recipient)
 - a) Building
 - b) Heavy
 - c) Highway
 - d) Residential
19. Recipient selected General Wage Determination Decision and modification number?
Yes No EPA Davis Bacon Coordinator - concurs with wage determination selected by recipient Corrected Wage Determination and modification number from EPA Davis Bacon Coordinator



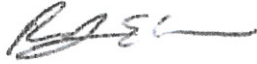
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

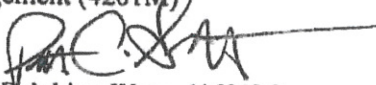
MAR 20 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76, Consolidated Appropriations Act, 2014

FROM: ✓ Andrew D. Sawyers, Director 
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director 
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel (AIS)" requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

Implementation

The Act states:

Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out

the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

The following questions and answers provide guidance for implementing and complying with the AIS requirements:

Project Coverage

1) What classes of projects are covered by the AIS requirement?

All treatment works projects funded by a CWSRF assistance agreement, and all public water system projects funded by a DWSRF assistance agreement, from the date of enactment through the end of Federal Fiscal Year 2014, are covered. The AIS requirements apply to the entirety of the project, no matter when construction begins or ends. Additionally, the AIS requirements apply to all parts of the project, no matter the source of funding.

2) Does the AIS requirement apply to nonpoint source projects or national estuary projects?

No. Congress did not include an AIS requirement for nonpoint source and national estuary projects unless the project can also be classified as a 'treatment works' as defined by section 212 of the Clean Water Act.

3) Are any projects for the construction, alteration, maintenance, or repair of a public water system or treatment works excluded from the AIS requirement?

Any project, whether a treatment works project or a public water system project, for which engineering plans and specifications were approved by the responsible state agency prior to January 17, 2014, is excluded from the AIS requirements.

4) What if the project does not have approved engineering plans and specifications but has signed an assistance agreement with a CWSRF or DWSRF program prior to January 17, 2014?

The AIS requirements do not apply to any project for which an assistance agreement was signed prior to January 17, 2014.

- 5) **What if the project does not have approved engineering plans and specifications, but bids were advertised prior to January 17, 2014 and an assistance agreement was signed after January 17, 2014?**

If the project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the approval date for purposes of the exemption in section 436(f).

- 6) **What if the assistance agreement that was signed prior to January 17, 2014, only funded a part of the overall project, where the remainder of the project will be funded later with another SRF loan?**

If the original assistance agreement funded any construction of the project, the date of the original assistance agreement counts for purposes of the exemption. If the original assistance agreement was only for planning and design, the date of that assistance agreement will count for purposes of the exemption only if there is a written commitment or expectation on the part of the assistance recipient to fund the remainder of the project with SRF funds.

- 7) **What if the assistance agreement that was signed prior to January 17, 2014, funded the first phase of a multi-phase project, where the remaining phases will be funded by SRF assistance in the future?**

In such a case, the phases of the project will be considered a single project if all construction necessary to complete the building or work, regardless of the number of contracts or assistance agreements involved, are closely related in purpose, time and place. However, there are many situations in which major construction activities are clearly undertaken in phases that are distinct in purpose, time, or place. In the case of distinct phases, projects with engineering plans and specifications approval or assistance agreements signed prior to January 17, 2014 would be excluded from AIS requirements while those approved/signed on January 17, 2014, or later would be covered by the AIS requirements.

- 8) **What if a project has split funding from a non-SRF source?**

Many States intend to fund projects with "split" funding, from the SRF program and from State or other programs. Based on the Act language in section 436, which requires that American iron and steel products be used in any project for the construction, alteration, maintenance, or repair of a public water system or treatment works receiving SRF funding between and including January 17, 2014 and September 30, 2014, any project that is funded in whole or in part with such funds must comply with the AIS requirement. A "project" consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all contracts and assistance agreements awarded are closely related in purpose, time and place. This precludes the intentional splitting of SRF projects into separate and smaller contracts or assistance agreements to avoid AIS coverage on some portion of a larger

project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreement for SRF and State or other funding would carry separate requirements.

9) What about refinancing?

If a project began construction, financed from a non-SRF source, prior to January 17, 2014, but is refinanced through an SRF assistance agreement executed on or after January 17, 2014 and prior to October 1, 2014, AIS requirements will apply to all construction that occurs on or after January 17, 2014, through completion of construction, unless, as is likely, engineering plans and specifications were approved by a responsible state agency prior to January 17, 2014. There is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to January 17, 2014.

10) Do the AIS requirements apply to any other EPA programs, besides the SRF program, such as the Tribal Set-aside grants or grants to the Territories and DC?

No, the AIS requirement only applies to funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12)

Covered Iron and Steel Products

11) What is an iron or steel product?

For purposes of the CWSRF and DWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings (defined in more detail below);
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel (defined in more detail below);
- Reinforced precast concrete; and
- Construction materials (defined in more detail below).

12) What does the term 'primarily iron or steel' mean?

'Primarily iron or steel' places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

13) Can you provide an example of how to perform a cost determination?

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

14) If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

15) What is the definition of steel?

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

16) What does 'produced in the United States' mean?

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the

material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

17) Are the raw materials used in the production of iron or steel required to come from US sources?

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

18) If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

19) What is the definition of 'municipal castings'?

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;

Meter Boxes;
Service Boxes;
Steel Hinged Hatches, Square and Rectangular;
Steel Riser Rings;
Trash receptacles;
Tree Grates;
Tree Guards;
Trench Grates; and
Valve Boxes, Covers and Risers.

20) What is 'structural steel'?

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

21) What is a 'construction material' for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

22) What is not considered a 'construction material' for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and

data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

23) If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

24) What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

Compliance

25) How should an assistance recipient document compliance with the AIS requirement?

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, starting with the assistance agreement, all the way down to the purchase agreements. Sample language for assistance agreements and contracts can be found in Appendix 3 and 4.

EPA recommends the use of a step certification process, similar to one used by the Federal Highway Administration. The step certification process is a method to ensure that producers adhere to the AIS requirement and assistance recipients can verify that products comply with the AIS requirement. The process also establishes accountability and better enables States to take enforcement actions against violators.

Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer,

processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification can be quite simple. Typically, it includes the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached, as Appendix 5, are sample certifications. These certifications should be collected and maintained by assistance recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information. Step certification is the best practice.

26) How should a State ensure assistance recipients are complying with the AIS requirement?

In order to ensure compliance with the AIS requirement, States SRF programs must include specific AIS contract language in the assistance agreement. Sample language for assistance agreements can be found in Appendix 3.

States should also, as a best practice, conduct site visits of projects during construction and review documentation demonstrating proof of compliance which the assistance recipient has gathered.

27) What happens if a State or EPA finds a non-compliant iron and/or steel product permanently incorporated in the project?

If a potentially non-compliant product is identified, the State should notify the assistance recipient of the apparent unauthorized use of the non-domestic component, including a proposed corrective action, and should be given the opportunity to reply. If unauthorized use is confirmed, the State can take one or more of the following actions: request a waiver where appropriate; require the removal of the non-domestic item; or withhold payment for all or part of the project. Only EPA can issue waivers to authorize the use of a non-domestic item. EPA may use remedies available to it under the Clean Water Act, the Safe Drinking Water Act, and 40 CFR part 31 grant regulations, in the event of a violation of a grant term and condition.

It is recommended that the State work collaboratively with EPA to determine the appropriate corrective action, especially in cases where the State is the one who identifies the item in noncompliance or there is a disagreement with the assistance recipient.

If fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-

888-546-8740 or OIG_Hotline@epa.gov. More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

28) How do international trade agreements affect the implementation of the AIS requirements?

The AIS provision applies in a manner consistent with United States obligations under international agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to such agreements. In general, SRF assistance recipients are not signatories to such agreements, so these agreements have no impact on this AIS provision. In the few instances where such an agreement applies to a municipality, that municipality is under the obligation to determine its applicability and requirements and document the actions taken to comply for the State.

Waiver Process

The statute permits EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

In order to implement the AIS requirements, EPA has developed an approach to allow for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow States, on behalf of the assistance recipients, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from states will be considered. Pursuant to the Act, EPA has the responsibility to make findings as to the issuance of waivers to the AIS requirements.

Definitions

The following terms are critical to the interpretation and implementation of the AIS requirements and apply to the process described in this memorandum:

Reasonably Available Quantity: The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

Satisfactory Quality: The quality of iron or steel products, as specified in the project plans and designs.

Assistance Recipient: A borrower or grantee that receives funding from a State CWSRF or DWSRF program.

Step-By-Step Waiver Process

Application by Assistance Recipient

Each local entity that receives SRF water infrastructure financial assistance is required by section 436 of the Act to use American made iron and steel products in the construction of its project. However, the recipient may request a waiver. Until a waiver is granted by EPA, the AIS requirement stands, except as noted above with respect to municipalities covered by international agreements.

The waiver process begins with the SRF assistance recipient. In order to fulfill the AIS requirement, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American made iron and steel products. It is essential that the assistance recipient include the AIS terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 3 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three conditions is met:

1. Applying the American Iron and Steel requirements of the Act would be inconsistent with the public interest;
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Proper and sufficient documentation must be provided by the assistance recipient. A checklist detailing the types of information required for a waiver to be processed is attached as Appendix 1.

Additionally, it is strongly encouraged that assistance recipients hold pre-bid conferences with potential bidders. A pre-bid conference can help to identify iron and steel products needed to complete the project as described in the plans and specifications that may not be available from domestic sources. It may also identify the need to seek a waiver prior to bid, and can help inform the recipient on compliance options.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the State SRF program. It is strongly recommended that the State designate a single person for all AIS communications. The State SRF designee will review the application for the waiver and determine whether the necessary information has been included. Once the waiver application is complete, the State designee will forward the application to either of two email addresses. For CWSRF waiver requests, please send the application to: cwsrfwaiver@epa.gov. For DWSRF waiver requests, please send the application to: dwsrfwaiver@epa.gov.

Evaluation by EPA

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the State designee that a waiver request has been approved or denied as soon as such a decision has been made. Granting such a waiver is a three-step process:

1. Posting – After receiving an application for a waiver, EPA is required to publish the application and all material submitted with the application on EPA's website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: http://water.epa.gov/grants_funding/aisrequirement.cfm
2. Evaluation – After receiving an application for waiver of the AIS requirements, EPA Headquarters will use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.
3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SRF program, and post the signed waiver on our website. The assistance recipient should keep a copy of the signed waiver in its project files.

Public Interest Waivers

EPA has the authority to issue public interest waivers. Evaluation of a public interest waiver request may be more complicated than that of other waiver requests so they may take more time than other waiver requests for a decision to be made. An example of a public interest waiver that might be issued could be for a community that has standardized on a particular type or manufacturer of a valve because of its performance to meet their specifications. Switching to an alternative valve may require staff to be trained on the new equipment and additional spare parts would need to be purchased and stocked, existing valves may need to be unnecessarily replaced, and portions of the system may need to be redesigned. Therefore, requiring the community to install an alternative valve would be inconsistent with public interest.

EPA also has the authority to issue a public interest waiver that covers categories of products that might apply to all projects.

EPA reserves the right to issue national waivers that may apply to particular classes of assistance recipients, particular classes of projects, or particular categories of iron or steel products. EPA may develop national or (US geographic) regional categorical waivers through the identification of similar circumstances in the detailed justifications presented to EPA in a waiver request or requests. EPA may issue a national waiver based on policy decisions regarding the public's interest or a determination that a particular item is not produced domestically in reasonably available quantities or of a sufficient quality. In such cases, EPA may determine it is necessary to issue a national waiver.

If you have any questions concerning the contents of this memorandum, you may contact us, or have your staff contact Jordan Dorfman, Attorney-Advisor, State Revolving Fund Branch, Municipal Support Division, at dorfman.jordan@epa.gov or (202) 564-0614 or Kiri Anderer, Environmental Engineer, Infrastructure Branch, Drinking Water Protection Division, at anderer.kirsten@epa.gov or (202) 564-3134.

Attachments

Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Description of the foreign and domestic construction materials — Unit of measure — Quantity — Price — Time of delivery or availability — Location of the construction project — Name and address of the proposed supplier — A detailed justification for the use of foreign construction materials • Waiver request was submitted according to the instructions in the memorandum • Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor 	✓	
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products — Relevant excerpts from the bid documents used by the contractors to complete the comparison — Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers 		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested: <ul style="list-style-type: none"> — Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials — Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers. — Project schedule — Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials • Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought • Has the State received other waiver requests for the materials described in this waiver request, for comparable projects? 		

Appendix 2: HQ Review Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Comments
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> • Does the waiver request include the following information? <ul style="list-style-type: none"> — Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products — Relevant excerpts from the bid documents used by the contractors to complete the comparison — A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market • Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%? 				
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> • Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested? <ul style="list-style-type: none"> — Supplier information or other documentation indicating availability/delivery date for materials — Project schedule — Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials • Does supporting documentation provide sufficient evidence that the contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers? • Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information) • Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? <p>Examples include:</p> <ul style="list-style-type: none"> — Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State — Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States — Correspondence with construction trade associations indicating the non-availability of the materials • Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits? 				

Appendix 3: Example Loan Agreement Language

ALL ASSISTANCE AGREEMENT MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN SRF ASSISTANCE AGREEMENTS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States ("American Iron and Steel Requirement") unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the American Iron and Steel Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.

Appendix 4: Sample Construction Contract Language

ALL CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN ALL CONTRACTS IN PROJECTS THAT USE SRF FUNDS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the City of _____ (“Purchaser”) and the _____ (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Appendix 5: Sample Certifications

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxxx
2. Xxxx
3. Xxxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative



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

**DRINKING WATER STATE REVOLVING FUND
 CERTIFICATE OF APPROVAL – AMENDED**

Providence Water has met the program requirements of the Drinking Water State Revolving Fund (DWSRF) for the proposed Replacement of Lead Services and Replacement or Relining of Water Mains project and is eligible to apply for a DWSRF loan from the Rhode Island Infrastructure Bank. Specifically, Providence Water is applying for funding not to exceed one hundred million dollars (\$100,000,000.00) for this 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. Providence Water has certified that it will comply with all the requirements of applicable state and federal laws. The following conditions apply to this project:

1. This CA shall replace the 4/25/2008 CA for this project, which is hereby rescinded.
2. 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 other Federal or State Agency with authority over the project or project area.
3. All construction related costs incurred prior to July 29, 2007 are ineligible for DWSRF program participation.
4. Short-term construction related impacts shall be mitigated by utilizing standard sedimentation and erosion control methods during construction.
5. All applicable architectural/engineering plans, specifications and reports are to be submitted to The Rhode Island Department of Health, Center for Drinking Water Quality (RIDOH) for review and approval prior to advertisement of the project for proposals for construction.
6. Approved Disadvantaged Business Enterprise (DBE) utilization plans shall be obtained from the State of RI MBE/WBE Compliance Office, prior to the Providence Water issuing Notices to Proceed. Copies of the approved DBE utilization plans shall be provided to RIDOH.
7. Providence Water must install the DWSRF Project sign in the vicinity of the Project as required by the DWSRF Program.
8. All requests for payment for work must be accompanied by the appropriate documentation to demonstrate compliance with all requirements of the RIDOH, and the DWSRF Program (including but not limited to Davis Bacon, American Iron and Steel, DBE, RI MBE/WBE and Debarment and Suspension).

Carlene B. Newman for
 June A. Swallow, PE, Chief
 Center for Drinking Water Quality

August 11, 2017
 DATE

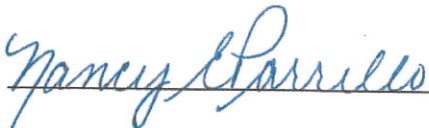
Project Name: Replace Lead Services – Replace or Line Water Mains
 Project Number: DWSRF-08-15

STATE OF RHODE ISLAND DIVISION OF PUBLIC UTILITIES AND CARRIERS

DOCKET No. 18 - _____

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. All changes and differences between books and test year data and any changes in the manner of recording said data during the test year have been expressly noted.



Nancy E. Parrillo

STATE OF RHODE ISLAND
PROVIDENCE COUNTY

Subscribed and sworn to me this 6th day of FEBRUARY, 2018.


Notary Public Joseph R. Murphy

My commission expires: 4-7-18

Testimony
of
GREGG M. GIASSON, PE
before the
RI DIVISION OF PUBLIC UTILITIES AND CARRIERS

In support of Providence Water Supply Board's

APPLICATION FOR AUTHORIZATION TO BORROW UP TO \$1,000,000 FROM THE
RHODE ISLAND INFRASTRUCTURE BANK

for

PROVIDENCE WATER

February, 2018

Docket No. D-18- _____

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 five years, the first two
10 years as the Senior Director of Operations and the last three years as the Deputy General
11 Manager of Operations/Executive Engineer. From 2008 to 2012, I worked for the Pawtucket
12 Water Supply Board as the Assistant Chief Engineer/Chief of Operations. Prior to
13 Pawtucket, I worked at the consulting firm Camp, Dresser & McKee for 12 years where I
14 worked on a variety of drinking water projects as both a project engineer and project
15 manager. I am a 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 be used to provide zero percent (0%) interest loans to
19 Providence Water's retail customers. The loans will be restricted to replacement of the
20 customer's lead service (referred to as the "private side") from the curb stop to the water
21 meter. See **Exhibit A** for an illustration.

22

1 **Q. How many “private side” lead services are within the Providence Water retail system?**

2 A. Providence Water estimates that there are approximately 29,000 private side lead services in
3 our retail system. In contrast, Providence Water currently has approximately 12,300 public
4 side lead services.

5

6 **Q. Do you have an estimate of the cost for a “private side” lead service replacement?**

7 A. Providence Water has been involved in the replacement of 442 private side lead service
8 replacements. The range of costs for these services was from \$1,000 to \$7,300, with an
9 average cost of \$2,500. The range of cost is due to factors such as: length of the service from
10 the curb stop to the meter, obstructions that need to be removed and replaced (i.e. trees,
11 shrubs, fences), depth of the service, and method of replacement (open cut versus pulling).

12

13 **Q. Why is Providence Water asking for funds to replace the “private side” lead services?**

14 A. Providence Water is asking for this loan for several reasons.

15 (1) The customer pays for, installs, and maintains the service line from the curb stop to the
16 meter. Therefore, Providence Water does not use ratepayer funds to pay for private side
17 replacements or repairs,

18 (2) Lead service replacement (both public and private) is part of Providence Water’s overall
19 efforts to reduce customer’s exposure to lead in water.

1 (3) The Environmental Protection Agency (EPA) has indicated that they are considering
2 requiring, of water utilities, proactive full lead service line replacement. See **Exhibit B**, page
3 8.

4
5 **Q. Does Providence Water currently have a loan program?**

6 A. Yes, Providence Water will allow the customer to put the cost of the private side lead service
7 replacement on their Providence Water bill. Providence Water allows the customer one (1)
8 year to pay off the balance of the loan at 1% interest (monthly).

9
10 **Q. How successful is the current private side lead service loan program?**

11 A. Since 2006, Providence Water has replaced 13,300 public side lead services. When replacing
12 these services, Providence Water has offered the 1% loan to the customer to replace the
13 private side of those services. Since 2006, 442 (of the 13,300) have replaced the private side
14 of the lead service and utilized the 1% loan.

15
16 **Q. Does Providence Water think that this program will be successful?**

17 A. Providence Water modeled this program after a similar program that is utilized by the Boston
18 Water and Sewer and Commission (BWSC). Providence Water is considering this a pilot
19 program and depending on the amount of customers that take advantage of this loan program,
20 Providence Water will adjust the program accordingly.

21

1 Q. Mr. Giasson, does that conclude your testimony?

2 A. Yes, it does

EXHIBIT A

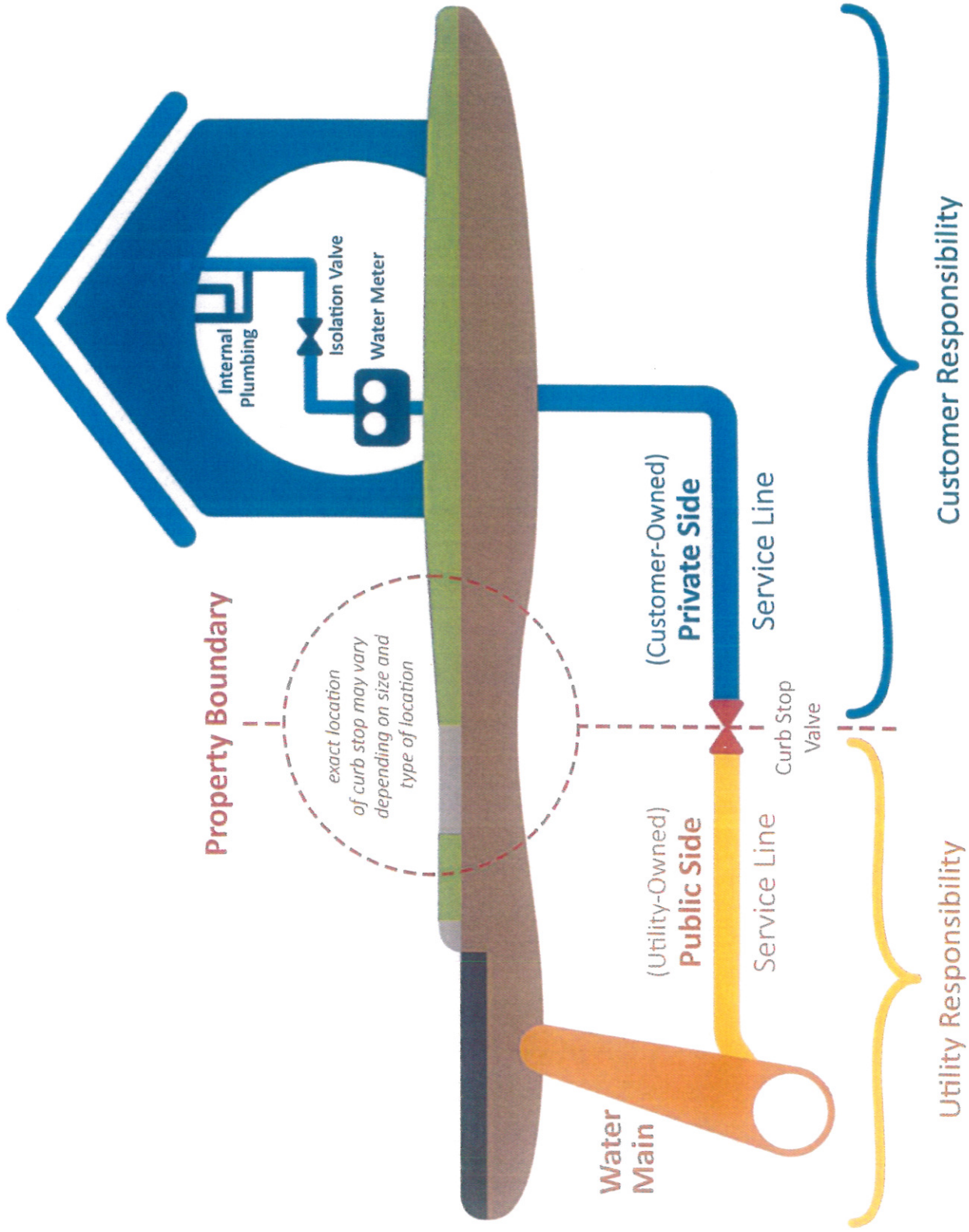
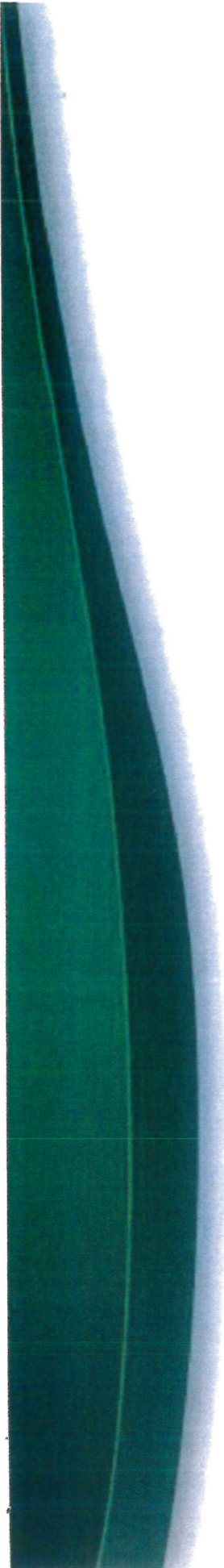


EXHIBIT B



Lead and Copper Rule Revisions

Office of Ground Water and Drinking Water

Federalism Consultation Meeting

January 8, 2018



Purpose & Overview

Purpose:

- To obtain input from State and Local Government Officials on potential revisions to key areas of the Lead and Copper Rule

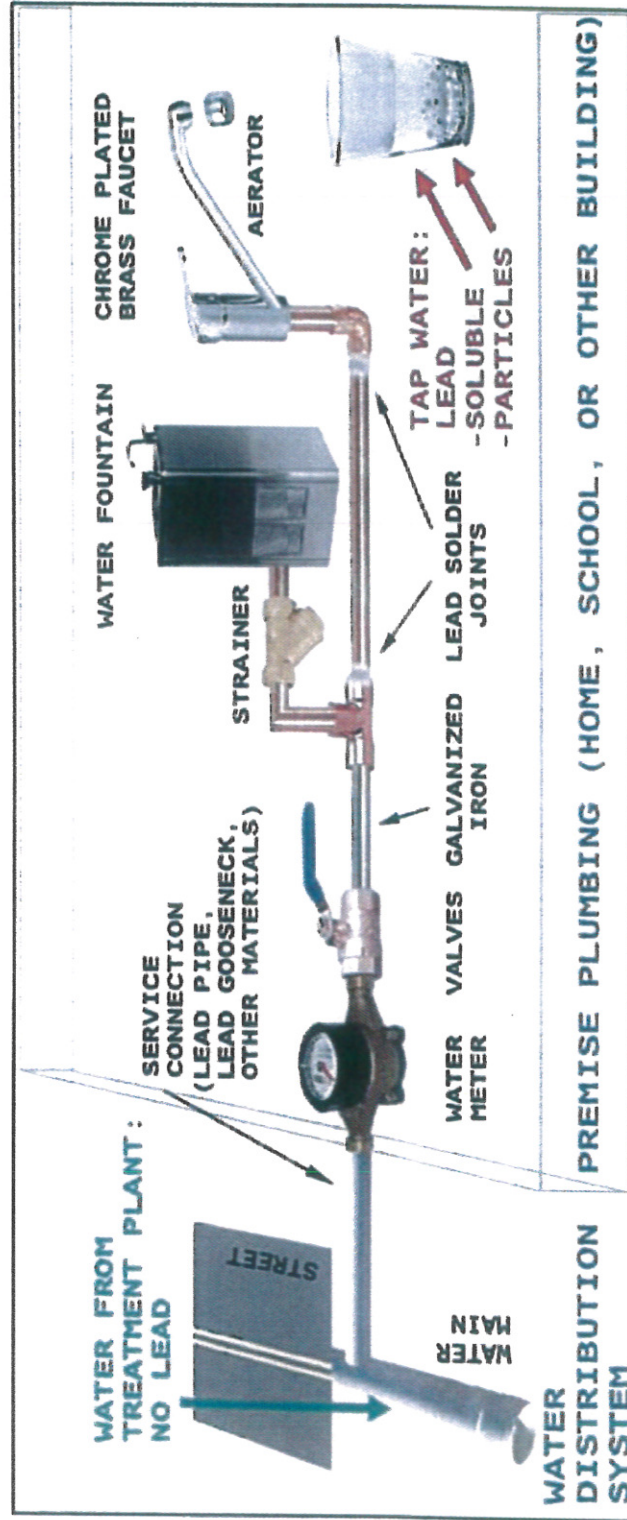
Agenda:

- Background on the Lead and Copper Rule (LCR)
- Key areas for potential rule revisions
- Cost Information
- Next steps



Lead and Copper Rule (LCR)

- The National Primary Drinking Water Regulation for Lead and Copper was promulgated June 7, 1991.
- Applies to 68,000 public water systems serving ~300 million people
- Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.
- The LCR requires water systems to sample taps and to take actions including treating water to make it less corrosive to plumbing materials that contain lead and copper, educating consumers and replacing lead service lines.





LCR: Health Effects

- Lead:
 - Lead damages the brain, red blood cells and kidneys
 - Studies consistently demonstrate the harmful effects of lead exposure on children, including cognitive function, decreased academic performance and poorer performance on tests of executive function.
 - Lead exposure is also associated with decreased attention, and increased impulsivity and hyperactivity in children.
 - Lead is particularly dangerous to children because their growing bodies absorb more lead than adults and their brains and nervous systems are more sensitive to the damaging effects of lead.
- Copper:
 - Can cause stomach and intestinal distress, liver or kidney damage, and complications of Wilson's disease in genetically predisposed people



Key Challenges with the Current LCR

- The LCR is one of the most complicated drinking water regulations for states and drinking water utilities to implement.
- The LCR is the only drinking water regulation that requires sampling in homes, often by the consumers themselves, with very specific sampling procedures that are not always followed.
- The current structure of the rule compels additional protective actions by water systems only after a potential problem has been identified; under the current rule, up to 10% of samples can have highly elevated levels of lead with no additional requirement for actions.
- Many systems have not fully optimized corrosion control treatment or have not maintained optimized treatment, and small systems are not required to optimize corrosion control unless more than 10% of samples exceed the action level.
- In most communities, lead service lines are partially or entirely privately owned and a number of homeowners or renters may be unwilling or unable to replace the portion of the line at their home.



Key Areas for Rule Revisions

- Lead Service Line Replacement
- Corrosion Control Treatment
- Tap Sampling
- Public Education and Transparency
- Copper Requirements



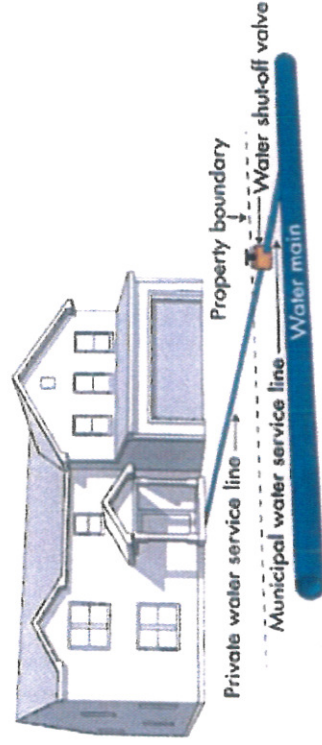
Lead Service Line Replacement

Current Requirements

- Systems that exceed the lead Action Level (AL) after installing corrosion control treatment (CCT) must replace 7% of lead service lines per year (the state can accelerate)
- Systems are only required to replace portion of the LSL owned by the PWS
- Systems may consider an LSL replaced if a sample from that line is below the AL
- Systems must offer to replace customer owned portion at customer cost
- LSLR can stop when lead \leq AL for 2 consecutive monitoring periods

Challenges

- Most homeowners have declined the opportunity to replace their portion of the lead service line.
- Partial replacements may be harmful due to the disruption of the service line dislodging lead





Lead Service Line Replacement Key Questions

- What are the opportunities and challenges to state and local governments if EPA were to modify the LCR to:
 - Require systems to create an inventory of lead service lines
 - Require proactive full lead service line replacement on a specified schedule (e.g., 10, 15, 25, 35 years from promulgation)
 - Allow partial LSLR only for emergency repair or “unwilling or unable customers” when conducting infrastructure replacement (e.g., main replacement)
 - Require pitcher filters to be distributed and regularly maintained by the PWS for three months immediately following lead service replacement



Corrosion Control Treatment

Current Requirements

- Systems serving >50,000 required to perform CCT
- Systems serving ≤50,000 required to perform CCT if AL exceeded
- System proposes treatment (or changes) and state approves

Challenges

- States and water systems often lack needed expertise
- Some small systems with lead service lines are not required to perform CCT





Corrosion Control Treatment

Key Questions

- What are the opportunities and challenges to state and local governments if the LCR was modified to:
 - Target systems to required install CCT differently:
 - Change the current system size threshold (50,000 people served), or
 - Require systems with lead service lines (regardless of population served) to install and maintain CCT?
 - Require plumbed in point of use treatment devices to be provided to households with lead service lines and regularly maintained
 - Change the requirements for designating optimal CCT to:
 - Prescribe a default CCT that must be maintained unless a system can demonstrate equivalent CCT to the state, or
 - Require the system to conduct a periodic re-evaluation of CCT to be reviewed by the state?
 - Require system to find and fix problems in corrosion control treatment if a tap sample exceeds an action level?



Transparency & Public Education

Current Requirements

- The annual Consumer Confidence Report sent to all consumers must include lead sampling results and an informational statement about the health effects of lead and actions to reduce exposure
- Systems that exceed lead action level must begin public education within 60 days after end of monitoring period:
 - Educational materials must include information on health effects of lead, sources of lead, and steps consumers can take to reduce exposure to lead in drinking water
- The 2016 Water Infrastructure Improvement for the Nation Act (WIIN) requires notice of exceedance of AL within 24 hours

Challenges

- Intensive public education only occurs after a problem has been identified
- Information on lead in drinking water is confusing, particularly results in comparison to the action level



Transparency & Public Education: Key Questions

- What do state and local governments think are the most effective ways for water systems to deliver educational information to consumers?
- What opportunities and challenges would state and local governments face if the LCR was revised to require:
 - Water systems to provide on-going targeted outreach with a special emphasis on all customers with lead service lines?
 - Water systems to provide notification to consumers within 24 hours of exceeding an action level (as required by the 2016 WIIN Act)?
 - Water Systems to make information accessible to consumers on results of all tap sampling, results of water quality parameter (WQP) monitoring and the number and locations of LSLs?



LCR Tap Sampling

Current Requirements

- Collect samples at residential taps that are at high risk of lead contamination
- 90th Percentile result compared to Action Levels based on treatment feasibility
 - 15 ppb ($\mu\text{g/L}$) lead
 - 1.3 ppm (mg/L) copper

Challenges

- Complicated sampling procedure
- Procedures are not always followed
- Up to 10% of samples can have highly elevated levels of lead with no additional requirement for actions





Tap Sampling: Key Questions

- What are the opportunities and challenges for states and local governments if the rule changed sampling protocols, including:
 - Changing where water systems are required to collect tap samples?
 - At sites based on customer request,
 - At schools served by the system,
 - Change the way samples are collected to be more representative of exposure?
 - Increase the number of samples required
 - Instruct consumers to sample when they are drawing water for drinking or cooking.
 - Establish a household action level that if exceeded would trigger a report to the consumer and to the applicable health agency for follow up?



Copper

Current Requirements

- Copper samples are collected at the same time and customer taps as lead samples.
- The 90th% value of results is compared to the copper AL of 1.3 ug/L.
- If the copper AL is exceeded, water systems must implement CCT.



Copper Revisions

Key Questions

- What opportunities and challenges would state and local governments face if EPA revised the LCR to:
 - Establish a screen to determine if water systems have water aggressive to copper?
 - If water is aggressive, require:
 - monitoring and/or
 - public education and/or
 - CCT.
 - Modify tap sampling to require separate sampling sites for copper?



How Does it All Fit Together?

- The LCR is a composite of multiple requirements that apply to systems differently depending on system size and water quality
- The revised LCR would similarly bring together multiple key requirements that could vary according to system specific conditions
- One important factor in considering potential changes to the LCR is cost. The following slides provide representative examples of the costs of a few key potential requirements



Example Costs for Key Potential Requirements

Lead Service Line Replacement

- Based on preliminary estimates, replacing a full LSL would cost on average \$4,700 per line replaced
- Cost can vary greatly depending on the length and the amount of pavement that must be restored. Costs may range from \$1,200 - \$12,300 per line replaced





Example Costs for Key Potential Requirements

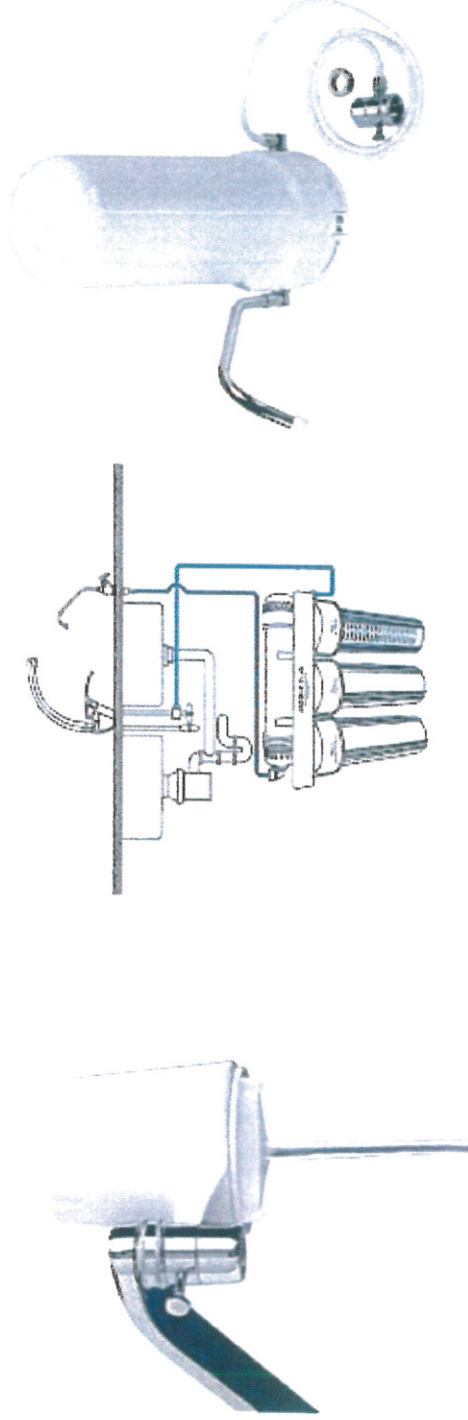
Estimated Costs for Centralized Orthophosphate Treatment (CCT) Systems				
Public Water System Size (People Served)	Total System Capital Cost (\$)	Annual System O&M Cost (\$)	Total Capital Cost per Household (\$)	Annual O&M Cost per Household (\$)
25-100	18,000	2,000	740	78
100-500	19,000	2,000	170	21
500-1000	21,000	3,000	72	12
1000-3300	22,000	6,000	31	8
3300-10000	39,000	8,000	17	3
10000-50000	48,000	25,000	5	3
50000-100000	63,000	81,000	2	3
100000-500000	92,000	265,000	1	2

In this table total system and household capital costs are one time costs and are not annualized values. Annualized capital cost would normally be calculated over the useful life of the technology.



Example Costs for Key Potential Requirements

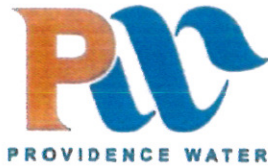
- Plumbed in Point of Use filter devices would have an estimated total annual cost of \$120 per household





Discussion

- Do you have any other approaches that you would like EPA to consider?
- Any additional information or concerns you would like to share with EPA?
- EPA would appreciate any information, and specific data, state and local governments could provide on their experiences with:
 - lead service line replacement
 - corrosion control treatment (studies and implementation)
 - sampling programs or
 - other aspects of drinking water lead control programs.



**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 expenditures related to the Private Side Lead Service Replacement Loan Program.

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

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

BOARD OF DIRECTORS

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Vice Chairperson
Sabina Matos
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Councilperson
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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 expenditures related to the Private Side Lead Service Replacement Loan Program.

WHEREAS, it is the intent of the Board to borrow funds in an amount, not to exceed one million dollars (\$1,000,000) for expenditures related to the Private Side Lead Service Replacement Loan Program and any cost of issuance and/or reserves as required.

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 Private Side Lead Service Replacement Fund for the Private Side Lead Service Replacement Loan Program

❖ 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 November 15, 2017 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.
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Xaykham Khamsyvovong, 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, 2016 AND 2015

**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 year ended June 30, 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

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, 2016 and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

During the fiscal year ended June 30, 2016, the City adopted new accounting guidance, GASB Statement No. 72, *Fair Value Measurement and Application*. Our opinion is not modified with respect to this matter.

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-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, 2016 and 2015, 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

Prior Year Financial Statements

The financial statements of the Providence Water Supply Board as of June 30, 2015 were audited by other auditors whose report dated April 1, 2016 expressed an unmodified opinion on those statements.

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 28 through 30 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, 2016, 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 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 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, 2016

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2016 AND 2015**

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, 2016 and 2015.

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 non-operating 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, non-capital 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, 2016 AND 2015

Condensed Financial Information

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total current assets	\$ 62,360,519	\$ 56,860,298	\$ 50,845,457
Net property, plant and equipment	359,674,679	317,261,613	299,812,331
Total assets	<u>422,035,198</u>	<u>374,121,911</u>	<u>350,657,788</u>
Total current liabilities	13,183,282	13,498,670	9,928,198
Total long-term liabilities	157,876,249	123,484,780	75,559,279
Total liabilities	<u>171,059,531</u>	<u>136,983,450</u>	<u>85,487,477</u>
Deferred inflows of resources	<u>178,623</u>	-	<u>2,709,308</u>
Net position:			
Net investment in capital assets	256,129,467	239,087,594	225,543,538
Restricted fund	37,233,166	36,145,168	32,410,386
Unrestricted fund	<u>(42,565,589)</u>	<u>(38,094,301)</u>	<u>4,507,079</u>
Total Net Position	<u>\$ 250,797,044</u>	<u>\$ 237,138,461</u>	<u>\$ 262,461,003</u>
Total operating revenue	\$ 69,209,492	\$ 69,231,217	\$ 62,872,231
Total operating expenses	44,687,516	43,179,067	41,750,117
Depreciation	10,673,384	11,313,363	12,643,922
Total operating expenses including depreciation	<u>55,360,900</u>	<u>54,492,430</u>	<u>54,394,039</u>
Operating income	13,848,592	14,738,787	8,478,192
Nonoperating expense	(673,210)	(1,811,838)	(1,562,494)
Capital grants and contributions	<u>483,201</u>	<u>1,098,257</u>	<u>3,303,600</u>
Change in Net Position	<u>\$ 13,658,583</u>	<u>\$ 14,025,206</u>	<u>\$ 10,219,298</u>

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2016 AND 2015**

Financial Highlights

During the year, the Water Supply Board had operating revenues that exceeded operating expenses by \$13.8 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 \$422.0 million, up \$47.9 million from last year's total assets of \$374.1 million. Current assets, principally cash, decreased by \$1.0 million, and net plant increased by \$42.4 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 non-operating expenses of \$0.67 million, and capital contributions of \$.48 million.

The Water Supply Board's net position totaled \$237.1 million at June 30, 2015, a decrease of \$25.3 million from June 30, 2014. The decrease is the result of recording the net pension liability in the amount of \$41.3 million to reflect implementation of GASB Statement No. 68. Also reflected in the change of our net position is net operating income of \$14.7 million, net non-operating expenses of \$1.8 million, capital contributions of \$1.1 million, and a prior period adjustment of \$2 million.

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 non-operating 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 Town of Foster. The agreement called for Town of Foster to reimburse Water Supply Board a total of \$1.6 million plus interest over the next 10 years. Non-operating 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.

The Water Supply Board's total operating revenues were \$69.2 million for fiscal year 2015, an increase of \$6.4 million over prior year's revenue of \$62.9 million. Total operating expenses of the water system amounted to \$54.5 million, which is slight increase over the prior year's amount of \$54.4 million. The increase in revenue in 2015 was attributable to the increase in rates authorized by the RI Public Utilities Commission (PUC) in December 2013. Fiscal year 2015 represents the first full fiscal year which reflects that increase in rates. Fiscal year 2015 non-operating revenue, principally interest, amount to \$324,754, and non-operating expenses of \$2.1 million was principally interest on long-term debt. Capital grants and contributions in fiscal year 2015 amounted to \$1.1 million.

The increase in revenue in fiscal year 2016 as compared to fiscal year 2015 was combinations of recognizing the Tax relief payment from Town of Foster, slight increase in consumption in retail customers, increase in Impact fees, miscellaneous revenue, and decrease in consumption in wholesale customers.

**PROVIDENCE WATER SUPPLY BOARD
(AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2016 AND 2015**

Capital Assets and Debt Administration

Capital Assets:

At June 30, 2016, the Water Supply Board had \$359.7 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 \$42.4 million, or 11.8%, over the prior year.

At June 30, 2015, the Water Supply Board had \$317.3 million invested in various capital assets. This amount represented a net increase of \$17.4 million, or 5.8%, over the previous year.

Major project expenditures in fiscal year 2016 included (in millions):

*	Replace / upgrade water mains	\$	15.67
*	Administration Building Site Design/Land Acquisition	\$	11.20
*	Replace sand filters	\$	6.70
*	Supplemental Tunnel - Investigation Rehabilitation (2016)	\$	1.30
*	Pretreatment Pilot-Scale Evaluation	\$	1.06
*	Sludge handling / disposal	\$	1.01
*	Plant Influent and Aerator Rehabilitation	\$	0.92
*	Treatment Process Studies	\$	0.44
*	Replace fire hydrants	\$	0.41
*	Various Distribution System Improvements	\$	0.37
*	Unidirectional Flushing (UDF) Program Development	\$	0.31
*	Install Transmission Mains (W. Cranston)	\$	0.30
*	Replace distribution valves	\$	0.28
*	Replace lead services	\$	0.26
*	Aerated, Settled, and Filter Influent Conduits	\$	0.18
*	Replace 16 inch & larger valves	\$	0.15
*	90" influent conduit - inspection	\$	0.12
*	Treatment Plant On-Site Wastewater Treatment System	\$	0.12
*	COF - Operating Expenses	\$	0.12
*	Other Miscellaneous Projects	\$	0.55

The Water Supply Board's fiscal year 2016 capital budget included project expenditures of \$27.1 million for infrastructure and capital projects. The major projects were: water main replacements and upgrades, treatment plant filter replacements, plant influent and aerator upgrades, sludge removal and disposal, source water improvements, aerated settled and filter conduits, various distribution system improvements and installing transmission mains in Western Cranston. The Water Supply Board, in December 2015 purchased a new central operating facility and embarked on major improvements and renovations on the new facility which will be the new headquarters of the company. The majority of infrastructure projects are financed on a pay-as-you-go, cash basis from rate revenues. Some projects were funded from bond proceeds issued in fiscal year 2016. New capital additions, 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, 2016 AND 2015**

Debt:

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 24.5%. Providence Water Supply Board sought and received approval from the RI Division of Public Utilities (the Division) to borrow \$30 million from the RI Infrastructure Bank to finance the purchase and renovation of a new Central Operating Facility (COF). The Division's approval for this borrowing was the basis of rate relief authorized by the PUC that will generate additional revenue of \$2.1 million per year to fund the debt service associated with this borrowing.

A new \$30.0 million bond was issued in December 2016.

At June 30, 2015, the Water Supply Board had \$78.2 million in bonds and notes outstanding versus \$74.3 million in the previous year. This represented an increase of \$3.9 million, or 5%. A new \$8.0 million bond was issued in 2015 to fund various water main improvements.

Subsequent Events

Providence Water Supply Board has applied to the Public Utility Commission (PUC) for full rates increase across all classes of the Water Supply Board customer, effective February 2017. These rates range from 6.7% for the wholesale customers to 15.0% for the retail customers. The rates increase, if approved, would generate additional revenue of \$7.9 million, and allow the Water Supply Board to continue to improve and replace the aging infrastructure and maintain the continued supply of safe drinking water to the two thirds of the state of Rhode Island population it serves. The rates increase would also allow the water board to generate additional revenue to fund the debt service associated with future debt it will borrow. The increase would bring the annual revenue of the Water Supply Board to \$77.2 million.

Providence Water Supply Board is in the final stage of a merger and annexation with East Smithfield Water District to its water operation. The East Smithfield Water District currently serves about 2,400 customers in East Smithfield, and North Providence. When the merger and annexation is completed, Providence Water Supply Board customers' counts would increase to approximately 74,400 customers including its wholesalers. The merger is expected to be completed by mid-January 2017.

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 January 1, 2011 to June 30, 2016. A new contract was in negotiations at fiscal year-end and subsequently approved by the union and City. The new contract 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, 552 Academy Avenue, Providence, RI 02908.

PROVIDENCE WATER SUPPLY BOARD
 (AN ENTERPRISE FUND OF THE CITY OF PROVIDENCE, RHODE ISLAND)
 STATEMENTS OF NET POSITION
 JUNE 30, 2016 AND 2015

EXHIBIT I

	<u>2016</u>	<u>2015</u>
Assets:		
Current unrestricted assets:		
Cash and cash equivalents	\$ 2,364,040	\$ 4,796,887
Accounts receivable, net of allowance for uncollectible accounts of \$1,242,827 in 2016 and \$1,247,078 in 2015	6,696,642	6,332,160
Accounts receivable - unbilled	2,843,801	3,441,854
Inventory	569,051	826,530
Other assets		300,455
Total current unrestricted assets	<u>12,473,534</u>	<u>15,697,886</u>
Current restricted assets:		
Cash and cash equivalents	42,041,914	39,989,014
Accounts receivable	60,571	16,959
Notes receivable - short term	127,439	
Total current restricted assets	<u>42,229,924</u>	<u>40,005,973</u>
Total current assets	<u>54,703,458</u>	<u>55,703,859</u>
Capital assets:		
Land	23,836,137	22,613,760
Building and improvements	103,048,502	84,679,611
Improvements other than buildings	326,348,497	311,430,903
Machinery and equipment	31,999,221	31,586,324
Scituate Reservoir Project	18,681,695	18,681,695
Construction in progress	73,252,031	55,087,340
	<u>577,166,083</u>	<u>524,079,633</u>
Less accumulated depreciation and amortization	217,491,404	206,818,020
Total capital assets, net	<u>359,674,679</u>	<u>317,261,613</u>
Other noncurrent assets:		
Notes receivable - long term	<u>1,308,387</u>	
Deferred Outflows of Resources:		
Pension-related deferred outflows of resources	<u>6,348,674</u>	<u>1,156,442</u>
Total assets and deferred outflows of resources	<u>422,035,198</u>	<u>374,121,914</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, 2016 AND 2015

EXHIBIT I

	<u>2016</u>	<u>2015</u>
Liabilities:		
Current:		
Current portion of long-term debt	\$ 3,892,845	\$ 4,628,807
Due to City of Providence General Fund	643,624	1,394,422
Accounts payable	1,049,299	1,231,083
Accrued liabilities	<u>2,600,756</u>	<u>2,383,551</u>
	<u>8,186,524</u>	<u>9,637,863</u>
Amounts to be paid from current restricted assets:		
Due to Water Resources Board	360,017	400,400
Accounts payable	<u>4,636,741</u>	<u>3,460,405</u>
	<u>4,996,758</u>	<u>3,860,805</u>
Total current liabilities	<u>13,183,282</u>	<u>13,498,668</u>
Noncurrent liabilities:		
General revenue bonds	99,652,367	73,545,212
Net pension liability	50,365,882	43,268,573
Other post employment benefit obligations payable	<u>7,858,000</u>	<u>6,671,000</u>
Total noncurrent liabilities	<u>157,876,249</u>	<u>123,484,785</u>
Total liabilities	<u>171,059,531</u>	<u>136,983,453</u>
Deferred Inflows of Resources:		
Pension-related deferred inflows of resources	<u>178,623</u>	
Net Position:		
Net investment in capital assets	256,129,467	239,087,594
Restricted	37,233,166	36,145,168
Unrestricted	<u>(42,565,589)</u>	<u>(38,094,301)</u>
Total Net Position	<u>\$ 250,797,044</u>	<u>\$ 237,138,461</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, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
Operating Revenues:		
Charges for services:		
Water sales:		
General customers	\$ 47,413,514	\$ 46,859,419
Other local water suppliers	16,929,522	17,732,754
Fire protection services	2,322,938	2,308,161
Maintenance charges and other revenue	2,543,518	2,330,883
Total operating revenues	<u>69,209,492</u>	<u>69,231,217</u>
Operating Expenses:		
Source of supply	2,785,157	2,654,218
Pumping operations	755,951	724,018
Water treatment	7,376,945	8,227,250
Transmission and distribution	6,158,189	5,086,495
Charge for services provided by other City departments	839,167	839,167
Customer accounts and service	3,738,236	3,593,293
Administrative and general	16,014,991	15,031,845
Depreciation	10,673,384	11,313,363
Property taxes - other local governments	7,018,880	7,022,781
Total operating expenses	<u>55,360,900</u>	<u>54,492,430</u>
Operating Income (Loss)	<u>13,848,592</u>	<u>14,738,787</u>
Nonoperating Revenue (Expense):		
Interest income	404,534	324,754
Interest expense and other	(2,682,272)	(2,136,592)
Other revenues	1,604,528	
Net nonoperating revenue (expense)	<u>(673,210)</u>	<u>(1,811,838)</u>
Capital Grants and Contributions	<u>483,201</u>	<u>1,098,257</u>
Change in Net Position	13,658,583	14,025,206
Net Position - Beginning of Year	<u>237,138,461</u>	<u>223,113,255</u>
Net Position - End of Year	<u>\$ 250,797,044</u>	<u>\$ 237,138,461</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, 2016 AND 2015

EXHIBIT III

	<u>2016</u>	<u>2015</u>
Cash Flows from Operating Activities:		
Receipts from customers	\$ 71,148,337	\$ 69,062,726
Payments to vendors	(24,401,681)	(25,137,957)
Payments to employees	(17,785,511)	(13,593,617)
Net cash provided by (used in) operating activities	<u>28,961,145</u>	<u>30,331,152</u>
Cash Flows from Capital and Related Financing Activities:		
Acquisition and construction of capital assets	(53,086,450)	(28,779,604)
Interest and issuance costs paid on debt	(2,682,272)	(2,136,592)
Principal payments on long-term debt	(4,628,807)	(4,094,774)
Proceeds from long-term debt	30,000,000	8,000,000
Proceeds from note receivable	168,702	
Capital grants	483,201	1,098,257
Net cash provided by (used in) capital and related financing activities	<u>(29,745,626)</u>	<u>(25,912,713)</u>
Cash Flows from Investing Activities:		
Investment income (loss)	404,534	324,754
Net cash provided by (used in) investing activities	<u>404,534</u>	<u>324,754</u>
Net Increase (Decrease) in Cash and Cash Equivalents	(379,947)	4,743,193
Cash and Cash Equivalents - Beginning of Year	44,785,901	40,042,708
Cash and Cash Equivalents - End of Year	<u>\$ 44,405,954</u>	<u>\$ 44,785,901</u>
Unrestricted Cash and Cash Equivalents	\$ 2,364,040	\$ 4,796,887
Restricted Cash and Cash Equivalents	<u>42,041,914</u>	<u>39,989,014</u>
	<u>\$ 44,405,954</u>	<u>\$ 44,785,901</u>
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:		
Operating income (loss)	\$ 13,848,592	\$ 14,738,787
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:		
Depreciation	10,673,384	11,313,363
Provision for doubtful accounts	4,251	(269,904)
Changes in assets and liabilities:		
(Increase) decrease in accounts receivable	185,708	370,165
(Increase) decrease in inventories	257,479	53,282
(Increase) decrease in other assets	300,455	(268,752)
(Increase) decrease in deferred outflows of resources	(5,192,232)	(1,156,442)
Increase (decrease) in due to other funds	(750,798)	16,773
Increase (decrease) in accounts payable and accrued expenses	1,171,374	3,019,665
Increase (decrease) net pension liability	7,097,309	1,911,599
Increase (decrease) OPEB obligation	1,187,000	1,285,739
Increase (decrease) in deferred inflows of resources	178,623	(683,123)
Net Cash Provided by (Used in) Operating Activities	<u>\$ 28,961,145</u>	<u>\$ 30,331,152</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 2016, the \$60,570 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, 2016, 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>2016</u>	<u>2015</u>
Cash and cash equivalents	\$ 2,364,040	\$ 4,796,887
Restricted cash and cash equivalents	<u>42,041,914</u>	<u>39,989,014</u>
	<u>\$ 44,405,954</u>	<u>\$ 44,785,901</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 \$44,405,954, \$250,000 is covered by Federal Deposit Insurance Corporation (FDIC) insurance and \$2,114,040 is uncollateralized.

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

4. CAPITAL ASSETS

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>

The following is a summary of the activity in capital assets as of June 30, 2015:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Disposals/ Transfers</u>	<u>Ending Balance</u>
Capital assets not being depreciated:				
Land	\$ 21,958,397	\$ 655,363	\$	\$ 22,613,760
Scituate Reservoir Project	18,681,695			18,681,695
Construction in progress	47,609,161	24,438,961	16,960,782	55,087,340
Total capital assets not being depreciated	<u>88,249,253</u>	<u>25,094,324</u>	<u>16,960,782</u>	<u>96,382,795</u>
Capital assets being depreciated:				
Buildings and improvements	79,135,020	5,544,591		84,679,611
Improvements other than buildings	297,055,247	14,375,656		311,430,903
Machinery and equipment	30,877,466	708,858		31,586,324
Total capital assets being depreciated	<u>407,067,733</u>	<u>20,629,105</u>	<u>-</u>	<u>427,696,838</u>
Less accumulated depreciation for:				
Buildings and improvements	55,267,185	6,207,747		61,474,932
Sewer and infrastructure	113,064,008	4,367,715		117,431,723
Equipment	27,173,462	737,903		27,911,365
Total accumulated depreciation	<u>195,504,655</u>	<u>11,313,365</u>	<u>-</u>	<u>206,818,020</u>
Total capital assets being depreciated, net	<u>211,563,078</u>	<u>9,315,740</u>	<u>-</u>	<u>220,878,818</u>
Capital Assets, Net	<u>\$ 299,812,331</u>	<u>\$ 34,410,064</u>	<u>\$ 16,960,782</u>	<u>\$ 317,261,613</u>

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

5. LONG-TERM DEBT

Long-term debt activity for the years ended June 30, 2016 and 2015, was as follows:

	2016				
	<u>Beginning Balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>Ending Balance</u>	<u>Due Within One Year</u>
Bonds payable:					
Revenue bonds	\$ 78,174,019	\$ 30,000,000	\$ 4,628,807	\$ 103,545,212	\$ 3,892,845
Long-Term Liabilities	<u>\$ 78,174,019</u>	<u>\$ 30,000,000</u>	<u>\$ 4,628,807</u>	<u>\$ 103,545,212</u>	<u>\$ 3,892,845</u>
	2015				
	<u>Beginning Balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>Ending Balance</u>	<u>Due Within One Year</u>
Bonds payable:					
Revenue bonds	\$ 74,268,793	\$ 8,000,000	\$ 4,094,774	\$ 78,174,019	\$ 4,628,807
Long-Term Liabilities	<u>\$ 74,268,793</u>	<u>\$ 8,000,000</u>	<u>\$ 4,094,774</u>	<u>\$ 78,174,019</u>	<u>\$ 4,628,807</u>

The following is a summary of bonds and notes outstanding at June 30, 2016 and 2015:

<u>Description</u>	<u>Amount of Interest Rate (%)</u>	<u>Outstanding June 30, 2016</u>	<u>Outstanding June 30, 2015</u>
Safe Drinking Water Bonds (CWFA FY2002)	3.61%	\$ 924,704	\$ 1,061,245
Scituate Reservoir Project (PPBA FY 2011)	5.40%	368,258	504,774
Safe Drinking Water Bonds (CWFA FY2008)	2.85%	26,703,000	28,181,000
Safe Drinking Water Bonds (CWFA FY2010)	.0410% to 3.14%	7,458,250	8,660,000
Safe Clean Water Bonds (CWFA FY2012)	.072% to 3.26%	2,621,000	2,748,000
Safe Clean Water Bonds (CWFA FY2013)	.019% - 2.53%	3,842,000	4,021,000
Safe Drinking Water Bonds (CWFA FY2013)	.022% - 2.63%	23,960,000	24,998,000
Safe Drinking Water Bonds (CWFA FY2013)	.022% - 3.01%	7,668,000	8,000,000
Safe Drinking Water Bonds (CWFA FY2015)	.022% - 3.01%	30,000,000	
Total		<u>\$ 103,545,212</u>	<u>\$ 78,174,019</u>

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

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

<u>Fiscal Year</u>	<u>Principal</u>	<u>ARRA Principal Forgiveness</u>	<u>Interest and Fees</u>	<u>Total</u>
2017	\$ 3,892,845	\$ (203,572)	\$ 2,542,880	\$ 6,232,153
2018	5,284,015	(270,262)	2,660,271	7,674,024
2019	5,312,106	(274,967)	2,557,456	7,594,595
2020	5,349,503	(280,369)	2,444,485	7,513,619
2021	5,474,936	(286,671)	2,322,402	7,510,667
2022-2026	28,850,557	(1,541,365)	8,912,270	36,221,462
2027-2031	30,804,250	(1,779,034)	5,047,793	34,073,009
2032-2036	<u>18,577,000</u>	<u>(1,027,296)</u>	<u>1,262,685</u>	<u>18,812,389</u>
Total	\$ <u>103,545,212</u>	\$ <u>(5,663,536)</u>	\$ <u>27,750,242</u>	\$ <u>125,631,918</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, 2016 and 2015. 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, 2016 and 2015, totaled \$643,624 and \$1,394,422, 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, 2016 and 2015 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.

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

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, 2015 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.

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

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 16,894 lead services to the end of fiscal year 2016 (June 30, 2016) at a cost of \$55,870,855.

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 City of Providence consisted of the following at June 30, 2015, the date of the latest actuarial valuation:

Inactive plan members or beneficiaries currently receiving benefits	3,097
Inactive employees entitled to but not yet receiving benefits	432
Active employees	<u>3,012</u>
Total	<u><u>6,541</u></u>

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

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, 2016:

Asset Class	Target Allocation
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
	100.00%

The total pension liability was determined by an actuarial valuation as of June 30, 2015, 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	8.25%, net of pension plan investment expense, including inflation

For the year ended June 30, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 2.60%. 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, 2016 are summarized as follows:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Weighted Real Rate of Return
Domestic equity	39.25%	6.49%	(2.20)%
International developed markets equity	13.25	7.16	(5.50)
International emerging markets equity	1.50	9.46	(5.50)
Core fixed income	29.00	1.68	4.40
Hedge fund, GTAA, Risk parity	13.00	3.60	26.70
Private equity	4.00	11.04	(15.30)
	100.00%		2.60%

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

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, 2016, 2015 and 2014 were \$3,615,102, \$3,212,354 and \$2,945,209, 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, 2016, 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:

	<u>June 30, 2016</u>	<u>June 30, 2015</u>
Total pension liability	\$ 67,406,877	\$ 60,131,939
Plan fiduciary net position	<u>17,040,995</u>	<u>16,863,406</u>
Net Pension Liability	<u>\$ 50,365,882</u>	<u>\$ 43,268,533</u>
Plan fiduciary net position as a percentage of the total pension liability	25.28%	28.04%

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

Changes in the Net Pension Liability for the Water Supply Board

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (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 difference 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>

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

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances as of June 30, 2014	\$ 58,311,217	\$ 16,954,283	\$ 41,356,934
Changes for the year:			
Service cost	854,182		854,182
Interest on total pension liability	5,509,989		5,509,989
Differences between expected and actual experience	79,253		79,253
Effect of assumptions changes or inputs	40,391		40,391
Employer contributions		3,212,354	(3,212,354)
Member contributions		1,037,505	(1,037,505)
Net investment income		331,724	(331,724)
Benefit payments, including refund to employee contributions	(4,663,093)	(4,663,093)	-
Administrative expenses		(9,367)	9,367
Net changes	<u>1,820,722</u>	<u>(90,877)</u>	<u>1,911,599</u>
Balances as of June 30, 2015	\$ <u>60,131,939</u>	\$ <u>16,863,406</u>	\$ <u>43,268,533</u>

Additional information as of the latest actuarial valuation follows:

Valuation Date	July 1, 2015
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	8.25%
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 8 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.

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

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2016 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, 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

The following presents the net pension liability of the Retirement System, calculated using the discount rate of 8.25%, 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 (7.25%) or 1-percentage-point higher (9.25%) than the current rate at June 30, 2015:

	<u>1% Decrease (7.25%)</u>	<u>Discount (8.25%)</u>	<u>1% Increase (9.25%)</u>
Net pension liability	\$ 49,571,509	\$ 43,268,533	\$ 37,941,170

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

For the years ended June 30, 2016 and 2015, the Water Supply Board recognized pension expense of \$5,698,801 and \$3,967,510, respectively.

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

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>	
Total	<u>\$ 6,348,674</u>	<u>\$ 178,623</u>

At June 30, 2015, 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	\$ 63,403	\$
Changes of assumptions	32,313	
Net difference between projected and actual earning on pension plan investments	<u>1,060,726</u>	
Total	<u>\$ 1,156,442</u>	<u>\$ -</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:

2017	\$ 1,622,650
2018	1,622,650
2019	1,622,650
2020	<u>1,302,101</u>
Thereafter	<u>\$ 6,170,051</u>

Payable to the Plan

At June 30, 2016, the Water Supply Board had made full payment of the required pension contribution for the year ended June 30, 2016.

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

10. POST EMPLOYMENT BENEFITS

The Water Supply Board follows GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*.

The Water Supply Board's Post-Retirement Benefits Program of the City of Providence (the Program) is a defined-benefit, single-employer post-retirement health and life insurance program. The Program provides lifetime health care and life insurance benefits to retired employees and their spouses when retirement was effective prior to 1996. Disclosures about this program, as a whole, are presented in the City of Providence, Rhode Island's basic financial statements. As of June 30, 2016 and 2015, the City recorded a liability for unpaid post-retirement contributions of \$278,037,000 and \$241,723,000, respectively. Separate actuarial information related to the Water Supply Board employees is not available. Accordingly, only disclosures about the Water Supply Board's participation in the Plan are presented herein.

<u>Year Ended June 30,</u>	<u>Annual Required Contribution</u>	<u>Actual Contribution</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
2016	\$ 1,841,000	\$ 678,000	36.8%	\$ 7,858,000
2015	1,774,000	507,000	28.6%	6,671,000
2014	1,755,357	437,598	24.9%	5,385,261

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.

11. RECLASSIFICATIONS

Certain reclassifications have been made to the Water Supply Board's financial statement presentation as of and for the year ended June 30, 2015 to correspond to the current year's format.

12. SUBSEQUENT EVENTS

Effective January 1, 2017, the Providence Water Supply Board entered into an agreement to merge with the East Smithfield Water District in Smithfield, Rhode Island. As part of the agreement, the Providence Water Supply Board has agreed to spend no less than \$4 million to upgrade the East Smithfield Water District's infrastructure over a 10-year period.

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

	2016	2015	2014
Total pension liability:			
Service cost	\$ 941,053	\$ 854,182	\$ 893,162
Interest	5,130,041	5,509,989	4,946,549
Differences between expected and actual experience	(223,279)	79,253	
Change from difference in proportionate share	3,875,236		
Changes of assumptions	3,083,805	40,391	
Benefit payments, including refunds of member contributions	(5,531,918)	(4,663,093)	(4,973,233)
Net change in total pension liability	7,274,938	1,820,722	866,478
Total pension liability - beginning	60,131,939	58,311,217	57,444,739
Total pension liability - ending	67,406,877	60,131,939	58,311,217
Plan fiduciary net position:			
Contributions - employer	3,615,102	3,212,354	2,945,209
Contributions - member	615,760	1,037,505	911,508
Net investment income	401,320	331,724	1,210,438
Change from difference in proportionate share	1,086,733		
Benefit payments, including refunds of member contributions	(5,531,918)	(4,663,093)	(4,973,233)
Administrative expense	(9,408)	(9,367)	(71,955)
Net change in plan fiduciary net position	177,589	(90,877)	21,967
Plan fiduciary net position - beginning	16,863,406	16,954,283	16,932,316
Plan fiduciary net position - ending	17,040,995	16,863,406	16,954,283
Net Pension Liability - Ending	\$ 50,365,882	\$ 43,268,533	\$ 41,356,934
Plan fiduciary net position as a percentage of the total pension liability	25.28%	28.04%	29.08%
Covered-employee payroll	\$ 13,096,208	\$ 12,930,447	\$ 11,900,000
Net pension liability as a percentage of covered-employee payroll	384.58%	334.63%	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 THREE FISCAL YEARS*

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

Notes to Schedule

Valuation date: July 1, 2015
 Measurement date: June 30, 2016
 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. 25 years remaining as of July 1, 2015 (16 years remaining as of July 1, 2015 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.
- Asset valuation method: 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: 3.5% 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 actuarial assumptions used reflect the assumptions proposed in the Experience Investigation for the Five Year Period Ending June 30, 2011 submitted to the Board on April 2, 2012, with the following exception:
 The retirement rate for Class B participants is 100% at age 60.

**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 THREE FISCAL YEARS*

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	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, 2016, 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, 2016.

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 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 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, 2016