

Testimony
of
RICKY CARUOLO
before the
PUBLIC UTILITIES COMMISSION

for

PROVIDENCE WATER

DOCKET#

May 16, 2016

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

2 A. Ricky Caruolo, General Manager of the Providence Water Supply Board (Providence Water)

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

4 A. I have been employed at Providence Water since April 1993, or approximately 23 years. I
5 was appointed Acting General Manager in February 1, 2014 and became the permanent
6 General Manager on June 11, 2014.

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

8 A. I graduated from the University of Rhode Island in 1990 with a Bachelor of Science in
9 Finance and a Bachelor of Science in Management. I also graduated from Providence
10 College in 1994 with a Master of Business Administration. As an employee of Providence
11 Water, I have held various management positions in the finance department, commercial
12 services department and in executive management.

13 **Q. What are your duties and responsibilities?**

14 A. I am responsible for managing the operations of a public water supply system that serves
15 more than 600,000 people. I provide administrative, financial and supervisory oversight of
16 all divisions within the organization.

17 **Q. Do you belong to any professional organizations or committees?**

18 A. Yes. I belong to the American Water Works Association, the New England Water Works
19 Association and the Rhode Island Water Works Association.

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

21 A. To provide a general overview of Providence Water's rate filing. Providence Water is
22 requesting a general rate increase to secure sufficient funds to provide for the operation and

1 maintenance of our water system that serves nine wholesale customers and over 72,000 retail
2 customers. Overall, our system supplies clean drinking water to 600,000 Rhode Islanders.

3 **Q. How was the filing prepared?**

4 A. The revenue requirements portion of the filing was prepared in house by Providence Water
5 staff. Nancy Parrillo, Senior Manager for Finance will provide testimony on the revenue
6 requirements for our rate year. Harold J. Smith of Raftelis Financial Consultants will
7 provide testimony for our cost allocation study and rate design. Gregg M. Giasson,
8 Deputy General Manager of Operations / Executive Engineer for Providence Water, will
9 provide testimony on our Infrastructure and Capital Improvement Plans and on our additional
10 staffing needs.

11 **Q. Has the Board approved this filing?**

12 A. Yes. The Board approved our rate filing on April 20, 2016.

13 **Q. Why is a revenue increase needed by Providence Water at this time?**

14 A. The last general rate increase (excluding the increase for the Central Operations Facility
15 (COF) approved in September 2015) became effective on December 7, 2013. Taking into
16 account the Commission's suspension period, the current rates of Providence Water will be
17 in effect for over three years.

18 In this filing we are requesting a revenue increase of \$8,328,042, or 12%, with total rate year
19 revenues amounting to \$77,728,472. Two areas account for 85% of the increase, our
20 Infrastructure Replacement Program (IFR) and salaries and benefits.

21 **Q. Has Providence Water seen any results in their water quality efforts?**

1 A. Yes. Providence Water has seen positive results directly related to our water quality efforts.
2 Customer complaints regarding discolored water have drastically declined. In January 2016
3 we became compliant with EPA's Lead and Copper Rule for the first time since 2007. It is
4 our belief that our continued water quality efforts will ensure that our customers continue to
5 receive the highest quality of water that we can produce.

6 **Q. Please provide examples of your water quality efforts.**

7 A. Providence Water has been extremely aggressive in an effort to become compliant with
8 EPA's Lead and Copper Rule for several years now. Some examples of our water quality
9 efforts are as follows: ongoing consultation with our expert panel, implementation and
10 expansion of a unidirectional flushing program, rehabilitation of unlined cast iron mains, and
11 evaluation of alternate treatment methods at our purification plant. For a more detailed
12 explanation please refer to the testimony of Gregg M. Giasson.

13 **Q. Did Providence Water complete any new initiatives in calendar year 2015? If yes,
14 please describe them.**

15 A. Yes. Providence Water targeted several initiatives that were based around customer service,
16 water quality, and security. On the customer service side, we redesigned our web site
17 internally to make it more user friendly for our customer base. Auto bill pay was
18 implemented as a convenient way for our customers to pay their bills electronically. We also
19 introduced paperless bills as a green initiative in order to reduce paper invoices which is a
20 cost savings to our rate payers.

21 In an effort to keep our customers better informed Providence Water became engaged in
22 social media. We have a presence on Facebook, Twitter and Instagram so that we can get
23 information shared to our customers in a timely fashion. Social media has allowed us to

1 share emergency and planned work like main breaks, water outages, and construction zones
2 that lead to detours. We have also used social media to provide helpful information to our
3 customers during extreme cold weather so they can avoid the potential of freezing pipes.

4 Our water quality initiatives have met and, in some cases, exceeded the 2015 consent
5 agreement we signed with the Department of Health. We flushed approximately 102 miles
6 of main in calendar year 2015, and we invested \$12.3 million in our distribution system by
7 replacing, cleaning and lining approximately 11.7 miles of main. As mentioned previously,
8 Providence Water passed our lead and copper testing for two semesters in a row this year
9 putting us in compliance with the lead and copper rule for the first time since 2007.

10 Our security efforts continue to be a top organizational priority now and into the future. It is
11 imperative that Providence Water remains vigilant with regard to our overall security.

12 Cybersecurity is a new threat and with each new technology platform that is added to the
13 organization, the threat vector associated with cybersecurity becomes much more broad and
14 dynamic. It is imperative that we implement applications, hardware, software and other
15 associated devices to ensure the success of implementing a cybersecurity plan. The ultimate
16 goal of our cybersecurity plan is as follows: (1) become more resilient against malicious
17 cyber activity both domestic and foreign in nature and (2) improve our response to
18 cybersecurity incidents while strengthening our recovery capabilities. Unfortunately
19 cybersecurity is not a one time product purchase; it is a process that requires continued
20 investments and vigilance on our part. We are committed to investing time and resources
21 hardening our cyber security efforts and we will continue to do so in the future.

1 Providence Water also remains committed to protecting our watershed, water source,
2 treatment plant, distribution system and new central operation facility. We have increased
3 the number of watershed inspectors from five (5) in 2012 to eight (8) in 2015 so that we can
4 do a better job monitoring our key infrastructure. We plan on constructing a security guard
5 facility at our purification plant. The security facility will allow us to better limit and control
6 access to our property and purification plant.

7 **Q. Does Providence Water have any plans for a lead education program?**

8
9 A. Yes. The Flint, Michigan crisis is something that we want to avoid at all costs.
10 Unfortunately Providence Water has approximately 13,800 public side lead services
11 remaining in our system, but the number of private lead services is much greater. It is our
12 plan to continue to replace our public lead services in conjunction with our main replacement
13 work which has been recommended by our expert panel. However, this alone will not solve
14 all lead issues that may arise in a customer's home. Therefore, Providence Water is
15 requesting \$250,000 per year to be used on a lead education outreach program throughout
16 our customer base. In the past, Providence Water was required to make financial payment to
17 the Department of Health as per our consent agreement; however, we feel that our lead
18 education program will have a direct benefit to families living within our retail distribution
19 system. The program will include but not limit us to the following: Lead education handouts
20 in English and Spanish to be delivered to all families with lead services; lead education
21 handouts in English and Spanish to be placed in public buildings (hospitals, dental offices,
22 city/town halls, etc.); lead testing kits; and lead service replacement quotes from our
23 contractor.

1 **Q. What is the status for the new COF?**

2 A. Providence Water purchased 125 Dupont Drive on December 28, 2015. We received
3 revenue bonds from the Drinking Water State Revolving Fund at an effective interest rate of
4 approximately 1.775%. The construction contract was awarded to the lowest qualified bidder
5 Dimeo Construction on March 7, 2016. Construction is under way and we anticipate
6 renovations will be completed by September 2017. While the new facility is being
7 renovated, we will experience an increase in utility, phone, insurance, security and other
8 related costs that will cause a bump in these basic operating expenses while the COF is under
9 construction. The new COF will be environmentally friendly incorporating solar power, low
10 energy high efficient lighting throughout the building and rain gardens to mitigate storm
11 water runoff in the Mashapaug Pond. The scope of the renovations is within budget.

12 **Q. Does Providence Water plan on paying taxes to the City of Providence for the COF?**

13 A. Providence Water will not pay taxes to the City of Providence unless authorized to do so by
14 the Commission. However, it is Providence Water's belief that the City of Providence is
15 entitled to payment in lieu of taxes in the amount of \$326,000 per year in order to make them
16 whole. This amount represents what they were receiving in taxes prior to Providence Water
17 acquiring 125 Dupont Drive for our rate payers. If the new COF was located in a city or
18 town outside of Providence, the taxes owed to one of those communities would be much
19 larger.

20 **Q. Will Providence Water limit the installation of solar panels to the new COF?**

21 A. No. Providence Water commissioned a solar study to determine the best possible locations
22 for us to install solar panels. It is our intent to install solar panels on the new COF and at

1 other properties owned by Providence Water. Approximately 5 separate locations are being
2 studied in addition to 125 Dupont Drive.

3 **Q. What initiatives are being addressed in calendar year 2016?**

4 A. Some initiatives being addressed in 2016 are as follows:

- 5 ° Renovations of the new COF;
- 6 ° Inspection to our 78" and 102" mains;
- 7 ° Completion of the filter bed project;
- 8 ° Completion of the influent and aeration project;
- 9 ° Evaluation of alternate clarification technologies;
- 10 ° Implementation of a new asset management system;
- 11 ° Implementation of solar power;
- 12 ° Construction of a new security guard facility; and
- 13 ° Renegotiate the Scituate tax agreement.

14
15 **Q. Has there been any progress acquiring the East Smithfield Water District?**

16 A. Yes. East Smithfield Water District held a public meeting on January 13, 2016. The East
17 Smithfield Water Districts Board voted on February 9, 2016 to petition the Providence Water
18 Supply Board to acquire their system. On February 17, 2016, my Board authorized me to
19 enter into negotiations to acquire the East Smithfield Water District. At a minimum,
20 Providence Water would be assuming all responsibility for providing retail water service to
21 the customer base and taking ownership of the District's assets. Discussions are ongoing and
22 an acquisition should be finalized by the end of calendar year 2016, if not sooner.

23 Providence Water would be acquiring approximately 2,400 new retail customers and losing

1 ESWD as a wholesale customer. Providence Water has committed \$4,000,000 in IFR
2 improvements in the ESWD over a ten- year period, see Exhibit RC- 2. The acquisition of
3 ESWD will result in an increase in utility costs, T&D work, general system maintenance, and
4 a complete replacement of all meters within the District to be compatible with the Providence
5 Water AMR system. There will be time, effort and costs associated with converting the
6 ESWD customer billing system so that it can be integrated into the Providence Water billing
7 system.

8 **Q. Does Providence Water plan on acquiring any other systems?**

9 A. Providence Water is open to the possibility of acquiring other systems if it makes financial
10 sense for our rate payers. Mayor Polisen from the Town of Johnston has approached us in
11 the past. Preliminary conversations commenced again in early March but no further details
12 are available at this time.

13 **Q. Have you attached the information required by R.I.G.L. Section 39-3-12.1?**

14 A. Yes, the information is attached as an Exhibit to my testimony.

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

16 A. Yes.

Compliance with R.I.G.L. §39-3-12.1

(1) Status of Physical Plant

The physical plant of the Providence Water Supply Board consists of five (5) feeder reservoirs (Ponagansett, Moswansicut, Barden, Westconnaug, and Regulating) and the main Scituate Reservoir, a 100% surface water supply with a total storage capacity of 41,268 million gallons; a filtration plant with associated sedimentation basins, and chemical storage and feeding equipment, and a filtration capacity of 144 million gallons per day; a transmission and distribution system, consisting of more than 1000 miles of transmission and distribution mains, which vary in size from 6 inch to 102 inches, and consisting primarily of pipe constructed of cast and ductile iron, asbestos-cement and concrete; four (4) completely enclosed distribution reservoirs with a total capacity of 115.3 million gallons; one (1) prestressed concrete cylindrical tank with a total capacity of 3.5 million gallons; four (4) distribution system pumping stations; one (1) raw water booster pumping station; six (6) pressure boosting pumping stations; eleven (11) emergency power systems, eight (8) driven by diesel engines and three (3) driven by gas engines; and administrative and maintenance garage facilities.

Compliance with R.I.G.L. §39-3-12.1

(2) Maintenance Policy

It is the policy of the Water Supply Board to maintain its system in proper operating condition in accordance with all accepted standards. Leaks and damaged valves, hydrants and other appurtenances of the distribution system are repaired and/or replaced expeditiously. Physical plant maintenance is performed in a planned manner by permanent crews when possible. Outside contractors are used to supplement forces when needed. Distribution pipes (most recent main extensions) were installed through fiscal reporting year ending June 30, 2015. Total pipe installed (and or replaced) in the system since 2005 is as follows:

<u>Year</u>	<u>Feet</u>	<u>Miles</u>
2005	11,400	2.16
2006	13,388	2.54
2007	8,122	1.54
2008	7,868	1.49
2009	8,176	1.55
2010	7,873	1.49
2011	44,489	8.43
2012	19,499	3.69
2013	43,919	8.32
2014	56,686	10.74
<u>2015</u>	<u>55,102</u>	<u>10.40</u>
Total	276,522	52.35

Compliance with R.I.G.L. §39-3-12.1

(3) Water Treatment Methods and Chemicals used

During the last fiscal reporting period, (July 2014 through the end of June 2015), Providence Water utilized the following four (4) chemicals during the treatment process, as follows:

1. Ferric Sulfate- Used to coagulate and settle out micro-organisms and particles that cause color and turbidity,
2. Lime- Used to adjust PH
3. Chlorine-Used as a disinfectant
4. Fluoride- Used to prevent dental cavities

The quantities and costs of the chemicals used based on purification plant reporting data for dosing of specified water are as follows:

<u>Chemical</u>	<u>Quantity Used</u>	<u>Unit Cost</u>	<u>Total Cost *</u>
Ferric Sulfate	816,618 gals	\$ 1.37	\$1,117,513.09
Lime	2,121 tons	\$ 214.16	\$469,479.40
Chlorine	170 tons	\$ 800.00	\$138,704.02
Fluoride	55,311gals	\$ 2.61	\$140,857.38
		Total	\$1,866,553.89

*Total cost does not compute exactly from figures shown, as it includes audit adjustments.

Compliance with R.I.G.L. §39-3-12.1

(4) Policy Relating to Expansion and Renovation of Physical Plant

It is the policy of the Board to assure that the system will continue to provide service to all existing customers. Technical evaluations are made to determine future needs so that required expansion can proceed in a timely manner in order to assure that new customers can be provided with the same level of service without any degradation of service to existing customers. Providence Water has an Infrastructure Replacement Program that addresses the rehabilitation or replacement of major system components. A Capital Improvement Program is also in place to address the implementation of new capital assets. Funding has been provided through rates established by the Public Utilities Commission. The programs are administrated though restricted funds for which semi-annual reports are provided to the Commission.

In fiscal year 2015 ending June 30, 2015, Providence Water invested approximately **\$27.1 million** into the infrastructure replacements and capital improvements to the system.



PROVIDENCE WATER

Tap Water Delivers

November 2, 2015

Mr. Todd Manni, Chairman
East Smithfield Water District
307 Waterman Avenue
Providence, Rhode Island 02908-5097

The Hon. Jorge O. Elorza
Mayor

Ricky Caruolo
General Manager

RE: Dissolution of East Smithfield Water District – Providence Water Supply Board Commitment

Dear Chairman Manni:

BOARD OF DIRECTORS

Kaykham Khamsyvoravong
Chairperson

Joseph D. Cataldi
Vice Chairperson

Michael J. Correla
Councilperson

Sabina Matos
Councilperson

Lawrence J. Mancini
Ex-Officio

Andy M. Andujar
Member

Kerri Lynn Thurber
Member

Carissa R. Richard
Secretary

William E. O'Gara, Esq.
Legal Advisor

A work session was held on September 28, 2015 between the East Smithfield Water District Board members and the staff of the Providence Water Supply Board. The meeting was focused on the dissolution of the East Smithfield Water District and the Providence Water Supply Board acquiring East Smithfield Water District customers on a retail basis.

Subsequently, East Smithfield Water District Board Treasurer Ray DiSanto sent a letter requesting that Providence Water provide a clearer idea of what we would commit to in terms of infrastructure improvements to the East Smithfield system. After discussions amongst our staff, Providence Water is proposing the following commitment to current East Smithfield Water District customers:

- Replacement of existing water meters and automatic meter reading devices to ensure compatibility with PWSB Itron meter reading software.
- Evaluation and possible removal of the North Elmore Pump Station. Providence Water will evaluate the option of connecting the North Elmore service area directly to a main within the Providence Water transmission/distribution system that has a higher hydraulic grade line. This connection would eliminate the North Elmore Pump Station and the associated operating and maintenance costs.
- Include the approximately seven (7) miles of cast iron and fifteen (15) miles of asbestos cement pipe as part of Providence Water's ongoing main rehabilitation program.

Providence Water is committing to spending a minimum of \$4,000,000 on the aforementioned projects over the next ten (10) years. The commitment of \$4,000,000 includes the engineering, labor and construction costs associated with these projects.

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

552 Academy Avenue
Providence, RI 02908

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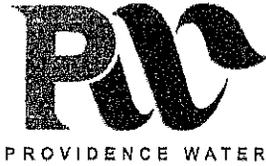
It is our understanding that this commitment exceeds the East Smithfield Water District's current funding level for infrastructure improvements. Providence Water currently manages a \$24 million Infrastructure Replacement Plan. Including the East Smithfield Water District infrastructure improvements within Providence Water's Infrastructure Replacement Plan will ultimately cost the East Smithfield Water District ratepayers less money due to the volume of work that Providence Water undertakes in a given year.

Please feel free to contact me at 521-6300 ext. 7188 or rickyv@provwater.com if you have any questions.

Respectfully,
PROVIDENCE WATER SUPPLY BOARD


Ricky Garuolo, General Manager

cc: Peter Pallozzi, Deputy GM - Administration, PWSB (e-mail)
Gregg Giasson, P.E., Executive Engineer, PWSB (e-mail)
Carissa Richard, Manager - Intergovernmental Relations, PWSB (e-mail)
Peter LePage, Senior Manager - Engineering, PWSB (email)



CERTIFICATE OF SECRETARY

I, Carissa R. Richard, do upon oath say:

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

1. That I am the duly appointed Secretary of the Providence Water Supply Board (PWSB), an entity established by the Home Rule Charter of the City of Providence.
2. That at the meeting of the PWSB held on Wednesday, February 17, 2016, the following was voted by all members of the Providence Water Supply Board present:

BOARD OF DIRECTORS

- Xaykham Khamsyvovong
Chairperson
- Joseph D. Cataldi
Vice Chairperson
- Michael J. Correia
Councilperson
- Sabina Matos
Councilperson
- Lawrence J. Mancini
Ex-Officio
- Andy M. Andujar
Member
- Kerri Lynn Thurber
Member
- Carissa R. Richard
Secretary
- William E. O'Gara, Esq.
Legal Advisor

RESOLVED: That the Board of Directors voted authorize the General Manager to pursue negotiations for the acquisition of the East Smithfield Water District.

In Witness Whereof, I have set my hand this 9th day of May 2016.

Carissa R. Richard
Carissa R. Richard
Secretary
Providence Water Supply Board

STATE OF RHODE ISLAND
PROVIDENCE, sc.

In Providence on the 9th day of May 2016, there personally appeared before me the above-named, Carissa R. Richard, individually and in her capacity as Secretary of the Providence Water Supply Board, and she acknowledged the execution of this certificate to be her free act and deed and in her said capacity.

Joseph P. Murphy
Notary Public: Joseph P. Murphy
My Commission Expires: 4-7-18

MEMBER

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

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