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July 19, 2013

Mrs. Luly Massaro
Commission Clerk
RI Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

The Hon. Angel Taveras
Mayor

Boyce Spinelli
General Manager

RE: Dk 4406 Bristol County Water Authority; Set 1

Dear Mrs. Massaro:

Enclosed is an original and seven copies of Providence Water's responses to the first set of data request from Bristol County Water Authority.

If you have any questions you can contact me at extension 7217.

Sincerely,

Mary L. Deignan-White
Senior Manager of Regulatory

cc: service list

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Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-1. Refer to the testimony of Boyce Spinelli, page 2, lines 17 to 19. The proposed increases to retail classes (23.0%) are very close (1.8% less) to the increase in total rate revenues (24.8%), and that the increase to the wholesale class (32.8%) is about 32% greater than the average increase.

- a. Does Mr. Spinelli agree that such an increase would result in very significant impacts to wholesale customers and the retail customers they serve?
- b. Did Providence Water consider phasing in the increase to wholesale customers or any other measures to mitigate the impact to wholesale customers?
- c. If Providence did consider phasing in the increase to wholesale customers or any other measures to mitigate the impact to wholesale customers, what measures did Providence consider, and why didn't it adopt any?

Answer:

- a. Please refer to Providence Water's response to Division 3-1, that indicates the revised wholesale increase is 23.6%, which is in line with the total rate increase and retail rate increase.
- b. No.
- c. Not applicable.

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**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-2: Refer to the testimony of Boyce Spinelli, page 4, lines 6 to 25. Mr. Spinelli indicated that nearly 80% of the proposed increase is due to 3 programs that address water quality issues. Please explain the following in detail:
- a. What part of that 80% is associated with the Infrastructure Replacement (IFR) program and the Unidirectional Flushing (UDF) program?
 - b. What portion of the IFR program relates solely to distribution facilities (pipes sizes 12 inches in diameter and smaller), as opposed to transmission facilities (pipe sizes greater than 12 inches in diameter)?
 - c. What portion of the UDF program, if any, has significant benefits to wholesale customers?
 - d. For any system mains that have diameters greater than 12 inches, but are solely used by and only have benefits for the distribution network, please identify these mains (size, Length and location) and include them in the distribution category.]
- Response:
- a. As is indicated in Boyce Spinelli's referenced testimony, the proposed increase in IFR and UDF totals \$8.5 million, and the proposed increase for all three (3) programs is \$11.5 million. The IFR and UDF programs constitute approximately 74% (\$8.5 million/\$11.5 million) of the total proposed increase for the three (3) programs.
 - b. Of the proposed \$8 million increase, \$6 million of the increase will be specifically dedicated to distribution mains (mains 6 inches to 8 inches in size). The additional \$2 million is part of what has been the planned overall funding program integral to PW's approved IFR Plan.
 - c. It is estimated that approximately 10% of the UDF program should provide benefits to wholesale customers.
 - d. Water mains that are 12 inches and larger in size are transmission mains. Water mains smaller than 12 inches function as the distribution piping that delivers water to individual customer service connections. Water mains 12" and greater in size are part of the PW's transmission system consisting of an interconnected network of intertwined and looped water mains which supplement each other and contribute to the overall transport of water through the system to both wholesale and retail customers.

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**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-3. Refer to the testimony of Boyce Spinelli, page 4, line 27 to 32. What is the current billing frequency for each of the wholesale customers?

Answer: Monthly.

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**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-4: Refer to the testimony of Boyce Spinelli, page 4, lines 27-28. Mr. Spinelli testified that the conversion to monthly billing will cost \$400,000.

- a. If wholesale customers are already billed on a monthly basis, should any portion of that cost be allocated to wholesale customers?
- b. If any of these costs have been allocated to wholesale customers, what amount was so allocated, and please explain in detail Providence's rationale for doing so.

Answer:

a. Yes. Providence Water's banking fees will increase as a result of the increase in processing payments. This expense is a General Administrative Expense and is charged to that class of accounts. Any increase in this expense would therefore be allocated to the Wholesale customers, the same as any other General Administrative Expense account. Please note that none of the direct costs associated with the switch to monthly billing have been charged to Wholesale. They have been charged to Customer Accounts expense and have been allocated all to Retail charges.

b. Please refer to Providence Water's response to DIV 3-1, Schedule HJS-S2, page 5 of 7, where \$49,000 was charged to account 63580, Contractual Services – Other. As shown on Schedule HJS-S11, Allocator Y is used to allocate these costs, as such, 22.27% of the \$49,000 would have been allocated to Wholesale, or \$10,912.30. As stated above, this is an administrative cost associated with the switch and as such would be allocated similarly to other administrative accounts.

Please note that the Wholesale customers are not charged a Service Charge, and are not allocated any Customer Accounts expenses. However, while there are few Wholesale accounts, they are large and are given more personal attention than other customer accounts. For example some have manual reads and bills.

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**Data Requests of the
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BCWA 1-5. Refer to the testimony of Boyce Spinelli, Table A page 6, lines 1 through 25.

- a. In this portion of Mr. Spinelli's testimony is he specifically requesting that the Commission not approve conservation rates as part of this case for either retail or wholesale customers?
- b. If you are not specifically requesting that the Commission not approve conservation rates as part of this case for either retail or wholesale customers, please explain your response in detail.

Answer:

a. Yes. I feel that our customers are already conserving as evidenced by our reduced consumption. The NBC sewer bills also have a conservation effect for many of our customers, as will our switch to monthly billing. Therefore, primarily for these reasons, we feel now is not the time to implement conservation rates.

b. Not applicable.

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**Data Requests of the
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BCWA 1-6: Refer to the testimony of Boyce Spinelli, Table A. In this table the total length of transmission and distribution mains is listed as being in excess of 950 miles.

- a. Is this the total currently in service?
- b. If not, what is the total currently in service?
- c. For the total currently in service, please list in feet the total lengths for each of the various size (by diameter) pipes.
- d. For the total currently in service, please break down each size total into feet of unlined iron pipe and the remaining total which will include lined iron pipe and all other types (various materials) of pipe.

Response:

- a. Yes
- b. See response to (a).
- c. The breakdown is as follows (Please note that for convenience, we are providing the figures in miles, as opposed to feet as was requested):

<u>Diameter (in.)</u>	<u>Miles</u>
6	482.4
8	290.3
10	3.1
12	94.0
16	41.0
20	5.9
24	24.1
30	16.1
36	1.9
42	4.9
48	2.4
60	4.2
66	1.6

- d. See Response to KCWA 1-1 for lengths of unlined pipe by size. Subtracting these lengths from the above provides the remaining total.

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**Data Requests of the
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BCWA 1-7: Refer to the testimony of Boyce Spinelli, Table A :

- a. Are any of the four listed enclosed distribution reservoirs either not needed (or used) at all to serve wholesale customers, or just marginally, under severe conditions?
- b. Are any of the listed booster pumping stations either not needed (or used) at all to serve wholesale customers, or just marginally, under severe conditions?
- c. Are any of the listed emergency power systems either not needed (or used) at all to serve wholesale customers, or just marginally, under severe conditions?
- d. List any of the facilities identified in BCWA 1-7 a-c that are not used to any significant degree to serve wholesale customers.

Response:

- a. No. All distribution reservoirs are needed and used on a daily basis to serve wholesale customers.
- b. The raw water booster pumping station is used under severe conditions to serve both wholesale and retail customers. This pump station is needed to pump raw water from the Scituate Reservoir to the Treatment Plant under low reservoir conditions when the normal gravity flow is no longer sufficient. The six (6) booster pumping stations are not used to serve wholesale customers. These booster pumping stations are very minor in size, serving less than 3% of our customers.
- c. Yes. Four (4) of the eleven (11) emergency power systems are not used to serve wholesale customers. These emergency power systems serve some of the smaller booster pumping station listed in (d) below.
- d. Booster pumping stations: Greenville Avenue BPS, Dean Estates BPS, Cranston Commons BPS, Alpine Estates BPS, Atwood Avenue BPS, and Ashby Street BPS. Emergency power systems: Greenville Avenue BPS, Dean Estates BPS, Alpine Estates BPS, and Atwood Avenue BPS.

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**Data Requests of the
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BCWA 1-8: Refer to the testimony of Boyce Spinelli, Table B.

- a. For the length in feet of each annual total, please provide the breakdown between the length of pipe that was replaced and the length of pipe that was first added to, or extended, the piping system.
- b. Also provide a further breakdown of annual lengths into unlined iron pipe and all others.

Response:

- a. Due to time period overlaps, it is not possible to provide a breakdown of pipe replaced versus new pipe installed on a year-by-year basis. The total pipe installed over the period from FY 2003 through FY 2012 was 139,845 feet. Of that total, 113,629 feet represented main replacement work, and 26,216 feet represented new main extensions.
- b. All of the pipe replaced was unlined cast iron. All of the pipe installed was cement-lined ductile iron.

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Data Requests of the
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BCWA 1-9: Refer to the testimony of Boyce Spinelli, Table D. Please provide a detailed breakdown of the \$21,000,000 that Providence Water invested in infrastructure replacements and capital improvements to the system during fiscal year 2012. For each separate project indicate the type of facility by functional categories, such as source of supply, pumping, treatment, storage, T&D, services, valves, meters, hydrants, general plant, etc.

Response: See attached Exhibit A

Project	FY2012 Expenditures	Category
Meter and Junction Chamber Rehabilitation	\$302,658	Raw Water
Raw Water Generator Replacement	\$293,301	Raw Water
Rehabilitate Large Dams (Gainer/Regulating Dam)	\$782	Raw Water
90" influent conduit - inspection	\$3,212	Raw Water
Rehabilitate large dams (Regulating Reservoir Dam)	\$1,385	Raw Water
Lagoon #2 Restoration	\$1,017,552	Treatment
Replace sand filters	\$5,541,232	Treatment
Process Control and Control System Upgrades	\$104,500	Treatment
Plant Influent and Aerator Rehabililitation	\$24,093	Treatment
Aerated, Settled, and Filter Influent Conduits	\$4,819	Treatment
Lab Improvements	\$17,437	Treatment
Treatment Process Studies	\$145,490	Treatment
Treatment Plant Architectural Upgrades	\$60,256	Treatment
Install New CO2 System	\$323,533	Treatment
Dean Estates Pump Station Upgrade	\$732,973	Pumping
Various Pump Station Improvements	\$15,111	Pumping
Neutaconkanut reservoir - inspect / rehabilitation	\$18,400	Storage
102 Aqueduct - Investigation/Rehabilitation	\$1,823,010	Transmission System
Replace 16 inch & larger valves	\$25,144	Transmission System
Install Transmission Mains	\$22,278	Transmission System
Emergency Interconnection - Structure D	\$666	Transmission System
Replace distribution valves	\$149,775	Distribution System
Replace fire hydrants	\$529,716	Distribution System
Replace lead services	\$1,539,968	Distribution System
Replace / upgrade water mains	\$6,732,891	Distribution System
MLOG Leak Detection	\$589,130	Distribution System
Hydrant Locks	\$161,622	Distribution System
Valve and Hydrant Asset Assessment	\$549,296	Distribution System
Various Distribution System Improvements	\$69,959	Distribution System
Security upgrade at treatment plant and facilities	\$18,853	Support Systems
GIS System and base mapping conversion system	\$118,185	Support Systems
Administration Building Site Design/Land Acquisition	\$7,104	Support Systems
Rehabilitate Access Roads and Fencing - PW Property	\$23,979	Support Systems
Various Support System and Facilities Improvements	\$4,221	Support Systems
Total	\$20,972,530	

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-10. Refer to the testimony of Boyce Spinelli, Table E.

- a. Does Providence Water separate in any way the portion of its "Non-accounted for Water" between the level that retail customers are responsible for and the level that wholesale customer are responsible for.
- b. If the answer is in the affirmative, please provide all assumptions, calculations and work-papers that were used in deriving those responsibilities.

Answer:

- a. Ordinarily, Providence Water does not separate it's "Non-accounted for Water", but our rate consultants did pro-rate the amount for this rate filing. Please see the response to BCWA 1-30.
- b. Please see the response to BCWA 1-30, prepared by Mr. Smith, for the details.

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**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-11. Refer to the testimony of Boyce Spinelli, Table E.

- a. How are the amounts shown as "Sales for Resale" listed on Table E determined?
- b. In answering this request, please provide the source of all data utilized and all assumptions, calculations and work-papers that Providence used to derive the total annual amounts.
- c. Please provide an example using FYE 2012 to demonstrate the entire process from meter readings to the final determination of value listed (13,213,689 HCF).

Answer:

- a. The amounts reflect the total wholesale billing consumption for the years listed.
- b. Reports were run by Providence Water's MIS department which list the consumption by wholesale account. Please see attached report for FY 2012.
- c. Meter readings are taken by the Commercial Services department. They are entered in the PW's billing system. Bills are issued. A report is run by MIS for a period in time, i.e., 7/1/11 – 6/30/12.

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
Wholesale						
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	178,329,000.00	238,407.75	32
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	150,129,000.00	200,707.22	30
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	128,419,000.00	171,683.16	27
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	117,088,000.00	156,534.76	30
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	103,394,000.00	138,227.27	28
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	131,529,000.00	175,840.91	33
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	89,517,000.00	119,675.13	27
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	24,989,000.00	33,407.75	7
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	98,917,000.00	132,241.98	29
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	101,568,000.00	135,786.10	30
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	92,233,000.00	123,306.15	31
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	0.00	0.00	0
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	24,564,000.00	32,839.57	1
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	114,597,000.00	153,204.55	28
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	152,370,000.00	203,703.21	33
603002	603002	BUDLONG RD	CITY OF EAST PROVIDENCE	1,507,643,000.00		2,015,565.51
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	46,667,600.00	62,389.84	29
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	37,818,100.00	50,558.96	29
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	25,233,810.00	33,735.04	28
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	31,723,190.00	42,410.68	30
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	16,395,800.00	21,919.52	28
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	21,997,400.00	29,408.29	33
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	22,983,100.00	30,726.07	34
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	19,623,700.00	26,234.89	34
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	19,940,200.00	26,658.02	25
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	24,130,000.00	32,259.36	32
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	25,512,700.00	34,107.89	29
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	38,899,700.00	52,004.95	33
604001	604001	GEORGE WATERMAN RD	GREENVILLE WATER DIST	330,925,300.00		442,413.50
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	4,869,480.00	6,510.00	32
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,093,950.00	1,462.50	32
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,029,996.00	1,377.00	29
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,912,040.00	5,230.00	29
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,332,340.00	4,455.00	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,141,074.00	1,525.50	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	804,773.20	1,075.90	20
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	2,048,024.00	2,738.00	20
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	413,718.80	553.10	11
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,082,356.00	1,447.00	11
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	999,702.00	1,336.50	25
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	2,307,580.00	3,085.00	25
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,310,870.00	1,752.50	33
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,021,920.00	4,040.00	33
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,359,490.00	1,817.50	34
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,160,300.00	4,225.00	34
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	974,793.60	1,303.20	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	2,726,460.00	3,645.00	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,333,160.40	1,782.30	28
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	2,599,300.00	3,475.00	28
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,254,022.00	1,676.50	33
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,369,740.00	4,505.00	33
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,188,946.00	1,589.50	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	3,253,800.00	4,350.00	30
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	1,039,720.00	1,390.00	32
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	4,480,520.00	5,990.00	32
605002	605002	DEAN AVE	EAST SMITHFIELD WATER	54,108,076.00		72,337.00
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	42,612,000.00	56,967.91	1

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	11,167,000.00	14,929.14	1
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	7,491,000.00	10,014.71	4
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	23,932,000.00	31,994.65	22
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	27,384,000.00	36,609.63	28
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	28,921,000.00	38,664.44	33
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	18,780,000.00	25,106.95	25
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	22,030,000.00	29,451.87	33
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	19,758,000.00	26,414.44	34
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	16,386,000.00	21,906.42	29
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	23,977,000.00	32,054.81	30
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	26,179,000.00	34,998.66	32
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	25,882,000.00	34,601.60	29
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	33,653,000.00	44,990.64	33
606001	606001	519 SMITHFIELD RD	TOWN OF SMITHFIELD	328,152,000.00		438,705.88
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	164,679,000.00	220,159.09	32
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	133,597,000.00	178,605.61	30
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	95,738,000.00	127,991.98	27
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	86,763,000.00	115,993.32	33
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	51,783,000.00	69,228.61	25
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	34,404,000.00	45,994.65	33
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	10,799,000.00	14,437.17	13
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	7,510,000.00	10,040.11	21
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	21,276,000.00	28,443.85	29
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	19,985,000.00	26,717.91	30
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	54,691,000.00	73,116.31	32
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	82,815,000.00	110,715.24	29
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	126,225,000.00	168,750.00	33
607001	607001	PETTACONSETT AVE	CITY OF WARWICK	890,265,000.00		1,190,193.85
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	257,162.40	343.80	23
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	57,596.00	77.00	23
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	76,819.60	102.70	7
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	16,456.00	22.00	7
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	41,140.00	55.00	28
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	241,604.00	323.00	28
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	165,308.00	221.00	29
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	18,700.00	25.00	29
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	121,176.00	162.00	32
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	32
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	86,020.00	115.00	25
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	25
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	109,208.00	146.00	33
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	33
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	115,566.00	154.50	34
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	34
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	92,752.00	124.00	31
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	31
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	86,768.00	116.00	27
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	0.00	0.00	27
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	179,520.00	240.00	33
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	22,440.00	30.00	33
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	150,348.00	201.00	30
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	7,480.00	10.00	30
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	26,180.00	35.00	32
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	256,190.00	342.50	32
812604	812604	PLAINFIELD & TAYLOR ST	TOWN OF JOHNSTON	2,128,434.00		2,845.50
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	256,564.00	343.00	34
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	11,968.00	16.00	34
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	3,740.00	5.00	27

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	161,194.00	215.50	27
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	129,030.00	172.50	29
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	29
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	137,258.00	183.50	32
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	32
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	106,216.00	142.00	25
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	25
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	145,112.00	194.00	33
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	33
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	151,096.00	202.00	34
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	34
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	131,648.00	176.00	31
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	31
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	143,616.00	192.00	27
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	27
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	145,486.00	194.50	33
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	0.00	0.00	33
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	167,552.00	224.00	30
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	3,740.00	5.00	30
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	265,166.00	354.50	32
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	7,480.00	10.00	32
812605	812605	PLAINFIELD & CAPITAL ST	TOWN OF JOHNSTON	1,966,866.00		2,629.50
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,218,043.20	1,628.40	26
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	6,600,352.00	8,824.00	26
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,570,500.80	2,099.60	35
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	8,550,388.00	11,431.00	35
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,254,770.00	1,677.50	29
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	3,919,520.00	5,240.00	29
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,322,838.00	1,768.50	32
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	2,943,380.00	3,935.00	32
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	991,848.00	1,326.00	25
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,694,220.00	2,265.00	25
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,274,966.00	1,704.50	33
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	2,049,520.00	2,740.00	33
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,322,464.00	1,768.00	34
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	2,019,600.00	2,700.00	34
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,197,548.00	1,601.00	31
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,918,620.00	2,565.00	31
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,039,346.00	1,389.50	27
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	2,165,460.00	2,895.00	27
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,273,470.00	1,702.50	33
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	3,223,880.00	4,310.00	33
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,192,312.00	1,594.00	30
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	3,740,000.00	5,000.00	30
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	1,303,764.00	1,743.00	32
812606	812606	PLAINFIELD/SIMMONSVILLE A\	TOWN OF JOHNSTON	6,305,640.00	8,430.00	32
812606	812606	PLAINFIELD/SIMMONSVILL	TOWN OF JOHNSTON	60,092,450.00		80,337.50
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,745,682.40	2,333.80	26
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	14,767,390.00	19,742.50	26
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	2,339,295.20	3,127.40	36
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	19,146,780.40	25,597.30	36
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,860,500.40	2,487.30	28
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	9,846,148.40	13,163.30	28
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,985,566.00	2,654.50	32
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	7,668,944.80	10,252.60	32
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,476,178.00	1,973.50	25
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	4,584,641.60	6,129.20	25
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,922,360.00	2,570.00	33

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	5,362,187.60	7,168.70	33
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,975,468.00	2,641.00	34
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	5,347,975.60	7,149.70	34
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,786,598.00	2,388.50	31
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	5,049,074.80	6,750.10	31
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,545,368.00	2,066.00	27
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	4,774,184.80	6,382.60	27
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,920,490.00	2,567.50	33
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	8,610,452.40	11,511.30	33
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,803,054.00	2,410.50	30
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	8,650,620.00	11,565.00	30
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	1,787,046.80	2,389.10	28
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	11,751,828.00	15,711.00	28
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	0.00	0.00	0
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	0.00	0.00	0
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	11,107.80	14.85	3
812607	812607	PLAINFIELD & GREENHILL AVE	TOWN OF JOHNSTON	206,896.80	276.60	3
812607	812607	PLAINFIELD & GREENHILL	TOWN OF JOHNSTON	127,925,839.80		171,023.85
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	146,383.60	195.70	26
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	2,992.00	4.00	26
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	748.00	1.00	35
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	178,996.40	239.30	35
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	105,094.00	140.50	29
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	29
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	97,988.00	131.00	32
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	32
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	70,686.00	94.50	25
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	25
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	95,370.00	127.50	33
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	33
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	101,728.00	136.00	34
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	34
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	85,272.00	114.00	31
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	31
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	70,686.00	94.50	27
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	27
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	33
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	118,184.00	158.00	33
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	127,908.00	171.00	30
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	0.00	0.00	30
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	159,324.00	213.00	32
812608	812608	PLAINFIELD & EVERBLOOM ST	TOWN OF JOHNSTON	3,740.00	5.00	32
812608	812608	PLAINFIELD & EVERBLOOM	TOWN OF JOHNSTON	1,365,100.00		1,825.00
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	327,923.20	438.40	26
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	75,548.00	101.00	26
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	51,612.00	69.00	35
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	384,920.80	514.60	35
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	271,898.00	363.50	29
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	11,220.00	15.00	29
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	247,588.00	331.00	32
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	0.00	0.00	32
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	147,356.00	197.00	25
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	0.00	0.00	25
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	198,594.00	265.50	33
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	3,740.00	5.00	33
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	209,814.00	280.50	34
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	0.00	0.00	34
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	185,878.00	248.50	31

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	0.00	0.00	31
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	186,252.00	249.00	27
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	0.00	0.00	27
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	201,586.00	269.50	33
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	7,480.00	10.00	33
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	231,880.00	310.00	30
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	11,220.00	15.00	30
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	314,160.00	420.00	32
812629	812630	PLAINFIELD & NARDOLILLO ST	TOWN OF JOHNSTON	37,400.00	50.00	32
812629	812630	PLAINFIELD & NARDOLILLO	TOWN OF JOHNSTON	3,106,070.00		4,152.50
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	16,925,744.00	22,628.00	29
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	896,403.20	1,198.40	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	558,756.00	747.00	1
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	14,004,804.00	18,723.00	28
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	960,432.00	1,284.00	2
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	880,627.88	1,177.31	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	11,359,128.00	15,186.00	28
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	917,339.72	1,226.39	31
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	1,111,528.00	1,486.00	3
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	494,203.60	660.70	17
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	6,348,276.00	8,487.00	17
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	321,565.20	429.90	11
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	3,677,916.00	4,917.00	11
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	728,552.00	974.00	25
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	7,797,900.00	10,425.00	25
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	960,058.00	1,283.50	33
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	9,925,960.00	13,270.00	33
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	985,490.00	1,317.50	34
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	10,296,220.00	13,765.00	34
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	867,306.00	1,159.50	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	8,893,720.00	11,890.00	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	808,214.00	1,080.50	28
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	8,587,040.00	11,480.00	28
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	955,196.00	1,277.00	33
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	11,242,440.00	15,030.00	33
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	866,184.00	1,158.00	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	11,212,520.00	14,990.00	30
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	936,870.00	1,252.50	32
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	15,214,320.00	20,340.00	32
813505	813488	307 WATERMAN AVE	EAST SMITHFIELD WATER	148,734,713.60		198,843.20
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	123,733,000.00	165,418.45	28
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	125,589,000.00	167,899.73	31
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	87,724,000.00	117,278.07	27
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	109,362,000.00	146,205.88	33
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	89,196,000.00	119,245.99	28
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	89,249,000.00	119,316.84	30
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	114,590,000.00	153,195.19	36
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	88,341,000.00	118,102.94	28
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	99,016,000.00	132,374.33	32
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	97,853,000.00	130,819.52	30
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	111,951,000.00	149,667.11	34
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	122,271,000.00	163,463.90	28
813584	813567	EAST BAY PIPELINE	BRISTOL WATER AUTHORITY	1,258,875,000.00		1,682,987.97
813788	813768	NATICK AVE	CITY OF WARWICK	330,698,000.00	442,109.63	32
813788	813768	NATICK AVE	CITY OF WARWICK	274,190,000.00	366,564.17	36
813788	813768	NATICK AVE	CITY OF WARWICK	178,810,000.00	239,050.80	21
813788	813768	NATICK AVE	CITY OF WARWICK	184,760,000.00	247,005.35	34
813788	813768	NATICK AVE	CITY OF WARWICK	119,221,000.00	159,386.36	24

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
813788	813768	NATICK AVE	CITY OF WARWICK	154,038,000.00	205,933.16	33
813788	813768	NATICK AVE	CITY OF WARWICK	179,419,000.00	239,864.97	34
813788	813768	NATICK AVE	CITY OF WARWICK	150,483,000.00	201,180.48	29
813788	813768	NATICK AVE	CITY OF WARWICK	147,169,000.00	196,750.00	30
813788	813768	NATICK AVE	CITY OF WARWICK	171,622,000.00	229,441.18	32
813788	813768	NATICK AVE	CITY OF WARWICK	157,077,000.00	209,995.99	29
813788	813768	NATICK AVE	CITY OF WARWICK	258,223,000.00	345,217.91	33
813788	813768	NATICK AVE	CITY OF WARWICK	2,305,710,000.00		3,082,500.00
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	155,883,520.00	208,400.43	30
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	18,752,656.00	25,070.40	30
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	145,174,528.00	194,083.59	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	14,702,336.00	19,655.53	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	134,169,600.00	179,371.12	28
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	11,064,416.00	14,792.00	28
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	150,189,056.00	200,787.51	32
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	11,062,912.00	14,789.99	32
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	129,633,286.00	173,306.53	25
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	9,437,760.00	12,617.33	25
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	145,806,330.00	194,928.25	33
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	9,621,440.00	12,862.89	33
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	161,371,136.00	215,736.81	35
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	10,835,136.00	14,485.48	35
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	136,181,760.00	182,061.18	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	9,365,728.00	12,521.03	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	148,527,104.00	198,565.65	32
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	10,073,376.00	13,467.08	32
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	143,450,112.00	191,778.22	30
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	10,780,608.00	14,412.58	30
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	137,683,968.00	184,069.48	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	11,162,752.00	14,923.47	29
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	160,451,584.00	214,507.47	33
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHOR	16,268,064.00	21,748.75	33
813999	813977	CLINTON AVE	KENT COUNTY WATER AUTHO	1,891,649,168.00		2,528,942.74
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	32
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	607,376.00	812.00	32
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	507,892.00	679.00	29
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	29
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	396,440.00	530.00	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	787,270.00	1,052.50	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	323,210.80	432.10	20
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	2,992.00	4.00	20
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	164,485.20	219.90	11
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	748.00	1.00	11
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	367,642.00	491.50	25
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	25
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	492,932.00	659.00	33
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	33
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	501,160.00	670.00	34
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	34
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	423,742.00	566.50	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	382,228.00	511.00	28
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	28
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	482,086.00	644.50	33
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	3,740.00	5.00	33
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	456,654.00	610.50	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	0.00	0.00	30
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	540,804.00	723.00	32

Acct No.	Svc Loc No.	Svc Loc Address	Name	Gal	HCF	Svc Days
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	18,700.00	25.00	32
814124	814093	RIDGE RD	EAST SMITHFIELD WATER	6,460,102.00		8,636.50
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	103,853,000.00	138,840.91	32
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	84,210,000.00	112,580.21	29
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	62,641,000.00	83,744.65	28
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	59,228,000.00	79,181.82	33
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	47,458,000.00	63,446.52	25
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	53,024,000.00	70,887.70	33
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	53,673,000.00	71,755.35	34
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	46,362,000.00	61,981.28	29
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	51,416,000.00	68,737.97	33
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	57,684,000.00	77,117.65	29
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	57,476,000.00	76,839.57	29
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	84,394,000.00	112,826.20	33
814423	610001	LOUISQUISSET PIKE	LINCOLN WATER DEPT	761,419,000.00		1,017,939.84
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	10,703,880.00	14,310.00	32
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	8,665,580.00	11,585.00	32
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	8,272,880.00	11,060.00	29
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	7,760,500.00	10,375.00	29
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	7,767,980.00	10,385.00	29
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	6,406,620.00	8,565.00	29
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	8,497,280.00	11,360.00	32
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	6,174,740.00	8,255.00	32
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	3,912,040.00	5,230.00	25
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	6,904,040.00	9,230.00	25
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	4,809,640.00	6,430.00	33
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	9,342,520.00	12,490.00	33
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	3,870,900.00	5,175.00	34
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	19,092,700.00	25,525.00	34
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	3,160,300.00	4,225.00	30
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	18,628,940.00	24,905.00	30
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	19,638,740.00	26,255.00	28
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	3,440,800.00	4,600.00	28
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	5,060,220.00	6,765.00	33
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	10,352,320.00	13,840.00	33
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	5,464,140.00	7,305.00	30
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	8,123,280.00	10,860.00	30
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	9,062,768.00	12,116.00	34
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	8,200,324.00	10,963.00	34
815845	815751	OAKLAWN AVE	KENT COUNTY WATER	203,313,132.00		271,809.00
		<i>Accounts</i>	<i>18</i>			<i>Wholesale</i>
						13,213,688.84
		<i>Accounts</i>	<i>18</i>	9,883,839,251.40		13,213,688.84

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-12. Refer to testimony of Boyce Spinelli, Table E.

- a. How are the amounts shown as "Sales to Ultimate Consumers" listed on Table E determined?
- b. In answering this request, please provide the source of all data utilized and all assumptions, calculations and work-papers that Providence used to derive the total annual amounts.
- c. Please provide an example using FYE 2012 to demonstrate the entire process from meter readings to the final determination of the value listed (13,081,259 HCF).

Answer:

a. The amounts reflect the total retail billing consumption for the years listed. Currently, reports are run from Providence Water's billing system. In earlier years shown on Table E, the amounts were calculated using the revenue billed and rates in effect.

b. Reports were run by Providence Water's MIS department which list the consumption by customer class (including wholesale accounts). Please see attached report for FY 2012.

c. Automated meter readings are taken by the Commercial Services department by way of drive by van. They are uploaded to MVRS system and transferred to PW's billing system. Bills are calculated, reviewed and issued by the Billing area. Credits or adjustments may be made as necessary. The final determination of the value listed is per a report run by our MIS department for a period in time, i.e., 7/1/11 – 6/30/12.

Consumption (rdgcons) -

7/1/2011 6/30/2012

12/6/2012

Class	Distinct Count of Accts	Dist Count of Svc	HCF	Gal	Avg HCF/Class
Commercial					
04 - Combination	794	793	199,966.12	149,574,657.76	
05 - Commercial I	2,034	2,034	1,020,019.84	762,974,840.32	
06 - Commercial II	2,554	2,553	1,211,818.46	906,440,208.08	
10 - Utility	26	26	94,771.03	70,888,730.44	
11 - Seasonal / Beach	9	9	7,274.21	5,441,109.08	
12 - Misc.	6	6	490.15	366,632.20	
14 - Comm/Indus Vac. Land	4	4	594.90	444,985.20	
24 - Comm. Condo.	33	33	29,746.37	22,250,284.76	
70 - Cemetary	5	5	3,314.45	2,479,208.60	
71 - Charitable	57	57	21,091.85	15,776,703.80	
72 - Church	206	206	37,576.15	28,106,960.20	
73 - Ex-charter	39	39	15,384.99	11,507,972.52	
74 - Federal	16	16	11,504.06	8,605,036.88	
75 - Hospital	62	62	432,691.13	323,652,965.24	
76 - Library	14	14	5,038.64	3,768,902.72	
77 - Military	1	1	0.19	142.12	
78 - Municipal	163	163	159,365.71	119,205,551.08	
79 - School	403	403	560,700.88	419,404,258.24	
80 - State	57	57	556,350.60	416,150,249.08	
82 - City Vote	2	2	1,492.00	1,116,016.00	
83 - Stabilized (44-3-9)	1	1	10.80	8,078.40	
84 - Amtrak	4	4	2,119.05	1,585,049.40	
CONHYD - CONTRACTOR HYDRANT	33	33	15,982.34	11,954,791.32	
PARK - PARK	11	11	5,407.81	4,045,041.88	
Commercial	6,534	6,532	4,392,711.73	3,285,748,375.32	672.29
Industrial					
07 - Industrial	43	43	201,227.33	150,518,042.84	
Industrial	43	43	201,227.33	150,518,042.84	4,679.71
Multi-Family					
02 - 2 - 5 Family	19,028	19,023	3,029,481.02	2,266,051,802.96	
03 - Apartments	1,070	1,070	1,061,685.56	794,140,798.88	
23 - Resid. Condo.	392	392	179,026.82	133,912,061.36	
Multi-Family	20,490	20,485	4,270,193.40	3,194,104,663.20	208.40
Residential					
01 - Single Family	45,638	45,625	4,214,281.08	3,152,282,247.84	
13 - Resid. - Vacant Land	13	13	2,199.90	1,645,525.20	

21 - Resid Bldg Lease Lnd	2	2	120.43	90,081.64	
33 - Farm / Forest	3	3	525.52	393,088.96	
Residential	45,656	45,643	4,217,126.93	3,154,410,943.64	92.37
Wholesale					
40 - WHOLESale	18	18	13,213,688.84	9,883,839,251.40	
Wholesale	18	18	13,213,688.84	9,883,839,251.40	734,093.82
Total No. of	72,741	72,721	26,294,948.23	19,668,621,276.40	361.49

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-13: Refer to the testimony of Paul Gadoury, pages 6 through 9.

- a. Does the UDF program affect both distribution mains (pipes 12 inches in diameter or smaller) and transmission mains or just predominantly distribution mains?
- b. If it affects/impacts pipe sizes greater than 12 inches in diameter, is there a size of transmission main where it has little to no effect/impact? For example, will 36 inch or 48 inch pipes benefit from or have improved flow due to the UDF program?

Response:

- a. The UDF program will primarily affect distribution mains (6 and 8 inches in diameter) and transmission mains (12 inches in diameter). Other transmission mains larger than 12 inches will not be substantially impacted.
- b. See response (a).

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-14: Refer to the testimony of Paul Gadoury, pages 9 through 12.

- a. For wholesale customers how many service interconnections do each have with the PWSB system and what is the diameter of the pipe supplying each connection?
- b. Which, if any, of the wholesale customers are served directly or nearly directly from the outlet side of the treatment plant?

Response:

- a. See attached listing of wholesale connections.
- b. All of the wholesalers receive water that has passed through and been treated at our treatment plant. None are fed directly from the outlet point of the plant.

Data Request BCWA 1-14

Wholesale Accounts	Service Pipe Size
Bristol County - Columbia Park	30"
East Providence - Budlong Road	42"
East Smithfield - Dean Ave	8"
East Smithfield - Ridge Road	16"
East Smithfield - Waterman Ave	12"
Greenville - George Waterman	12"
Johnston - Capitol Street	8"
Johnston - Everbloom Drive	8"
Johnston - Green Hill Road	16"
Johnston - Nardolillo Street	8"
Johnston - Simmonsville Ave	8"
Johnston - Taylor Road	8"
Kent County - Clinton Ave	30"
Kent County - Oaklawn Ave	12"
Lincoln - Woodward Road	16"
Lincoln - Charles Street	12"
Smithfield - Smithfield Road	12"
Warwick - Natick Road	42"
Warwick - Pettaconsett	30"

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

BCWA 1-15: Refer to the testimony of Paul Gadoury, page 10, lines 2 through 6.

- a. Please verify that Providence Water currently has 220 miles of unlined cast iron pipe in service that is at least 113 years old, and an even larger portion that is significantly older.
- b. What are the lengths of such mains installed prior to 1900 aggregated by diameter size?

Response: a. A detailed inventory in response to this data request of the cast iron pipe installed prior to 1900 and still in service yields a quantity of 260 miles. The breakdown is as follows:

<u>Diameter</u>	<u>Miles</u>
6"	160.4
8"	47.8
10"	2.9
12"	18.7
16"	10.3
20"	1.8
24"	9.0
30"	8.9

The second part of the question is unclear. There can be no portion older than pipe that is at least 113 years old.

- b. See response to (a).

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-16. Refer to the testimony of Paul Gadoury, page 12.

- a. Should the 7% figure on line 18 be 9%, or should the 9% figure (blue area of the upper pie chart) on Exhibit PG-3 be 7%?
- b. Should the 40% figure on line 19 be 42%, or should the 42% figure (blue area on the bottom pie chart) on Exhibit PG-3 be 40%?

Response:

- a. The 7% figure on line 18 should read 9%.
- b. The 40% figure on line 19 should read 42%.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-17. Refer to the testimony of Paul Gadoury, Exhibits PG-3 and PG-4. Please provide a detailed breakdown of the sources of funds totaling \$50 million for the currently approved 5 year Rehabilitation Plan and the \$77 million for the proposed expanded 5 year Rehabilitation Plan.

Answer: Please see the response to DIV 1-32 and KCWA 2-7 for documentation of the Source of Funds for the IFR program. The expenses identified on PG-3 and PG-4 are a portion of the IFR program and are included therein.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

- BCWA 1-18. Refer to the testimony of Paul Gadoury, Exhibits PG-3 and PG-4.
- a. Of the 48 miles of unlined iron pipe to be replaced/relined under the currently approved plan, what is the split between pipe greater than 12 inches in diameter and all pipe equal to or less than 12 inches in diameter?
 - b. Also, what are the total costs associated with each size group?
 - c. Of the 73 miles of unlined iron pipe to be replaced/relined under the proposed expanded plan, what is the split between pipe greater than 12 inches in diameter and all pipe equal to or less than 12 inches in diameter?
 - d. Also, what are the total costs associated with each size group?

Response:

- a. While the ultimate objective of the main replacement/relining program is to address all unlined cast iron mains from 6" to 42" in size, plans are to concentrate the initial 48 miles of the effort on 6" and 8" distribution mains and 12" transmission mains.
- b. It is estimated that approximately 90% (\$45 million) of the estimated expenditures shown in Table PG-3 would be associated with 6-inch and 8-inch distribution mains, and 10% (\$5 million) with 12-inch transmission mains.
- c. Plans are to concentrate the initial 73 miles of the effort on 6" and 8" distribution mains and 12" transmission mains.
- d. It is estimated that approximately 90% (\$69.3 million) of the estimated expenditures shown in Table PG-4 would be associated with 6-inch and 8-inch distribution mains, and 10% (\$7.7 million) with 12-inch transmission mains.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

BCWA 1-19. Refer to testimony of Harold Smith, page 7, lines 27 – 31.

- a. If Mr. Smith used a four year average for retail, what would the total retail use be in the pro-forma rate year, and how would the ratio of wholesale consumption to total consumption change?
- b. How would the allocator A change?

Response:

- a. Please see Providence Water's response to BCWA 1-20 below. Providence Water proposes using the 4 year average (for wholesale and retail) from FY 2010-2013. However the data required to evaluate the exact impact of this change are not yet available. Pro-forma consumption will be updated to reflect the four year average 2010-2013 in my rebuttal testimony.
- b. Please see the response a above.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-20. Refer to testimony of Harold Smith, page 8, lines 12 – 17.
- a. Does Mr. Smith agree that by using a three year average for retail consumption, rather than a four year average, that Providence has skewed consumption in the direction of wholesale consumption (causing wholesale consumption to be a greater percentage of the total)?
 - b. If Mr. Smith does not agree, please explain in detail.
 - c. Would Providence Water consider using the three year retail average for estimating pro-forma revenues, but use the four year average for purposes of calculating allocation factors?
 - d. If Providence Water is unwilling to do this, please explain why the four year average for retail consumption should not be used for allocation purposes?

Response:

- a. The use of the 3 year average for retail results in a higher wholesale proportion of pro-forma consumption than would be the case if a four-year average were used. I do not agree that the use of the 3 year average is inappropriate (i.e. 'skewed') to the extent that this average is representative of the retail demand Providence Water can expect going forward. Retail consumption in FY 2009 was considerably higher than that of the subsequent years. At the time this filing was submitted, the three-year average was used to determine representative retail pro-forma consumption, in light of the aberrant nature of FY 2009. However, Providence Water will be filing consumption amounts for FY 2013 and proposes using the average of FY 2010 through FY 2013 for pro-forma wholesale and retail consumption.
- b. Please see response a above.
- c. Please see response a above.
- d. Please see response a above.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-21. Refer to the testimony of Harold Smith, page 9, lines 16 – 18.
- a. Please provide the dates of filing of Providence Water's last three full rate filings.
 - b. Please explain in detail why Providence used a two year period to amortize the rate case expenses?
 - c. If Providence's last full rate filing was four years ago. Why wouldn't four years be a more appropriate amortization period?

Response:

- a. The dates and docket numbers of Providence Water's previous three full rate filings are as follows:
 - a. Dk. 2304 Filed 8/31/95 effective 12/26/95
 - b. Dk. 3163 Filed 6/30/00 effective 01/01/01
 - c. Dk. 3832 Filed 3/30/07 effective 11/01/07
- b. This was the method employed and approved by the commission in Dockets 4061 and 3832. It was maintained for this filing.
- c. Please see response b above. Also, though Providence Water's full rate filings are often separated by more than two years, abbreviated filings are prepared between full filings. As a result, Providence Water believes the two year amortization period to be appropriate.

Providence Water Docket 4406

Data Requests of the Bristol County Water Authority Set 1 (Issued June 28, 2013)

BCWA 1-22. Refer to the testimony of Harold Smith, page 9, lines 22 – 24. If \$2 million was already built into the rates, why wasn't this adjustment limited to \$6 million instead of \$8 million?

Answer: Mr. Smith only refers to an \$8 million adjustment to the current funding level of the IFR Fund in that section of his testimony. Providence Water provided this amount to Mr. Smith. To clarify, the \$2 million was not built into rates, but was in the IFR plan as a needed increase to IFR funding level. Providence Water would have been requesting an increase in IFR of \$2 million per year. The additional \$6 million is needed as a result of the Consent Decree with RIDOH as explained in the testimony and/or data request responses of Mr. Spinelli, Mr. Gadoury and Ms. Bondarevskis.

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-23. Refer to the testimony of Harold Smith, page 9, lines 26 – 28.
- a. Please provide all source data, assumptions, calculations and work papers used to derive the 2.5% inflation adjustment factor?
 - b. Also, explain in detail why a percentage much closer to historic levels (for instance, the last 3 to 5 years) of general inflation should not be used in this case?

Response:

- a. Please see “PWSB Response to DIV 1-38,” which summarizes the methodology and data used to derive this factor.
- b. The factor was derived based on the most recent available years of CPI-U data (i.e. CY 2010, 2011 and 2012), as described in “PWSB Response to DIV 1-38.”

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-24 Refer to the testimony of Harold Smith, page 13, line 28 to page 14, line 1.
- a. What portion, if any, of the \$507,545 adjustment associated with the UDF is allocated to the wholesale customer class?
 - b. Was any portion of this cost attributed solely to distribution mains (pipe sizes with diameters of 12 inches or smaller) and allocated to the wholesale customer class?
 - c. If some portion was so allocated, please explain in detail your rationale/justification for doing so.

Response:

- a. As of the most recent version of the rate filing schedules (PWSB Response to DIV 3-1), the wholesale proportion of the adjustment is \$10,230. Please see "PWSB Response to BCWA 1-24."
- b. No.
- c. Not applicable.

PWSB Response to BCWA 1-24

		Allocation Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire	Wholesale		
60150 Salaries + Wages - Emp	\$	85,030	HM	\$ 20,145	\$ 13,371	\$ 9,401	\$ 27,162	\$ -	\$ 8,131	\$ 6,820	\$ -
60450 Employee Pension + Ben	\$	42,515	HMY	\$ 23,653	\$ 6,686	\$ 4,701	\$ -	\$ -	\$ 4,065	\$ 3,410	\$ -
63150 Contractual Services - Engineer	\$	380,000	TD	\$ 178,367	\$ 118,394	\$ 83,240	\$ -	\$ -	\$ -		\$ -
	\$	507,545								\$ 10,230	

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-25. Refer to the testimony of Harold Smith, page 14, lines 1 – 5.

- a. Which, if any, of the wholesale customers are not currently billed on a monthly basis?
- b. What portion, if any, of the \$431,493 adjustment associated with the transition the monthly billing is allocated to the wholesale customer class?
- c. If some portion was so allocated, please explain in detail your rationale/justification for doing so.

Answer: Please see Providence Water's response to BCWA 1-3 and BCWA 1-4.

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-26 Refer to the testimony of Harold Smith, page 14, lines 24 – 29.
- a. Does PWSB have the data needed to allocate extra capacity costs to wholesale customers based on their relative contributions to peak demands?
 - b. If affirmative, why wasn't it used?
 - c. If Providence doesn't have the data, how long would it take and what would it cost to obtain the necessary data?

Response:

- a. Yes, the data are available.
- b. It is not used because the agreed upon methodology involves the calculation of one wholesale rate based on the total wholesale proportion of system consumption. This methodology was approved by the commission in Docket 3832 and has been maintained for this filing.
- c. See response to a above.

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-27 Refer to testimony of Harold Smith, page 15, lines 1 – 5.
- a. What is the basis for your assumption that the demand characteristics for all wholesale customers are equal, and that their demands for service are essentially the same as the demands placed on the system by the entire retail class?
 - b. Please provide any supporting analysis or studies that you relied on in making those assumptions.
 - c. If one or more wholesale customers had demand characteristics that put significantly more costly demands (on a unit basis) on the system than other wholesale customers, wouldn't your proposed allocations result in lower charges to those wholesale customers that put more costly demands on the system, and lead to lower cost wholesale customers subsidizing higher cost wholesale customers?
 - d. Similarly, If all retail customers had demand characteristics that put significantly more costly demands on the system (on a unit basis) than wholesale customer, wouldn't your proposed allocations result in lower charges to retail customers, and lead to lower cost wholesale customer subsidizing higher cost retail customers?

Response:

- a. The section of my testimony referenced by this question does give the impression that the long standing practice of developing one uniform rate for all of Providence Water's customers is based on the assumption that all of the wholesale customers have the same demand characteristics. In fact, the practice of developing one uniform commodity rate applicable to all wholesale customers has been approved by the Commission in Providence Water's last several rate filings and is consistent with the practice of having one uniform commodity rate for all members of each retail customer class. As such, we did not assume that the demand characteristics for all wholesale customers are equal, but instead continued using an approach that has been repeatedly approved by the Commission in previous Providence Water dockets.
- b. As indicated in the above response to a. we did not make any assumptions with respect to the demand characteristics of the wholesalers and therefore we did not rely on any studies or analyses.
- c. The allocation of costs to wholesale customers used in this filing is consistent with the long standing practice of having one uniform commodity rate that is applicable to all wholesale customers. To the extent that the demand characteristics of each individual wholesale customer are not similar, the cost allocation approach used in this filing could result in some wholesale customers subsidizing other wholesale customers; however, this approach is

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consistent with the practice of having one commodity rate that is applicable to all customers in each of the retail customer classes.

- d. See above response to c.

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- BCWA 1-28 Refer to testimony of Harold Smith, page 15, lines 23 – 28, and Schedule HJS-16.
- a. Please provide all source data, assumptions, calculations and work papers used to derive the 8 “Demand Factors” listed on Schedule HJS-16.
 - b. Are any (list each) of these Factors based on industry data that is not specific to PWSB’s system and its somewhat unique system characteristics?
 - c. If so, what industry data was used, what geographic area did it apply to, and during what timeframe?

Response:

- a. These were the factors used and accepted in Docket 3832 and they have been maintained for this filing.
- b. No.
- c. Not applicable.

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Data Requests of the Bristol County Water Authority Set 1 (Issued June 28, 2013)

BCWA 1-29. Refer to testimony of Harold Smith, page 15, line 23 through page 16, line 21.

- a. How are each of the wholesale customers metered for their usage. For example, are continuous recording meters used or are they basic meters simply providing accrued use by subtracting a reading at one point in time minus a reading at a prior point in time.
- b. Provide examples for each wholesale customer that is metered differently.

Answer: Per Providence Water's Commercial Services department:

- A) All wholesale accounts are metered with either a Venturi Meter or Protectus III Fire Service Meter. The meters simply register accrued use.
- B) Depending on the demand of the water needed, each connection is metered differently. For example, a smaller connection for the town of Johnston needs a 6" Protectus III meter to register low flows as well as high flows. If the demand is much larger as in the case of the connection for Bristol County, a Venturi Meter is used to collect the data for the large demand. See attached.

WHOLESALE ACCOUNTS

ACCOUNT #	CUSTOMER	METER TYPE
603002	East Providence	Venturi Meter
604001	Greenville	Venturi Meter
605002	East Smithfield	8" Protectus III Meter
606001	Smithfield	Venturi Meter
607001	Warwick-Pettaconsett	Venturi Meter
813505	East Smithfield	8" Protectus III Meter
813584	Bristol	Venturi Meter
813788	Warwick-Natick	Venturi Meter
813999	Kent County- Clinton	Venturi Meter
814124	East Smithfield	10" Protectus III Meter
814423	Lincoln	Venturi Meter
815845	Kent County-Oaklawn	8" Protectus III Meter
812604	Johnston Water- Plainfield & Taylor	6" Protectus III Meter
812605	Johnston Water- Plainfield & Capital	6" Protectus III Meter
812606	Johnston Water- Plainfield & Simmonsville	6" Protectus III Meter
812608	Johnston Water- Plainfield & Everbloom	6" Protectus III Meter
812629	Johnston Water- Plainfield & Nardolillo	6" Protectus III Meter
818016	Johnston Water- Plainfield & Greenhill	8" Protectus III Meter
817795	Johnston Water- Byron Randall Road	6" Protectus III Meter
817796	Johnston Water- Shun Pike Road	6" Protectus III Meter

For BCWA 1-29

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- BCWA 1-30 Refer to testimony of Harold Smith, page 16, lines 4 – 5.
- a. Please identify all locations on Schedules in the filing where adjustments are made to account for the wholesale share of lost water.
 - b. Similarly, identify all locations on Schedules in the filing where adjustments are made to account for the retail share of lost water.
 - c. Also provide all source data, assumptions, calculations and work papers used to derive the share of lost water attributable to Wholesale customers, and separately the share of lost water attributable to retail customers.
 - d. If these two “shares” do not total 1 or 100%, explain why they do not.

Response:

- a. Adjustments that account for the wholesale and retail proportions of lost water take place within the development of the allocation factors. Specifically, Factors A and F receive direct adjustments which account for the wholesale and retail shares of lost water. However, many of the remaining allocators that are calculated are influenced by factors A and F (e.g. Factor HM) and are—as a result—indirectly impacted by the lost water adjustment. Therefore any cost allocated on A or F includes a specific adjustment for lost water and any costs not allocated on A or F will be indirectly influenced by this adjustment, to the extent that the allocator used is impacted by A or F. For example—under the O&M expense allocations (HJS-11), source of supply costs are directly adjusted for lost water, via the use of allocator A. Factor HM, by contrast is not directly adjusted for lost water, but is developed through the use of other allocations factors, one of which is Factor F.
- b. Please see response to item a.
- c. Please see “PWSB Response to BCWA 1-30.” Lost Water is allocated based on the Wholesale and Retail shares of Transmission and Distribution mains.
- d. Not applicable.

PWSB Response to BCWA 1-30

Inch-Mile Calculations
Year Ending June 20, 2012

Pipe Size (inches)	Length (miles)	Inch-Miles	
6	482.44	2,894.64	
8	290.25	2,322.00	
10	3.06	30.60	
12	93.99	1,127.88	
16	40.97	655.52	
20	5.89	117.80	
24	24.09	578.16	
30	16.09	482.70	
36	1.93	69.48	
42	4.88	204.96	
48	2.42	116.16	
60	4.19	251.40	
66	1.60	105.60	
78	4.39	342.42	
90	4.47	402.30	
102	5.18	528.36	
Totals	985.84	10,229.98	
Local Distribution (10" or less)	775.75	5,247.24	51.29% (1)
Transmission (12" and greater)	210.09	4,982.74	48.71% (9)

Retail Customer Share of Lost Water

Retail Share of Local Distribution		<u>51.29%</u> (1)
Retail Consumption Pro-Forma (2)	13,147,187	50.11% (5)=(2/3)
Total Consumption Pro-Forma (3)	26,237,874	
Retail Share of Transmission		<u>24.41%</u> (6)=5*1
Total Retail Share of Unaccounted for Water		75.70% (7)=1+6

Wholesale Customer Share of Lost Water

Retail Share of Local Distribution		<u>0.00%</u> (8)
Wholesale Consumption Pro-Forma (9)	13,090,687	49.89% (11)=(9/10)
Total Consumption Pro-Forma (10)	26,237,874	
Retail Share of Transmission		<u>24.30%</u>
Total Wholesale Share of Unaccounted for Water		24.30% (12)=11*9
Total Wholesale and Retail Share		100.00% (13)=(7+12)

Lost Water

2009	3,114,862	HCF
2010	3,572,170	HCF
2011	3,380,059	HCF
2012	3,825,119	HCF
Four Year Average	3,473,053	(14)

Retail Share	2,629,060	HCF	(15)=14*7
Wholesale Share	843,993	HCF	(16)=14*12

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BCWA 1-31 Refer to testimony of Harold Smith, page 17, lines 23 – 29.

- a. What was the percentage of total costs allocated to the Wholesale customer class in “Providence Water’s last full rate filing,” and what is the percentage of total costs you propose to allocate to the wholesale customer class in this case?
- b. What was the percentage of total costs allocated to the Wholesale customer class in “Providence Water’s recent abbreviated filings?”
- c. Explain in some detail why or how the percentage of total costs allocated to the Wholesale customer class in “Providence Water’s recent abbreviated filings” were much different from comparable levels used in the last full rate case or proposed in this case?
- d. Regardless of the reason(s) for the disparity between the rate increases to retail and wholesale customers proposed in this case, wouldn’t you agree that the increase to wholesale customers and in turn to their retail customers is a very large increase, and could be characterized as resulting in “rate shock”?
- e. What measures did you consider or recommend to mitigate some of this impact, for example, a phase in approach.

Response:

- a. In Docket 3832, 27.31% of the total revenue requirements were allocated to Wholesale customers. As of the most recent version of the filing (PWSB Response for DIV 3-1), Providence Water proposes recovering 27.95% of the total revenue requirements from wholesale customers.
- b. In the most recent abbreviated filing (Docket 4061) Providence Water proposed recovering 27.63% of the total revenue requirements from wholesale customers.
- c. Please see “PWSB Response to BCWA 1-31.” As of the most recent version of the filing (i.e. PWSB Response to DIV 3-1), the percentage of total costs allocated to wholesale customers is comparable to previous full and abbreviated filings.
- d. Providence Water agrees that the increase to all customers is large, but does not agree that this increase would constitute “rate shock.” However, the majority of this increase will be used for necessary water quality improvements, many of which are regulatory in nature (Please see Page 5 of Boyce Spinelli’s initial testimony for further detail).
- e. Providence Water did not consider a phase in approach.

PWSB Response to 1-31

Revenue Requirement Recovery

Type	Docket	Wholesale Revenues (\$)	Retail Revenues (\$)	Total (\$)	Year
Full	4406	\$ 20,544,760	\$ 52,953,057	\$ 73,497,817	2012
Abbreviated	4061	\$ 16,650,654	\$ 41,834,707	\$ 58,485,361	2009
Full	3832	\$ 15,524,266	\$ 41,324,895	\$ 56,849,161	2007

Type	Docket	Wholesale Revenues (%)	Retail Revenues (%)	Total (%)	Year
Full	4406	27.95%	72.05%	100%	2012
Abbreviated	4061	28.47%	71.53%	100%	2009
Full	3832	27.31%	72.69%	100%	2007

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BCWA 1-32. Refer to testimony of Harold Smith, page 5, lines 9 – 11, and Schedule HJS-11. For each of the following accounts, please provide a detailed description of the types of expenses that are normally included, and list all expenses incurred in the test year exceeding \$10,000.

- a) Account 63510
- b) Account 67510
- c) Account 63530
- d) Account 63540
- e) Account 67530
- f) Account 62050
- g) Account 63550
- h) Account 63580
- i) Account 66780
- j) Account 67580
- k) Account 65980
- l) Account 65880

Answer: Please see attached worksheet explaining types of expenses and amounts over \$10,000 for the above accounts.

a)	Account 63510	Outside professional services or contractor support to the Water Supply department.		
		US Geological	\$ 12,978	Land Surveying/ Water Quality Monitoring
		US Geological	\$ 22,250	Land Surveying/ Water Quality Monitoring
		US Geological	\$ 28,875	Land Surveying/ Water Quality Monitoring
		Specialty Agricultural Products	\$ 31,690	Installation of Deer Exclusion Fencing
		Northern RI Conservation	\$ 10,903	Conservation Awareness Programs
		Northern RI Conservation	\$ 15,407	Conservation Awareness Programs
		Northern RI Conservation	\$ 10,800	Conservation Awareness Programs
		Northern RI Conservation	\$ 12,206	Conservation Awareness Programs
		Northern RI Conservation	\$ 12,329	Conservation Awareness Programs
		Out in Front Horticulture	\$ 14,195	Insecticide and Herbicide Applications
		Fuss and Oneil	\$ 10,100	Water Quality Project Management
		Fuss and Oneil	\$ 18,102	Water Quality Project Management
		Fuss and Oneil	\$ 10,484	Water Quality Project Management
		Fuss and Oneil	\$ 11,132	Water Quality Project Management
		Fuss and Oneil	\$ 26,440	Water Quality Project Management
b)	Account 67510	Miscellaneous expenses including office supplies, printing, postage, travel, advertisement, dues and subscriptions, and miscellaneous service contracts.		
		BCM	\$ 60,000	Security Maintenance Contract
c)	Account 63530	Contractor support to the Water Supply Department.		
		Verizon/Cox/Nextel	\$ 23,216	Telephone Expense
		Hach	\$ 10,000	Air Generator Maintenance
		Wonderware	\$ 40,219	Customer First & ACP Support
d)	Account 63540	Contractual maintenance for Water Supply including repairs to elevators, repairs to buildings, repairs to equipment and sludge removal.		
		Synagro	\$ 550,000	Sludge Removal
e)	Account 67530	Miscellaneous expenses including travel, postage, dues and subscriptions, and consulting services.		
		Weston Sampson Engineering	\$ 13,692	Professional Engineering Services
		General Treasurer	\$ 32,500	License for Plant
		Triumvirate Environmental	\$ 17,937	Hazardous Waste Disposal and Containment
f)	Account 62050	T&D Materials and Supplies including small tools, gravel sand, asphalt, pipes, fittings, gate boxes, copper, and hydrants.		
		Johnston Asphalt	\$ 64,076	Asphalt
		Various Vendors	\$ 29,310	Gravel/Sand
		Various Vendors	\$ 16,512	Small Tools
		Various Vendors	\$ 35,125	Gate Valves & Parts
		Various Vendors	\$ 49,967	Fittings
		Various Vendors	\$ 18,503	Gate Services Boxes
		Various Vendors	\$ 17,235	Copper
		Various Vendors	\$ 14,392	Hydrant
g)	Account 63550	Contractor support to T&D including street repairs and police details.		
		Cranston Police Department	\$ 22,162	Police Details
		Johnston Police Department	\$ 16,187	Police Details
		Providence Police Department	\$ 53,837	Police Details
		Piccoli Paving	\$ 294,314	Street Repairs
		R.P. Ianucillo	\$ 37,800	Various Waterline/Sewer Main Repair Services
h)	Account 63580	Admin & General contractual services including telephone, bank service charges, audit fees, maintenance contracts.		
		CMRS-FP	\$ 10,000	Postage
		CMRS-FP	\$ 10,000	Postage
		Gemini	\$ 38,635	Postage for Lead Brochure
		Gemini	\$ 34,055	Postage for CCR Mailing
		Wells Fargo	\$ 33,500	Copier Maintenance
		Marlin Bussiness Bank	\$ 11,469	Copier Maintenance
		Marlin Bussiness Bank	\$ 14,828	Copier Maintenance
		ESRI	\$ 40,444	GIS Maintenance
		ESRI	\$ 23,200	GIS Maintenance
		EOS	\$ 29,032	Novell OES Suite
		Hansen	\$ 38,801	Hansen Maintenance
		Send Word Now	\$ 39,720	Emergency Notification Service Fee
		Envista	\$ 12,500	Project Coordination System
		D3 Logic	\$ 30,000	Printing Services for Qrtly Billing Statements
		D3 Logic	\$ 30,000	Printing Services for Qrtly Billing Statements
		D3 Logic	\$ 30,000	Printing Services for Qrtly Billing Statements
		D3 Logic	\$ 30,000	Printing Services for Qrtly Billing Statements
		Braver	\$ 34,000	Audit Fees
		Verizon/Cox/Nextel	\$ 206,791	Telephone Expense
i)	Account 66780	Related to Regulatory expenses including legal, accounting, and Division fees.		
		Division of Public Utilities	\$ 167,992	Propotionate share of Division expenses
		Schact and McElroy	\$ 16,365	Regulatory Expenses
		Schact and McElroy	\$ 10,018	Regulatory Expenses
j)	Account 67580	Miscellaneous Admin and General expenses including legal services, appraisal fee ,and IT consulting services for billing and financial software.		
		Zandar	\$ 20,000	Software Conversion
		Adaptive Minds	\$ 15,778	Billing Software/Oracle Support
		Adaptive Minds	\$ 23,700	Billing Software/Oracle Support
		Adaptive Minds	\$ 32,760	Billing Software/Oracle Support
		Adaptive Minds	\$ 13,480	Billing Software/Oracle Support
		Adaptive Minds	\$ 14,160	Billing Software/Oracle Support
		EOS	\$ 16,503	Consulting Services
		Sansoucy	\$ 35,000	Appraisal Service
		Partridge Snow & Hahn	\$ 17,778	Legal Services/ Strategic Plan
		Partridge Snow & Hahn	\$ 18,213	Legal Services/ Strategic Plan
		Partridge Snow & Hahn	\$ 15,307	Legal Services/ Strategic Plan
k)	Account 65980	General Liability Insurance & Commercial Auto		
		Premium Financing Specialists	\$ 882,796	General Liability Insurance
		USI Insurance Services	\$ 124,176	Commercial Auto
l)	Account 65880	Worker's Compensation Insurance		
		Beacon Mutual	\$ 894,763	Worker's Comp Insurance

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BCWA 1-33: Refer to page 4 of 4 (Schedule HJS-11). Please provide the same information requested for the listed accounts in BCWA 1-32 for the following two line items:

- a) City Services Cost
- b) State 1 Surcharge

Answer:

a. The amount Providence Water included for City Service is the amount approved in Docket 3832. See attached detail.

b. The State 1 surcharge amount is the administrative portion of the Water Quality Protection Fund charged to Providence Water's Retail accounts. It should not have been allocated to wholesale and will be corrected in Providence Water's rebuttal testimony.

**Providence Water
Breakdown of City Services**

<u>Department</u>	<u>Effective</u> 01/01/03 Docket 3446 Adjusted <u>Amount</u>	<u>Effective</u> 11/01/07 Docket 3832 Adjusted <u>Amount</u>
Mayor's Office	\$100,055	\$106,438
City Council	47,034	50,035
City Council Administration	21,561	22,936
City Clerk	38,919	41,402
Law Department	144,652	153,880
(Includes Labor Lawyer)		
Finance Department	32,645	34,728
Controller's Office	77,557	82,505
Retirement Department	43,637	46,421
Data Processing Department	109,673	116,670
Treasurers Office	27,358	29,104
Purchasing	43,789	46,582
Personnel	43,115	45,866
Total City Services	\$729,994	\$776,568
Stop Loss Insurance		\$50,994
Annual GASB 43/45 Consulting fee		\$11,605
Total Amount authorized by RIPUC		\$839,167

Docket 3832 amount was calculated by increasing the Docket 3446 amount by 2.5% for 2.5 years.

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- BCWA 1-34 Refer to testimony of Harold Smith relative to Conservation Rates starting on page 18.
- a. Even though you present conservation rates in your testimony, are you recommending that the Commission not approve conservation rates as part of the case for either retail or wholesale customers?
 - b. If your response is not affirmative, please explain your response in detail.

Response:

- a. Please see the response to BCWA 1-5.
- b. Not applicable.

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BCWA 1-35 Refer to testimony of Harold Smith, page 5, lines 18 – 20, and Schedule HJS-14. For each listed allocation factor describe the basis and rationale for development of the factor, and provide detailed descriptions of how each allocation percentage was computed including specific ratios or formulas used.

- i. NP
- ii. AA
- iii. P
- iv. HM
- v. HMY
- vi. HOC
- vii. Y
- viii. Z
- ix. Com Z
- x. X4
- xi. YY
- xii. K1
- xiii. K2

Response:

- i. **Factor NP** is used to produce a detailed allocation of the power costs incurred by the operation of Providence Water’s pumping stations. The cost to each power station is allocated Base, Max Day, Max Hour and Wholesale based on either Factor AA or TD. The resulting amounts are totaled for each cost category, after which the Base, Max Day and Max Hour costs are summed and allocated to base, with the remainder allocated to Wholesale. The resulting Allocator NP is used to allocate the O&M line items 61523 and 61623.
- ii. **Factor AA** is allocated 1% to fire protection, with the remainder allocated Base, Max Day and Wholesale based on Pro-Forma consumption. Specifically, the 99% remaining after the 1% allocation to fire protection is multiplied by the wholesale proportion of total pro-forma consumption shown on “HJS-23 Projected Volumes” (i.e. wholesale consumption divided by the sum of wholesale and retail consumption). The remaining proportion (i.e. the 99% less the wholesale allocation) is then allocated to

**Data Requests of the
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base and max day based the units of service shown on HJS-16. Factor AA is used primarily to allocate Treatment related O&M expenses.

- iii. **Factor P** is calculated based on a 10% allocation to Max day, with remaining 90% allocated to base and wholesale based on pro-forma consumption, adjusted for lost water. Please note that, per PWSB Response to BCWA 1-37, Factor P will be revised to incorporate a lost water adjustment in my rebuttal testimony.
- iv. **Factor HM** is used to produce an allocation of T&D related labor costs, in order to accurately allocate the T&D labor related O&M line items shown on HJS-11. In the past, Providence Water has compiled a detailed work and service order breakdown, which is then allocated based on the relevant allocation factors from HJS-14. The sum for each cost category (i.e. Base, Max Day etc.) is then divided by the total T&D labor costs to produce the proportion for each component of the HM allocator. In Docket 3832 this process was performed for each of the three years prior to the test year, with the results being averaged to produce the overall HM allocator. Please see “PWSB Response to DIV 1-3” for the most up to date versions of these calculations, noting that Providence Water has proposed that a six year average be used, in place of the 3 year methodology employed in Docket 3832.
- v. **Factor HMY** is Factor HM, with the Meters and Service and Billing and Collection costs reallocated to Base. This is used to allocate O&M line items 60450 and 60460. Note that the allocations to the remaining cost categories (i.e. Public Fire and Wholesale) are the same as Allocator HM.
- vi. **Factor HOC** is calculated in the same manner is Factor HM, using a detailed breakdown of costs incurred by Providence Water for services performed under contract. This is used to allocate O&M line item 63550 “Contractual Services Other” shown on HJS-11.
- vii. **Factor Y** is calculated based on the cost allocations of all salary related O&M line items. Specifically, each Salary related line is allocated to the cost components (i.e. Max Day, Max Hour etc.) based on the relevant allocation factor from HJS-14. The result is then totaled for each category and then divided by the total of all salary related O&M line items to produce the each component of the allocator. Factor Y is used to allocate Administrative and General O&M costs, which are assumed to be proportionally related to labor related O&M costs incurred by Providence Water

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- viii. **Factor Z** is calculated based on the total allocation to each cost component for all O&M line items, excluding the total for the Administrative and General category. Specifically, each O&M line item is allocated based on the relevant factors from HJS-14. The resulting grand totals for each cost component are then divided by total O&M costs, excluding A&G costs, to produce the each component of the allocator.
- ix. **Com Z** is Factor Z with Meters and Service and Billing and Collection costs reallocated proportionally to Base, Max Day and Max Hour.
- x. **Factor X4** is used to allocate the capital reimbursement adjustment on HJS-11. It is calculated based on the capital cost allocations shown on HJS-12. Specifically, the costs within each capital fund are allocated based on the relevant allocation factor from HJS-14. The resulting totals for each cost component are totaled and divided by the total for all capital costs to determine each component of the allocator. This assumes that the way in which capital costs are reimbursed is proportionally related to the way capital costs are incurred.
- xi. **Factor YY** is Factor Y with Meters and Services and Billing and Collection costs reallocated to base.
- xii. **Factor K1** is Factor K2 with Meters and Service and Public Fire Protection reallocated proportionally to Base, Max Day and Max Hour.
- xiii. **Factor K2** is based on the allocation of net plant investment. Specifically, each plant investment category (excluding land items) is allocated on the relevant allocation Factor from HJS-14. The resulting totals for each costs component is then divided by the total net plant investment to determine the allocation percentage for that cost component.

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BCWA 1-36 Was factor NP computed correctly? Shouldn't it be: 60.06% to Base, 39.94% to Wholesale?

Response: Yes, Factor NP was computed correctly.

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BCWA 1-37 Was factor P computed correctly? Shouldn't it be: 47.31% to Base, 10% to Max Day, 0.90% to Fire, 41.79% to Wholesale?

Response: In "PWSB Response to DIV 3-1" Factor P did not incorporate the adjustment for lost water, as it was incorporated in the development of Factor A. Factor P will be revised in my rebuttal testimony.

Providence Water Docket 4406

**Data Requests of the
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BCWA 1-38. Refer to the testimony of Harold Smith, page 5, lines 12 – 14, and Schedule HJS-12. For each of the capital funds listed below please provide a detailed breakdown of the specific projects/Equipment that comprise the Pro-Forma Rate Year Amounts along with a description of the need/purpose of each project or equipment purchase:

- a) Capital Fund
- b) Infrastructure Replacement Fund
- c) Equipment Replacement

Answer: See below as follows:

- a) Capital Fund - Please refer to the direct testimony of Paul Gadoury, exhibit PG-5 which provides the list of projects and amounts for fiscal years 2013-2017.
- b) Infrastructure Replacement Fund –Please see data response KCWA 2-7 which provides a detailed list of projects and amounts for fiscal years 2011-2015 and beyond for this fund
- c) Equipment Replacement – Attached is HJS-S9E which itemizes equipment, vehicles, computers etc. for fiscal years 2013-2015. Also, attached is the vehicle/equipment /computer/software replacement plans provided by Providence Water managers, which describes the vehicles or equipment being replaced and an estimated cost. The Equipment Replacement fund was established by PUC order and has been used for many years to provide cash funding for the acquisition and replacement of all vehicles, trucks, agricultural, computer equipment and software systems.

Providence Water
Restricted Account Sources and Uses of Funds
Projected FY 2013 - FY 2015

Schedule HJS-S9E
Equipment/Vehicle Replacement Fund

Source of Funds	FY 2013	FY 2014	FY 2015
D4061 (effective 4/27/10)	600,000	600,000	600,000
Add'l funding from new docket effective 1/1/14	-	-	-
Carryover funds from prior year estimated	1,388,272	939,272	604,272
Total Sources	1,988,272	1,539,272	1,204,272
Less obligated uses of funds			
Vehicle and Equipment purchases	540,000	580,000	560,000
Computer Equipment purchases	156,000	150,000	150,000
Office Furniture purchases	25,000	25,000	25,000
Security Equipment	30,000	30,000	30,000
Shop & Plant Equipment	298,000	150,000	200,000
Total Uses	1,049,000	935,000	965,000
End of Year Balance	939,272	604,272	239,272

BCWA 1-38C

Shop and Plant Equipment Replacement Schedule

Description	FY 2012-2013	FY2013-2014	FY2014-2015
Slope Mower Fertilizer	200,000.00		
Portable Emergency Generators	20,000.00		
Portable Emergency Lighting	10,000.00		
Gas Powered De-Watering Pumps	20,000.00		
Portable Valve Winder		10,000.00	
Excavator Training Simultor		12,000.00	
Vacuum Excavator	30,000.00		
Rider Mowers		50,000.00	20,000.00
Skid Steere Loader			30,000.00
Gas Powered Concrete Cutting Machine		15,000.00	
Skid Mount Air Compressor	10,000.00	10,000.00	
Jack Hammers	1,000.00	1,000.00	1,000.00
Demo Saws		5,000.00	
Fork Lift			
Chain Saws		1,000.00	
Emergency			80,000.00
Mohawk Heavy Duty Truck Lift			40,000.00
Scissor Lift		20,000.00	
A/C Recycling Recharger		10,000.00	
Diesel Particulate Filter Cleaner			10,000.00
Oil Filter Recycling Unit		10,000.00	
Total	291,000.00	144,000.00	181,000.00

SUPPORT SERVICES

VEHICLE #	DESCRIPTION	COST	FY2012-2013	FY2013-2014	FY2014-2015
10	2004 CHEV IMPALA	I			
12	2005 CHEV MALIBU				25,000.00
1621	2006 FORD TAURUS	I			25,000.00
32	2001 CHEV 3/4 TON	D	30,000.00		
214	2008 FORD F-550	D			
385	2003 CHEV BLAZER	D			30,000.00
1523	2002 CHEV MALIBU	I			25,000.00
1755	2005 CHEV MALIBU	I			30,000.00
427	2011 FORD DUMP	D			
1277	2005 CHEVY PICK-UP				
390	2006 CHEVY TRAILBLAZER				
2316	2001 CHEVY VAN				
986	2012 FORD F-550	D			
2467	2007 CHEVY MALIBU	I			
772	2001 CHEV PICK UP	I			
459	2005 CHEVY IMPALA	I			25,000.00
403	2003 CHEVY MALIBU	I			
459	2005 CHEVY IMPALA	I			25,000.00
FY TOTALS			30,000.00	0.00	185,000.00

COMMERCIAL SERVICES

VEHICLE #	DESCRIPTION	COST	FY2012-2013	FY2013-2014	FY2014-2015
171	2004 GMC LIGHT UTILITY	D	47,000.00		
172	2004 GMC LIGHT UTILITY	D		60,000.00	
174	2004 GMC LIGHT UTILITY	D		60,000.00	
176	2004 GMC LIGHT UTILITY	D	47,000.00		
229	2002 FORD 450 (EMERG)	D	50,000.00		
391	2007 CHEVY TRAILBLAZER	I			
462	2005 HONDA CIVIC HYBRID	D			30,000.00
587	2003 CHEVY MALIBU	I			
454	2010 FORD ESCAPE				
739	1998 FORD WINSTAR	D	20,000.00		
741	2006 FORD FREESTAR	D			
742	1998 FORD WINSTAR	D	20,000.00		
743	2007 CHEVY IMPALA	D			
744	2006 FORD FREESTAR	D			
	1998 FORD WINSTAR	D			
749	2006 FORD FREESTAR	D			
750	2006 FORD FREESTAR	D			
290	2004 GMC LIGHT TRUCK	D		47,000.00	

FY TOTAL			184,000.00	167,000.00	30,000.00
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TRANSMISSION DISTRIBUTION

VEHICLE #	DESCRIPTION	COST	FY2012-2013	FY2013-2014	FY2014-2015
48	2003 JOHN DEERE BACKHOE	D			
83	2000 CHEV VAN (CREW)	D			
130	2003 CHEV BLAZER	D			
121	1996 CHEVY CREW TRUCK	D			
150	2003 CHEV STAKEBOY	D			
160	2003 CHEV DUMP TRUCK	D			
197	2007 FORD STERLING DUMP	D			
199	2011 FORD DUMP	D			
235	2003 CHEV BLAZER	D	30,000.00		
252	2005 GMC COMPRESSOR TRUCK	D		60,000.00	
745	2005 FORD RANGER	D		25,000.00	
278	1995 FORD BACKHOE (EQUIP)	D			78,000.00
447	2005 CHEV MALIBU	I			
461	2006 CHEV TRAILBLAZER	I			
520	2005 GMC COMPRESSOR TRUCK	D	50,000.00		
541	2003 CHEV STAKEBOY	D	35,000.00		
626	2007 INTL VAC EXCAVATOR	D			
740	2005 FORD RANGER	D			20,000.00
746	2005 FORD RANGER	D			
747	1998 FORD WINSTAR	D	40,000.00		
758	1998 CHEV VAN	D		20,000.00	
1590	2005 FORD RANGER	D		30,000.00	
868	2000 CHEV VAN (CREW)	D			
895	2001 NEWH BACKHOE	D			
935	2000 CHEV VAN (CREW)	D			
738	2005 FORD RANGER	D		25,000.00	
954	2001 STERL DUMP	D			
1001	2001 CHEVY SMALL UTILITY	D			
1554	1996 CHEVY UTILITY	D			
2444	1994 FORD BACKHOE (EQUIP)	D			
2533	2002 FORD STERL HOIST	D			
3441	2009 JOHN DEERE BACKHOE	D			
1348	2005 JOHN DEERE BACKHOE	D			
3802	2011 SILVERADO	D			
2535	2008 FORD F-550	D			
2276	2002 FORD 450 (EMERG)	D	48,000.00		
18	2004 CHEVY IMPALA	D			
64	2007 CHEVY TRAILBLAZER	I			
1217	2011 SILVERADO	I			
3442	1991 FORD BACKHOE (EQU)	D		70,000.00	
	FY TOTAL		203,000.00	230,000.00	98,000.00

ENGINEERING

VEHICLE #	DESCRIPTION	COST	FY2012-2013	FY2013-2014	FY2014-2015
44	2008 CHEV COLORADO				
161	2002 CHEV BLAZER	D	30,000.00		
223	2002 CHEV BLAZER	D	30,000.00		
448	2005 CHEV MALIBU	I			
947	2010 FORD RANGER	I			
591	2004 CHEV IMPALA	I			25,000.00
638	2006 CHEV TRAILBLAZER	D			
676	2004 CHEV IMPALA	I			25,000.00
712	2011 FORD ESCAPE	D			
946	2011 FORD ESCAPE 4X4	D			
3784	2002 CHEV MALIBU	I			
3806	2002 CHEV MALIBU	I	25,000.00		
4028	2002 CHEV MALIBU	D		25,000.00	
FY TOTAL			85,000.00	25,000.00	50,000.00

WATER SUPPLY

VEHICLE #	DESCRIPTION	COST	FY2012-2013	FY2013-2014	FY2014-2015
37	2004 CHEV PICK UP	D		30,000.00	
42	2005 HONDA CIVIC HYBRID	I			25,000.00
452	2006 CHEV PICK UP	D			
63	2003 CHEVY MALIBU	I		25,000.00	
75	1998 FORD DUMP	D			
173	2005 CHEVY PICK UP	D			30,000.00
233	2008 FORD F-150	D			
316	2006 FORD FREESTAR	D			
325	2006 FORD ESCAPE	I			
386	2004 CHEV IMPALA	I			
47	2006 CHEV PICK UP	I			
550	2004 CHEV PICK UP	D	25,000.00		
551	2001 CHEV PICK UP	D	25,000.00		
586	2004 CHEV IMPALA	I			
607	2008 FORD F-150	D			
608	2008 FORD F-150	D			
624	2005 CHEVY PICK UP	D			
647	1999 FORD VAN	D			
689	2000 FORD F-350	D		25,000.00	
730	2010 FORD ESCAPE	D			
832	2002 FORD 450 DUMP	D			
837	2000 FORD PICK UP	D			25,000.00
1050	2010 FORD ESCAPE	I			
2417	1996 FORD F-70	D			35,000.00
2429	2011 CHEV PICK UP	D			
2522	2011 CHEV PICK UP	D			
3789	2006 CHEV TRAILBLAZER	I			30,000.00
3803	RETIRED	I			
4027	2010 FORD ESCAPE	D			
2467	2007 CHEVY MALIBU	I			
1193	SLOPE MOVER (EQUIP)	D			
E46	2006 SLOPE MASTERS (EQUIP)	D			
E62	SLOPE MASTERS (EQUIP)	D			48,000.00
E66	1994 SLOPE MASTERS (EQUIP)	D			
E70	SLOPE MASTERS (EQUIP)	D		52,470.00	
543	NEW HOLLAND TRACTOR				
1645	2003 SLOPE MASTERS				
	FY TOTAL		50,000.00	132,470.00	193,000.00

FY2013

Servers	60,000.00
Network Routers/Switches	50,000.00
Personal Computers	15,000.00
Office	12,000.00
Printers	5,000.00
Disk Drives	6,000.00
Omissions	8,000.00
	156,000.00

FY2014

Servers	60,000.00
Network Routers/Switches	35,000.00
Personal Computers	15,000.00
Office	12,000.00
Printers	5,000.00
Disk Drives	15,000.00
Omissions	8,000.00
	150,000.00

FY2015

Servers	60,000.00
Network Routers/Switches	25,000.00
Personal Computers	30,000.00
Office	12,000.00
Printers	5,000.00
Disk Drives	6,000.00
Omissions	12,000.00
	150,000.00

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-39. Refer to the testimony of Harold Smith, page 5, lines 15 – 17, and Schedule HJS-13. For each of the 11 Communities/Districts listed on this Schedule please provide a list of the assets (aggregated by function) that are either not used in providing service to wholesale customers and/or do not provide any benefit to wholesale customers along with their associated property taxes. For example, include all distribution mains (pipes with diameters equal to or less than 12 inches) and distribution valves, services, retail meters, hydrants, pump stations and storage tanks that only serve retail customers, etc.

Answer: The following communities or districts include assets that would serve both wholesale and retail; Scituate, Foster, North Providence, Glocester, West Warwick, West Glocester Fire, Harmony Fire District, Chepachet Fire District. We no longer pay taxes to Warwick.

In Cranston, Providence Water was successful in our tax appeal and is exempted from taxes pursuant to Section 18 of Chapter 1278 of the Public Laws of 1915 as amended. We no longer pay taxes on pipelines and other water appurtenances installed after April 27, 1931. Therefore, we do not pay taxes on any pump stations, only the land. The taxes on the land would be \$6,684. Providence Water only pays taxes on the pre-1931 value of pipelines, some of which would benefit wholesale customers and some that would not. A breakdown is not available.

In Johnston, the Ashby St. Pump Station would only serve retail customers. The taxes are \$3,188.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

BCWA 1-40. Refer to the testimony of Harold Smith, page 5, lines 9 – 11, and Schedule HJS-11. Please provide a breakdown of the amounts in the following Accounts for the test year and the two prior years by separating each annual total between expenses related solely to distribution facilities, expenses related solely to transmission facilities, and those expenses partially related to both types of facilities:

- a) Account 60150 Salaries + Wages - Emp
- b) Account 60160 Salaries + Wages - Emp
- c) Account 63150 Contractual Services - Engineer
- d) Account 63350 Contractual Services – Legal T&D
- e) Account 63460 Contractual Services – Mgt Fees
- f) Account 63550 Contractual Services - Other
- g) Account 63560 Contractual Services – Other

Answer: Please refer to Div 1-4 “Comparative Schedule of Expenses” page 2 under Transmission and Dist. Expenses for the amounts for the above accounts for the rate year and the two prior fiscal years. Providence Water does not track or record detail to further breakdown the expenses between distribution and transmission facilities.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

BCWA 1-41. Refer to the testimony of Harold Smith, page 5, lines 9 – 11, and Schedule HJS-11. What portion (amount and percentage) of the following Accounts during the rate year and the two prior years are for expenses related primarily to transmission facilities:

- a) Account 60130 Salaries + Wages - Emp
- b) Account 60140 Salaries + Wages – Emp
- c) Account 62030 Materials + Supplies
- d) Account 62040 Materials + Supplies
- e) Account 63130 Contractual Services – Engineer
- f) Account 63240 Contract Services- Acctg
- g) Account 63430 Contractual Services – Mgt Fees
- h) Account 63530 Contractual Services - Other
- i) Account 63540 Contractual Services - Other

Answer: Please refer to Div 1-4 “Comparative Schedule of Expenses” page 1 under Water Treatment Expenses for the amounts for the above accounts for the rate year and the two prior fiscal years. Providence Water does not track or record detail to further breakdown the expenses related to transmission facilities.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-42. Refer to the testimony of Harold Smith relative to salary and labor costs, and the response to Division 1-1. It appears that personnel costs will increase significantly between the unadjusted test year and the rate year. Presumably a large portion, if not most, is related to several new/additional employees being hired. For each new/additional employee provide the following:

- a. a description of their position; the group they report to (e.g., Administration, an Operations function, Customer service, etc.);
- b. why they are needed (justification for their hiring); and
- c. their known or estimated salaries.

Answer: The assumption is incorrect. Providence Water is not asking for approval for new/additional employees over and above our present authorized number of positions. We are backfilling existing positions, not looking to increase our authorized number of positions.

a. N/A

b. N/A

c. N/A

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1 (Issued June 28, 2013)**

BCWA 1-43. Refer to the testimony of Paul Gadoury, Section 3, Water Main Replacement/Relining pages 9 through 13, and Exhibit PG-4. Over the next 20 years this Exhibit indicates that the PWSB plans to invest approximately \$362 million in replacing or relining system transmission and distribution mains.

- a. What portion (\$ amount) of that investment is expected to be used to replace/reline distribution mains, and what amount of that investment is expected to be used to replace/reline transmission mains?
- b. To the extent some of Providence's "distribution mains" may be larger than 12 inches in diameter, identify them separately.
- c. Also, to the extent some of Providence's "transmission mains" may be 12 inches in diameter, identify them separately.

Response:

- a. The ultimate objective is to replace/reline all of Providence Water's transmission mains (12 to 42 inches in diameter). While the initial phases of the program will be concentrating on 6" and 8" distribution mains and 12" transmission mains, with further future assessment of the system, it is anticipated that some larger 16" and 24" transmission mains will be included in the program over the next 20 year period. It would not be unreasonable to expect that perhaps 20% of the above referenced estimated \$362 million expenditure would be utilized for the replacement/relining of transmission mains ranging from 12 inches to 24 inches in size, with the remainder being utilized for the 6" and 8" distribution mains.
- b. All of Providence Water's mains that are 12" in size and larger are transmission mains.
- c. See response (b).

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-44 Refer to the testimony of Harold Smith in general.
- a. When (date of the final report) and by whom was the last Cost of Service Study (COSS) performed for PWSB's system?
 - b. What was the period of time covered in that study (usually at least several months prior to the date of the final report)?
 - c. Assuming there have been significant variations between the economic conditions, customer demographics and system facilities since the most recent COSS and the test year for a pending rate case, is Mr. Smith comfortable using many or most of the allocators and system characteristics that are now several years old as a basis for allocating costs to various customer classes in the pending rate case?
 - d. If affirmative, please explain your answer in detail.
 - e. Without the benefit of basing all allocations on current data and system characteristics wouldn't it be more appropriate (acceptable industry practice) to apply the increase on an A-T-B basis rather than using many or most of the allocators and system parameters that have likely changed significantly since the last COSS?

Response:

- a. The last cost of service study was performed by me for Providence Water's full rate filing in 2007. The compliance filing and associated schedules are dated November 7, 2007. However a new study, based on data from the test-year ending June 30, 2012, has been performed for this filing.
- b. The COSS for the previous full rate filing (Docket 3832) covered the test year ending June 30, 2006. The study under review in this Docket covers the test year ending June 30, 2012.
- c. To the extent possible, information and data used in the current cost of service study has been updated to reflect changes in economic conditions, customer demographics and system facilities since the previous cost of service study and the most recent version of the rate model submitted in response to Division Data Request 3-1 reflects the use of this up to date information and data.
- d. Please see above response to item c.
- e. Please see above response to item c.

Providence Water Docket 4406

**Data Requests of the
Bristol County Water Authority
Set 1**

- BCWA 1-45 Refer to testimony of Harold Smith relative to “conservation” rates for wholesale customers.
- a. If the demand management rate (“conservation” rate) for wholesale customers is approved and one or more of PWSB’s wholesale customers passes along the increase to its retail customers on an A-T-B basis, what conservation effect would that result in to those wholesale customers other than the price elasticity effect of the average increase to the retail customers of those wholesale customers?
 - b. If your response is other than it will have no additional conservation effect, please explain in detail.
 - c. Similarly, if the conservation rate for wholesale customers is not approved and one or more of PWSB’s wholesale customers passes along the increase to its retail customers through an increasing block rate structure, would that result in conservation effects to those wholesale customers beyond the price elasticity effect of the average increase to the retail customers of those wholesale customers?
 - d. If your response is negative, please explain in detail.
 - e. Given these two scenarios would Providence not agree that the demand management rate proposed for wholesale customers will not by itself have any significant conservation effects on wholesale usage?

Response:

- a. None.
- b. Not applicable.
- c. Possibly, but it would be dependent on the way in which the inclining block rates are structured.
- d. Not applicable.
- e. Yes, and I have stated as much in my direct testimony.