

**RHODE ISLAND PUBLIC UTILITIES COMMISSION  
DOCKET NO. 4406**

**PREFILED TESTIMONY OF  
CHRISTOPHER P.N. WOODCOCK**

**REGARDING RATE RELIEF REQUEST  
FROM PROVIDENCE WATER**

**ON BEHALF OF**

**KENT COUNTY WATER AUTHORITY**

Woodcock & Associates, Inc.  
18 Increase Ward Drive  
Northborough, MA 01532

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**PREFILED TESTIMONY OF  
CHRISTOPHER P.N. WOODCOCK**

4 **Q: Please state your name and business address?**

5 A: My name is Christopher P.N. Woodcock and my business address is 18 Increase  
6 Ward Drive, Northborough, Massachusetts 01532.

7 **Q: By whom are you employed and in what capacity?**

8 A: I am the President of Woodcock & Associates, Inc. a consulting firm specializing in  
9 water and wastewater rate and financial studies.

10 **Prior Experience**

11 **Q: Please describe your qualifications and experience.**

12 A: I have undergraduate degrees in Economics and in Civil Engineering from Tufts  
13 University in Medford, Massachusetts. After graduating in 1974, I was employed by  
14 the environmental consulting firm of Camp, Dresser, and McKee Inc. (now CDM-  
15 Smith). For approximately 18 months I worked in the firm's environmental engineer-  
16 ing group performing such tasks as designing water mains, sewer collection and in-  
17 terception systems, pumping facilities and portions of a wastewater treatment facili-  
18 ty. From approximately January 1976, I worked in the firm's management and fi-  
19 nancial consulting services group, gaining increasing responsibility. At the time of  
20 my resignation, I was a corporate Vice President and appointed the leader of the  
21 group overseeing all rate and financial studies. In my career, I have worked on  
22 nearly 500 water and wastewater rate and financial studies, primarily in the United

1 States, but also for government agencies overseas. I also have worked on a num-  
2 ber of engineering and financial feasibility studies in support of revenue bond is-  
3 sues, I have drafted and reviewed revenue bond indentures, and I worked on sev-  
4 eral valuation studies, capital improvement financing analyses, and management  
5 audits of public works agencies. In addition to my professional experience I have  
6 held elected and appointed positions on municipal boards overseeing public works  
7 functions.

8 **Q: Have you previously testified before state regulatory commissions or courts**  
9 **on rate related matters?**

10 A: Yes, in addition to testimony I have provided before this Commission on numerous  
11 occasions since the 1970s, I have provided testimony on rate related matters before  
12 utility commissions in New Hampshire, Maine, Massachusetts, Connecticut, New  
13 York, Maryland, Texas, and Alberta, Canada. I have been retained as an expert  
14 witness on utility rate related matters in proceedings in state courts in California,  
15 Colorado, Arkansas, Florida, Massachusetts, Michigan, New Jersey, Maryland,  
16 Ohio, Virginia, and Pennsylvania, as well as the Federal Court in Michigan. I have  
17 been selected to several arbitration panels related to disputes over water rates and  
18 charges; I have provided testimony on rate related matters to the Michigan and  
19 Massachusetts legislatures, and I have provided testimony at administrative hear-  
20 ings on a number of occasions.

1 **Q: Do you belong to any professional organizations or committees?**

2 A: Yes, I am a member of the Water Environment Federation, the Rhode Island Water  
3 Works Association, the Massachusetts Water Works Association, the New England  
4 Water Works Association, and the American Water Works Association. For the Wa-  
5 ter Environment Federation, I was a member of the committee that prepared the  
6 manual on Wastewater Rates and Financing. I am past chairman and a current  
7 member of the New England Water Works Association's Financial Management  
8 Committee. In my capacity as Past President of the New England Water Works As-  
9 sociation I also sat on the Board of Directors as well as chairing and sitting on a  
10 number of other administrative committees. For the American Water Works Asso-  
11 ciation, I am past chairman of the Financial Management Committee and the Rates  
12 and Charges Committee that has prepared the manuals on Revenue Requirements,  
13 Water Rates, Alternative Rate Structures, and Water Rates and Related Charges. I  
14 have been reappointed to and am currently the longest standing member of the  
15 AWWA Rates & Charges Committee.

16 **Q: Are you the same Christopher Woodcock that has prefiled testimony on be-**  
17 **half of the Kent County Water Authority in other rate filings?**

18 A: Yes I am.

19 **Q: Who do you represent in this matter?**

20 A: I represent the interests of the Kent County Water Authority (KCWA or Kent Coun-  
21 ty). In past proceedings I have also represented several other wholesale customers

1 of Providence Water. While many of the issues I will address may also be in the in-  
2 terests to and perhaps of benefit to other wholesale customers, my testimony is only  
3 on behalf of KCWA.

4 **Q: What is the purpose of your testimony in this docket?**

5 A: The purpose of my testimony is to comment on the March 23, 2013 rate filing sub-  
6 mitted by Providence Water (as supplemented and corrected with testimony on April  
7 17, 2013<sup>1</sup>) and to provide recommended revisions to that filing, particularly as they  
8 relate to the costs that have been allocated to Kent County.

9 **Q: What is the impact of the increase proposed by Providence Water on the Kent**  
10 **County Water Authority?**

11 A: The increase proposed by Providence Water would result in a 32.8% increase in the  
12 annual revenues from KCWA or \$1,122,870<sup>2</sup>. While it has been three years since  
13 the last increase<sup>3</sup>, the last filing by Providence Water that included a cost allocation  
14 study was in Docket No. 3832 when the test year was June 30, 2006.

15 **Q: Can you summarize the issues you have identified?**

16 A: Yes. Like many dockets before the Commission, there are really four sets of issues:

17 1. the allocation of various costs or revenue requirements that form the basis  
18 for the proposed rates,

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<sup>1</sup> Throughout, my testimony regarding Mr. Smith's exhibits will refer to his supplemental testimony filed on April 17, 2013

<sup>2</sup> Providence Water Schedule HJS-S20

<sup>3</sup> April 27, 2010

- 1           2. the projections used for the rate year sales, number of accounts, fire ser-
- 2           vices, etc.,
- 3           3. the overall allowed revenues or revenue requirements, and
- 4           4. the proper rate design.

5

6           Regarding item #1 above, I am recommending a number of corrections to the allo-

7           cations submitted by Providence Water. Among those with the largest impact on

8           Kent County are (a) the failure to allocate unaccounted for water under the direction

9           provided by the Commission in Doc 3945, (b) the corrections to the asset values

10          provided in response to KCWA Data Request 1-4, (c) the incorrect classification of

11          “distribution” vs. “transmission” mains, and (d) the failure to recognize the change to

12          Chapter 46-15.6-6 that no longer requires IFR costs to be recovered “directly pro-

13          portionate to the users’ water consumption”.

14

15          Regarding item #2 above, the projections of sales, I believe Providence Water has

16          incorrectly mixed a three year average for the retail sale projections with a four year

17          average for the wholesale sales projections and unaccounted for water volumes. In

18          addition, I have proposed to update the numbers of meters, hydrants and fire ser-

19          vices to the values as of March 31, 2013<sup>4</sup> as provided in response to Division Data

20          Request 1-5 and KCWA 3-2.

21

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<sup>4</sup> If these values are further updated I agree to use those more recent values.

1 In regards to item #3, the overall revenue requirements, I believe that Providence  
2 Water has (a) proposed a capital program that leaves a substantial and unneces-  
3 sary balance in the IFR fund, (b) included funding for a new facility that has no ap-  
4 provals, no prior regulatory review, and is priced at the highest option identified, (c)  
5 failed to reflect any new or additional revenues that would result from the (one-time)  
6 increase in cash flow due to the conversion to monthly billing, and (d) suggested an  
7 excessive overall regulatory expense claim and amortized it over too short a period.  
8 As with past filings by Providence Water, I will examine the testimony of the Divi-  
9 sion's expert to address many of the other operating cost requests and may adopt  
10 many of these in my surrebuttal filing.

11

12 Item #4 primarily relates to the alternative conservation rates that Providence Water  
13 has provided but does not recommend at this time. Although this proposal may  
14 benefit the Kent County Water Authority (see HJS-S30), I do not believe that, as  
15 proposed, it is supported by the data supplied in this docket.

16 **Q: What are your overall recommendations?**

17 A: Providence Water has requested an increase in revenues of \$14,621,782 or  
18 24.33% that includes a 32.8% increase for Kent County (and the other wholesale  
19 customers) and an overall retail increase of only 21.68%.

20

21 As discussed earlier, I will examine the Division's and any other expert's testimony  
22 for additional guidance on many of the proposed operating expense adjustments.

1 In the absence of any additional adjustments, I have calculated an overall increase  
2 in rate revenues of \$6,814,668 or 11.6%. Based on this overall revenue require-  
3 ment and the adjustments detailed in this testimony, the rates to the Kent County  
4 Water Authority (and the other wholesale customers) should be *decreased* by 4.0%  
5 while the revenues derived from the *retail* customers should increase by about  
6 17.6%.

## 7 **Cost Allocations**

8 **Q: Of the four issues you have identified, which is the most important for the**  
9 **Kent County Water Authority?**

10 A: The misallocation of costs to the wholesale customers is the most important to the  
11 Authority. While there are a number of cost allocation issues I will address, there  
12 are two that stand-out:

- 13 1. The misallocation of capital costs in Mr. Smith's Schedule HJS-S12 that  
14 was based on incorrect asset values, and
- 15 2. The misallocation of unaccounted for or unmetered water that assigns too  
16 much of the base costs to the wholesale customers.

17 **Q: Please elaborate on your first point – the misallocation of capital costs.**

18 A: The capital costs claimed by Providence Water comprise nearly 40% of the overall  
19 revenue claim (HJS-S1). As shown on HJS-S12 (Allocation of Capital Cost), nearly  
20 all the capital expenses are allocated based on two factors: K1 and K2. These two  
21 factors are derived based on an allocation of individual cost categories for Provi-



1       dence Water's Net Assets. While the details of this allocation were not included in  
2       the filings, they were provided by Mr. Smith in an informal discovery request<sup>5</sup>.

3       Based on some discrepancies between Mr. Gadoury's testimony and the plant val-  
4       ues presented in the spreadsheet, KCWA asked for backup of the net asset values  
5       in KCWA's first set of data requests. The responses from Providence Water pro-  
6       vided corrections to the asset values.

7       **Q: What was the impact of correcting the net plant values?**

8       A: Just substituting the corrected asset values (KCWA 1-4, updated) into Mr. Smith's  
9       spreadsheet model with no other changes results in significant changes:

- 10           • The allocation of capital costs (HJS-S12) to the wholesale class drops  
11           from \$8,505,764 (30.26%) to \$5,850,728 (20.81%).
- 12           • The proposed revenues from KCWA (HJS-S20) drops from \$4,545,652 to  
13           \$3,998,409 and the overall increase for KCWA drops from the proposed  
14           32.8% to 16.8%.
- 15           • The proposed revenues from the entire wholesale class of customers drop  
16           by \$2,657,056 (and the wholesale increase drops from 32.8% to 16.8%).

17       This correction to data that Providence Water has now agreed was incorrect in the  
18       initial filing has a major impact. It shows how critical the proper underlying data can  
19       be to the cost allocations. Rather than having a larger overall increase than the re-  
20       tail class, the wholesale customers should have a lesser increase.

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<sup>5</sup> As this case moved on and the importance of this matter became clearer, Providence Water has provided additional information to correct this matter. My testimony is based on the formal testimony submitted by Providence Water

1 **Q: Do you have any other comments on the asset values?**

2 A: As the Commission is aware, it is common practice for water utility capital costs to  
3 be assigned based on the value of assets. This practice is followed because in-  
4 vestments in water system assets are typically quite “lumpy”; that is, the invest-  
5 ments in different categories of assets can change dramatically from year to year.  
6 For example, one year there may be significant expenditures related to meters while  
7 the next year there may be significant expenditures related to the treatment facili-  
8 ties. These investments can have major impacts on the utility’s rates and charges.  
9 If all the metering costs are assigned to the service charge in the year of that ex-  
10 pense it would result in a large increase to the service charges. The following year  
11 when expenses are concentrated on treatment, the service charge would drop back  
12 down dramatically and the metered rates would rise. Customers should not be sub-  
13 ject to major rate structure changes because of variations in annual expenses; there  
14 should be a level of continuity in rates. To do this, we typically look at past invest-  
15 ments as a reflection of future capital costs. Over time, the annual investments will  
16 add to the plant values and result in a proper allocation and recovery of costs.

17  
18 There are certainly implications to this practice. In this docket, Providence Water is  
19 seeking a major increase to cover costs associated with future expenses that are  
20 primarily involved with the retail distribution system. Looking at the projected IFR  
21 costs for the next 20 years, nearly 75% of the total projected expense is related to  
22 the retail distribution system. In its supplemental filing, the total of all transmission

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including Mr. Smith’s supplemental filing.

1 and distribution assets amounted to only 47% of the value however. Although 75%  
2 of the costs were related to the retail distribution system less than 47% of the IFR  
3 costs were allocated to distribution.

4  
5 The corrected asset values provided in response to KCWA 1-4 increased the  
6 transmission and distribution share from 47% to 59% helping to bring the T&D costs  
7 closer to the projected share of future investments, although still far short of the  
8 75% projected for the next 20 years.

9  
10 The point of this comparison is to demonstrate how critical the use of correct asset  
11 values is. In this docket, the capital costs that are allocated based on asset values  
12 amount to more than \$28 million in Providence Water's supplemental filing or nearly  
13 40% of the total revenue requirements.

14 **Q: Please explain the second correction you found, the misallocation of lost or**  
15 **unaccounted for water.**

16 A: The cost allocation spreadsheet that was used by Providence Water appears to  
17 have been updated from that used in the 2007 rate filing (Docket No. 3832). In that  
18 docket I had raised an issue regarding the allocation of lost or unaccounted for wa-  
19 ter. Providence Water had proposed to allocate the unaccounted for water using  
20 the inch-feet<sup>6</sup> of transmission vs. distribution pipe. I testified that this was incorrect  
21 and that a (then) recently released American Water Works Association (AWWA)

1 Manual made it clear that pipe size (diameter) did not impact overall losses; that the  
2 length of pipe, and particularly the lengths of customer service pipes, were what re-  
3 ally mattered.

4  
5 While the Commission found the evidence to have been presented too late in Docket  
6 3832, it encouraged the issue to be raised again. In Docket No. 3945<sup>7</sup> the Com-  
7 mission did address this matter, and in that decision the Commission states: “The  
8 parties were able to fully review the basis for (Mr. Woodcock’s) proposal and accept  
9 it. After review of the evidence and testimony at the hearing, the Commission spe-  
10 cifically approves this methodology for calculating lost and unaccounted for water,  
11 finding it to be supported by the water industry through credible scholarly publica-  
12 tions.” (page 10 of Report and Order 19671, Docket 3945) Perhaps being unaware  
13 of it, Providence Water did not take this Commission order into account in this filing.

14 **Q: Please describe what you have done.**

15 A: In recognition of the Commission’s Order in Docket No. 3945, I have recalculated  
16 the allocation of unaccounted for water. While Mr. Smith showed the result of his  
17 allocation of unaccounted for water in his Schedule HJS –S23, the basis for the al-  
18 location was not in the printed schedules. Based on my examination of his spread-  
19 sheet, he has continued to allocate the unaccounted water between retail and

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<sup>6</sup> The nominal diameter of pipe in inches times the length in feet

<sup>7</sup> Pawtucket Water

1 wholesale customers using the same inch-feet calculation he had used in Docket  
2 No. 3832.

3  
4 Rather than simply using the miles (or feet) of pipe multiplied by the diameter of  
5 pipe, I have used the Commission's approved method of only considering the length  
6 of pipe. Consistent with the method approved by the Commission in Docket 3945, I  
7 have also included an estimate of the length of pipe associated with retail service  
8 pipes. For this estimate I assumed that each account had a 25 foot service pipe<sup>8</sup>.

9 **Q: Why have you added an estimate for the length of customer service pipes?**

10 A: As discussed in AWWA Manual M36, "the majority of leakage volume losses occur  
11 on customer service connection piping, not on the water main piping of the distribu-  
12 tion system." (page 100) Since more than 50% of the losses come from the service  
13 pipes, it is important to include these pipes in the allocation of lost water. I would  
14 note that with the assumptions I have made, I have likely understated the loss vol-  
15 ume from retail service pipes since the service pipe I have included would account  
16 for closer to 25% of the losses and not "the majority".

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<sup>8</sup> KCWA requested an estimate of the total length of service pipe from Providence Water in KCWA 4-2. Providence Water could not provide an estimate of the total length, but did estimate 225 miles of service pipe between the main and the curb stop (typically the property line). I have estimated an additional 55% more pipe (125 miles) between the curb stop and the customer's structure. Considering Providence Water's response to KCWA 4-2, this is likely low.

1 **Q: What is the impact of this correction?**

2 A: Again, looking at *ONLY* this single matter, and changing the allocation of unac-  
3 counted for water at the base of HJS-S23<sup>9</sup> so it conforms to the Commission's or-  
4 der in Docket 3945 has a significant impact:

- 5 • The proposed revenues from KCWA (HJS-S20) drops from \$4,545,652 to  
6 \$4,409,041 and the increase drops from the proposed 32.8% to 28.8%.
- 7 • The proposed revenues from the entire wholesale class of customers drop  
8 by \$669,288.
- 9 • The percentage increase in wholesale revenues is almost equal to the  
10 overall increase proposed by Providence Water, and not significantly  
11 more.

12 **Q: Have you determined the combined impact of just these two changes?**

13 A: Yes I have. If I *only* make these two corrections the impacts are as follows:

- 14 • The proposed revenues from KCWA (HJS-S20) drops from \$4,545,652 to  
15 \$3,868,706 and the increase drops from the proposed 32.8% to 13.0%.
- 16 • The proposed revenues from the entire wholesale class of customers drop  
17 by \$3,286,810.
- 18 • The percentage increase in wholesale revenues is less than the overall in-  
19 crease proposed by Providence Water, and not significantly more.

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<sup>9</sup> not shown in the filing, but included in the spreadsheet model

1 **Q: Are there additional issues associated with the allocation of costs?**

2 A: While the two matters addressed above are the most critical errors, there are a  
3 number of other issues.

- 4 • I believe Providence Water has improperly classified pipe between trans-  
5 mission and distribution in the cost allocation study, and that the proposed  
6 classifications are inconsistent with other testimony and documents sup-  
7 plied by Providence. This misclassification results in an over-allocation of  
8 costs to the wholesale customers.
- 9 • The allocations using symbols N, NO and NP for pumping facilities fail to  
10 allocate any costs to fire protection despite Providence's admission that  
11 water used for firefighting is pumped through these facilities. The proper  
12 allocation of a portion of these costs to firefighting reduces the allocation  
13 to wholesale customers.
- 14 • As discussed by Mr. Gadoury, the operating expense under Transmission  
15 & Distribution: Contract Service - Engineer is a major new expense for the  
16 cleaning and lining of the retail distribution pipes. I believe that none of  
17 this should be allocated to the wholesale customers and should be allo-  
18 cated to only the retail beneficiaries according to allocation symbol TD.
- 19 • The miscellaneous revenues from the State Surcharge are all from retail  
20 customers; the wholesale customers should not receive any credit for this  
21 revenue offset. I have allocated all these revenues to the retail base func-  
22 tion.

1           • Based on the response to KCWA 4-3, Providence Water has derived allo-  
2 cation symbols X1 and X2 using only a single year's data. While the set-  
3 tlement in Docket 3082 may have derived these values based on only one  
4 years' data that settlement was not binding on future cases.

5           a. As shown on my Schedule CW-S14C, the allocation percentage to  
6 the wholesale customers under symbol HM (the basis for symbol  
7 X1) increases each year from 6.37% in FY 2010 to 8.20% in FY  
8 2012. Providence Water has picked the highest allocation percent  
9 to wholesale customers and ignored the other two years. This  
10 choice to limit the consideration to only one year makes no sense  
11 when one considers that symbol X1 is used to allocate T&D costs  
12 in all three years.

13           b. Similarly, the allocation percentage to wholesale customers under  
14 symbol HOC (the basis for symbol X2) increases from 17.72% in  
15 FY 2010 to 18.49% in FY 2012. Again, considering only one year  
16 when this symbol is used to allocate three years of costs makes no  
17 sense.

18           Symbols X1 and X2 should be derived using all three years just as sym-  
19 bols HM and HOC used all three years. Providence Water's only explana-  
20 tion or support for using a single year is based solely on a docket that has  
21 no binding precedence in this case. I believe that using all three years just  
22 as was done for the basis of these symbols, is far more valid.



- 1 • There are a number of other allocations in Mr. Smith’s Supplemental Tes-  
2 timony and Exhibits that I believe he may have agreed should be correct-  
3 ed in his responses to data requests. However, based on Mr. Smith’s  
4 comment in the response to DIV 3-1 -- “Providence Water retains the right  
5 to investigate the (changes), and propose further changes ...” – I believe it  
6 is appropriate to address these revisions in my testimony should Provi-  
7 dence choose to change its apparent prior acceptance.

8 a. In response to KCWA 1-18 Providence Water agreed that the allo-  
9 cation of Administrative & General: Employee Pensions and Bene-  
10 fits should be based on allocation symbol Y and not Z. Allocation  
11 symbol Y is used to allocate employee related costs and should be  
12 used for the allocation of Employee Pensions and Benefits. This is  
13 also consistent with the allocation of these costs in past dockets.

14 b. Allocation symbols K1 and K2 are used to allocate the vast majority  
15 of capital items. In developing these allocators, the value of system  
16 assets is used as a surrogate for the allocation of future infrastruc-  
17 ture replacement and other capital investments. Because land is  
18 not being replaced, the value of land has been removed from the  
19 derivation of these allocators. Mr. Smith’s supplemental exhibits  
20 and testimony failed to remove land associated with Treatment and  
21 with Lakes, River, Other Intakes. Mr. Smith appeared to agree with

1                   these adjustments in the responses to KCWA 1-19 and KCWA 1-  
2                   20.

3                   c. Allocation symbols HM, HMC and HOC are used to allocate almost  
4                   90% of the Transmission & Distribution costs (over \$5.1 million of  
5                   the overall revenue requirements); they are an important element of  
6                   the overall cost allocations. In its supplemental filing, Providence  
7                   Water allocated these expenses using the exact same percentages  
8                   that were developed over 5 years ago in Docket 3832 (see re-  
9                   sponse to KCWA 1-13). KCWA asked for these allocation symbols  
10                  to be updated using FY 2010 – FY 2012 data rather than using the  
11                  old FY 2004 – FY 2006 data. In his response to KCWA 1-13, Mr.  
12                  Smith indicated he would use this updated data for FY 2010 – FY  
13                  2012 in his rebuttal testimony and exhibits.

14                  d. Allocation symbols X1 and X2 are based on the allocations of sym-  
15                  bols HM and HOC. I have revised these to conform with the  
16                  changes to symbols HM and HOC discussed above.<sup>10</sup>

17                  e. I have allocated the Plant Supply Mains and Other Power Produc-  
18                  tion Equipment in the updated asset listing using allocation symbol  
19                  A not N (see response Div 2-9).

20                  f. I have included the corrected water production values for lost water  
21                  in the calculation of allocation symbol P.

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<sup>10</sup> Mr. Smith's corrected spreadsheet provided in response to DIV 3-1 incorrectly derives symbol X1 and X2 based solely on one year (2012) and not all three years. See testimony on this above.

1 **Q: Aside from Mr. Smith’s suggestion in the response to DIV 3-1 about “the right**  
2 **to investigate the (changes), and propose further changes ...” do you have**  
3 **any reason to believe Mr. Smith may no longer agree with these changes?**

4 A: Yes. In the response to DIV 3-1 requesting an updated spreadsheet model that  
5 contains the revisions he has agreed to, Mr. Smith now proposes “that the calcula-  
6 tion of factors HM, HOC, and HMC be based on a six year average” rather than a  
7 three year average<sup>11</sup>. This is inconsistent with his prior response to KCWA 1-13  
8 where said he these allocation symbols would be “revised to reflect these (FY 2010-  
9 2012) updated allocation percentages in my rebuttal testimony.” Parties should be  
10 able to rely on the responses to data requests and the representations that are  
11 made regarding acceptance of changes.

12 **Q: How has the split between transmission and distribution pipes been used in**  
13 **Mr. Smith’s cost allocation study?**

14 A: While it is not shown in the schedules submitted as part of Mr. Smith’s prefiled and  
15 supplemental testimony, transmission and distribution pipes have been split out  
16 within the spreadsheet he has provided. There is a section on the miles of pipe by  
17 size. Mr. Smith has calculated a total number of inch-miles of pipe by multiplying  
18 the length of each size pipe (in miles) by the nominal diameter (in inches) to get an  
19 “inch-miles” of each size pipe.

20

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<sup>11</sup> He also agreed that the costs associated with the cleaning and lining of retail distribution pipe should be assigned based on allocation symbol TD. See also the response to KCWA 4-4.

1 Mr. Smith has next split these inch-miles of pipe into a distribution percentage and a  
2 transmission percentage. In doing this he has assumed that all pipes that are 10" in  
3 diameter or less are distribution pipes and that all pipes that are 12" or greater are  
4 transmission pipes.

5 **Q: What is the relevance of this split? How does it impact the cost allocation**  
6 **study?**

7 A: First, it must be understood that the terming of pipe as "transmission" or "distribu-  
8 tion" is not the real issue. The sole purpose of this classification is to identify assets  
9 that are used and useful by the wholesale customers. I believe that all parties can  
10 agree that any costs associated with pipes that are used for service to retail cus-  
11 tomers should not be assigned or allocated to the wholesale customers. Because  
12 water piping is under pressure and the pipes are looped, it is somewhat difficult to  
13 precisely identify pipes as just retail or both retail and wholesale. Clearly there are  
14 large pipes (over 12") in the Providence retail system are of little or no benefit to  
15 wholesale customers. However, to make the identification of piping responsibility  
16 somewhat simpler, we have used the convenience of terming some pipe as "distrib-  
17 ution" and some as "transmission", and we have typically used a size convention  
18 to make this distinction.

19  
20 Costs associated with distribution pipes are only assigned to the retail customers  
21 that make use of the distribution system. Transmission pipes are used by both re-

1 tail and wholesale customers<sup>12</sup>, and costs associated with these facilities are allo-  
2 cated between wholesale and retail service. It is thus critical to properly identify  
3 what is distribution pipe (retail only) and what is transmission (both retail and whole-  
4 sale). If piping that is only for the retail distribution system is assigned to the whole-  
5 sale customers, the wholesalers are charged for services they do not need; services  
6 that are neither used nor useful to the wholesale customers.

7  
8 This split between distribution and transmission is used in several places.

- 9 1. Mr. Smith has allocated unaccounted for water using the relative share of  
10 distribution and transmission inch-miles assuming that distribution pipes  
11 are 10" or less and transmission pipes are 12" or greater.<sup>13</sup>
- 12 2. When Providence corrected the asset listing that is used to allocate most  
13 capital costs, it split up the asset value of pipe between Distribution and  
14 Transmission. To do this, they used the same percentages of pipe inch-  
15 miles discussed above. While the use of inch-miles (rather than just  
16 miles) may be appropriate for *this* allocation, the split should classify dis-  
17 tribution pipe as 12" and less and transmission pipe as 16" and greater.

---

<sup>12</sup> No party has ever contended that there are pipes that are solely allocable to just wholesale customers.

<sup>13</sup> As discussed earlier, the use of inch-feet to allocate unaccounted for water is contrary to the Commission's orders; simple miles of pipe should have been used.

1 **Q: Why do you believe the transmission and distribution pipes were improperly**  
2 **classified in Mr. Smith's cost allocation study?**

3 A: Until data requests were asked about this issue, Providence Water had classified its  
4 pipe up to 12" as distribution pipe and those that are 16" or more as transmission.  
5 This is clearly defined on page I-11 of its 2011-2030 IFR Report as provided in re-  
6 sponse to Div 1-31. It is also used on Exhibit 7 to that Report (page I-21 and I-22),  
7 the description of the transmission system on pages III-21 through III-22, and the  
8 description of the distribution system on page III-23. Throughout this engineering  
9 report, the distribution system is consistently classified as pipes and valves that are  
10 12" or less and the transmission system is classified as pipes and vales that are 16"  
11 and greater.

12  
13 The cost allocation study should reflect the engineering classification that is used by  
14 Providence Water. It makes no sense to classify 12" pipes as distribution in the rate  
15 study when they are classified as transmission pipes in every other case.

16 **Q: In response to BCWA 1-2(d) Mr. Gadoury says that mains that are 12" and**  
17 **larger are transmission mains. How do you respond to that claim?**

18 A: As I noted earlier, Providence Water has submitted an engineering report (its IFR  
19 study) that has consistently labeled 12" pipes as distribution pipes. It is only for the  
20 rate filing that Providence seems to have changed its definition now saying in its da-  
21 ta response that 12" pipes are transmission pipes. I believe the engineering report  
22 that consistently classifies 12" pipes as distribution should be relied upon in this

1 case. There was no benefit or interest to Providence rate payers when 12" pipes  
2 were designated as distribution pipes in the IFR engineering report. There is a clear  
3 benefit to Providence's retail rate payers to classify the 12" pipes as transmission in  
4 this docket.

5  
6 Aside from the different definitions provided by Providence, there is a practical con-  
7 sideration. In the response to BCWA 1-11 we were provided the water sales by  
8 wholesale connection size. The response to BCWA 1-14 provided the size of the  
9 connection pipe for each wholesale connection. The response to KCWA 5-1 pro-  
10 vided the size of Providence Water's pipe that wholesale customers were connect-  
11 ed to. Based on these three responses I was able to determine that 89% of the  
12 wholesale water sales were through connections that were greater than 12", and vir-  
13 tually all (more than 97%) of the water supplied to the wholesale customers is  
14 through Providence Water pipes larger than 12". Essentially, there is no service to  
15 wholesale customers from Providence pipes that are 12" or less.

16  
17 There are nearly 100 miles of 12" pipe in the Providence system, very little, if any, of  
18 which is used by the wholesale customers. Based on this very practical considera-  
19 tion of how water is supplied to wholesale customers, it is apparent that the pipes  
20 that are 12" or less are not of significant benefit to the wholesale customer group.  
21 Accordingly, I believe that the 12" pipe in the Providence piping system should be

1 classified as distribution pipe and assigned to the retail customers that truly use  
2 these pipes<sup>14</sup>.

3 **Q: You also raised an issue with the lack of any allocation to fire protection for**  
4 **line items allocated using symbols N, NO, and NP. Can you discuss this mat-**  
5 **ter?**

6 A: Symbols N, NO and NP are used to describe the allocation of various pumping facil-  
7 ity costs. Inexplicably, Providence has failed to allocate any pumping costs to fire  
8 protection (see HJS-S11 and HJS-S14) despite Providence's admission that water  
9 used for firefighting is pumped through these facilities (see response to KCWA 2-  
10 20). As noted in the response to KCWA 1-10b, the costs for the larger pumping fa-  
11 cilities (allocated in part to wholesale customers) were allocated based on symbol A  
12 or AA. Items allocated under symbol A or AA properly allocate a portion of these  
13 costs to firefighting. In the case of the larger pumping stations, Providence Water  
14 did not make any allocation to fire protection. Correcting this and properly adding  
15 1% of the costs for these larger pumping stations to firefighting will reduce the over-  
16 all allocation to wholesale customers.

17  
18 Allocation symbols N, NO and NP should be revised to reflect the 1% allocation to  
19 fire protection, and the remaining allocations should be reduced accordingly.

---

<sup>14</sup> While a very small percentage of water (less than 3%) is indeed supplied to wholesale customers through 12" pipes, there are also 16" and larger pipes within the Providence Water retail system that are of no use or benefit to the wholesale customers. These should more than offset each other.



1 **Q: The final uncontested item you mentioned is the allocation of Contract Ser-**  
2 **vice – Engineer under Transmission & Distribution. Please discuss this.**

3 A: The operating expense under Transmission & Distribution: Engineering is for the  
4 cleaning and lining of the retail distribution pipes; there is no question as to what  
5 this expense is for. Because this expense is solely related to the unidirectional  
6 flushing of retail distribution pipes, I believe that none of this should be allocated to  
7 the wholesale customers and should be allocated according to allocation symbol  
8 TD.

9 **Q: You mentioned the failure to recognize the change to Chapter 46-15.6-6 that**  
10 **no longer requires IFR costs to be recovered “directly proportionate to the**  
11 **users’ water consumption” in your opening summary. What is this issue?**

12 A: First, this matter has a minimal impact on Kent County and the other wholesale cus-  
13 tomers; only affecting the amount of the service and fire protection charges. The RI  
14 Legislature changed section (1) of Chapter 46-15.6-6 in 2009 (after Providence Wa-  
15 ter’s last cost allocation filing).

16  
17 The prior IFR legislation required all IFR costs to be paid in proportion to use. This  
18 meant that any IFR costs related to fixed charges like the service charge or fire pro-  
19 tection charges had to be re-allocated to the base category to recover those costs  
20 “directly proportionate to the user’s water consumption.” In recognition of this for-

1 mer requirement, Providence Water<sup>15</sup> revised a number of its allocators to move all  
2 IFR costs to the base category. IFR costs that were related to replacing fire hy-  
3 drants, for example, were moved to the base category and recovered through water  
4 sales rather than through the fire service charge where hydrant related costs are  
5 typically (and properly) recovered.

6  
7 In earlier proceedings the Commission has expressed concern that the costs as-  
8 signed to meters and services resulted in service charges that were quite high. Ac-  
9 cordingly, the Commission ordered allocators such as Comm Y and Comm Z that  
10 moved costs from the service charge to the retail metered rates. In recognition of  
11 this concern I have not suggested any adjustments to the allocator adjustments that  
12 move retail costs from the service charges to the retail metered rates.

13  
14 While I am not suggesting a change to the service charge allocations, I believe the  
15 re-allocation of fire service costs should be corrected<sup>16</sup>. There are many IFR costs  
16 that were improperly assigned to the metered rates and artificially lowered the costs  
17 assigned to the fire protection charge. I believe it is important to understand the  
18 true costs of various services provided by Providence Water; fire protection is one  
19 of those services.

---

<sup>15</sup> As well as all other water utilities in RI

<sup>16</sup> Note that this matter was addressed in Docket 4171 – Pawtucket Water.

1 In 2009, the “directly proportionate to the user’s water consumption” wording was  
2 removed by the RI Legislature, allowing the IFR costs associated with fire protection  
3 to be properly assigned to both public and private fire protection. Customers should  
4 not have to subsidize these services through their metered water use rates. Ac-  
5 cordingly, I have allocated the fire service costs back to fire service for allocator K1.  
6 This is the allocator used for all IFR costs. Using the updated plant assets provided  
7 in response to Div 3-1, correcting this one allocator puts nearly \$1 million of IFR  
8 costs related to fire protection back on to the fire protection charges where they  
9 properly belong and removes them from the retail metered rates where they do not  
10 belong.

11 **Q: Do you have any additional comments on the cost allocation issues you have**  
12 **discussed?**

13 A: Yes. I have touched on revisions to a number of different allocations and symbols  
14 in my testimony. I believe it is important to note that the individual revisions I have  
15 discussed impact far more than just the line items associated with these individual  
16 symbols. Many of the allocation factors are based on the results of other individual  
17 allocations, so these changes have a wide ranging impact.

18

19 In the next section of my testimony I will address the pro forma water use. As I dis-  
20 cuss, I believe that there is a significant change that needs to be made to eliminate  
21 the inconsistent treatment of wholesale and retail customers. This revision also im-  
22 pacts the allocation of costs.

1 **Water Use**

2 **Q: What are the issues you would like to address regarding water use?**

3 A: There are two matters: (1) the use of a consistent historic period to determine pro  
4 forma water sales and (2) the use of the most up-to-date numbers of meters and  
5 fire services.

6 **Q: Please address the first matter, consistent water use periods.**

7 A: As discussed on page 8 of Mr. Smith’s prefiled testimony, Providence Water has  
8 proposed using an average of sales over the past three years to determine the retail  
9 pro forma sales, but he has used a four year average to derive the pro forma  
10 wholesale sales. He notes that retail sales in FY 2009 were “above average”, and  
11 using that year in the average would result in higher retail sales.

12

13 What Mr. Smith doesn’t say is that using the FY 2009 wholesale purchases (which  
14 were also “above average”) results in higher pro forma wholesale sales and thus a  
15 higher allocation to wholesale customers.

16

17 It makes no sense to throw out a high year for one class and not another. The  
18 sales to five of the wholesale customers were “above average” in FY 2009. If the  
19 high year for retail users is thrown out, shouldn’t the high year for each of the  
20 wholesale customers be thrown out as “above average”?

1 **Q: What have the water sales for your client, Kent County, looked like over this**  
2 **period?**

3 A: Like Providence, the Kent County water sales were quite high in FY 2009. The fol-  
4 lowing are the retail sales over the past few fiscal years (in million cubic feet).

- 5 • FY 2009: 364
- 6 • FY 2010: 320
- 7 • FY 2011: 342
- 8 • FY 2012: 332
- 9 • FY 2013: 329

10 Like other water utilities in the state, water sales have generally been dropping.

11 Looking at the past five years, FY 2009 was clearly high and skews any average for  
12 Kent County.

13 **Q: Are the water sales the only inconsistency?**

14 A: No. As also shown on HJS-S23, Mr. Smith has used a four year average for the pro  
15 forma or rate year unaccounted for water as well. In this case he did not throw out  
16 the unusually low unaccounted for water volume in FY 2009. Leaving the lower un-  
17 accounted for water volume from FY 2009 in the average, lowers the overall lost  
18 water volume and the volume of lost water ultimately assigned to the retail custom-  
19 ers. By including the lower unaccounted for water volumes from FY 2009 and ex-  
20 cluding the higher retail sales from FY 2009, Mr. Smith has reduced the volume wa-  
21 ter attributable to the retail customers thereby increasing the overall allocation to the  
22 wholesale customers.

1 **Q: What is the impact of this inconsistent development of pro forma sales and**  
2 **water losses?**

3 A: The impact is significant. Earlier I presented the corrected assignment of unac-  
4 counted for water. If we use consistent periods for retail water sales, for wholesale  
5 water sales, and for unaccounted for water, the difference to the wholesale custom-  
6 ers is in excess \$80,000/year. The pro forma sales don't just impact the allocations  
7 based on sales (symbols A and AA), but nearly every other allocation where there is  
8 not a direct assignment to meters or services.

9 **Q: What do you recommend?**

10 A: The Commission is well aware of the drop in water sales throughout Rhode Island  
11 in recent years. If pro forma sales are based on historic years when sales were  
12 higher, it will be impossible for the state's water utilities to achieve the allowed reve-  
13 nues with today's depressed sales. I recommend that the pro forma (rate year)  
14 sales for both retail and wholesale customers be based on the past three year's av-  
15 erage (FY 2010 – FY 2012), and that the unaccounted for water also be based on  
16 the same three year period.

17 **Q: Please discuss the updating of the numbers of accounts and fire services you**  
18 **mentioned.**

19 A: I expect that Providence Water's filing was based on the most up-to-date data they  
20 had the time the filing was prepared. Since then there have been increases in the  
21 numbers of accounts (meters), fire services and public fire hydrants. Based on var-

1 ious data requests, Providence Water has provided this updated information. Con-  
2 sistent with past Commission practice, I have used the most up-to-date numbers of  
3 accounts, fire services and hydrants.

4 **Q: Are there any additional matters related to water sales or numbers of ac-**  
5 **counts and services?**

6 A: There have been a number of data requests regarding the retail customer class  
7 demand factors presented by Providence Water. While these have no impact on  
8 the wholesale rates under the current cost allocation method, there are maximum  
9 day and maximum hour demands presented for the wholesale class in this filing.  
10 These are the same factors that have apparently been used for a number of years  
11 by Providence Water in its filings with the Commission. The Kent County Water Au-  
12 thority wants to go on record that it does NOT agree with these factors.

13  
14 The maximum day and maximum hour demands presented by Providence Water  
15 are the estimated non-coincident peak demands for each customer class. The use  
16 of the non-coincident demands is the accepted industry standard in water rate mak-  
17 ing. By definition, the sum of the non-coincident demands must be greater than the  
18 overall system-wide coincident peak demands. Using the three year (FY 2010 – FY  
19 2012) averages from the response to Div 2-2, the system-wide coincident maximum  
20 day demand is nearly identical to the sum of the non-coincident demands for the  
21 same three year period. Using the four year average (FY 2009-FY2012), the sys-

1 tem-wide coincidental maximum day exceeds the non-coincident demands for the  
2 same four year period – this is impossible.

3  
4 As noted, this matter does not impact the Kent County Water Authority in this filing.  
5 We do believe the factors are incorrect however; and, the resultant retail rates and  
6 fire charges are suspect because they are based on this erroneous data.

## 7 **Revenue Requirements**

8 **Q: The next general area you discussed in your summary was the revenue re-**  
9 **quirements. Can you summarize these issues or concerns?**

10 A: In general I have not spent a considerable amount of time on the claimed operating  
11 costs. From the data requests I have seen, both the Division and the Bristol County  
12 Water Authority have spent time analyzing these costs. The requested increases in  
13 operation and maintenance costs amount to about 15% of the overall requested in-  
14 crease. While there is a considerable increase in chemicals and sludge disposal,  
15 these costs are restricted and I expect the Division to offer an opinion on these  
16 costs that I will examine.

17  
18 The claimed property tax increases are considerable (nearly \$800,000), however,  
19 Providence Water has provided the tax bills through FY 2014 in response to Div DR  
20 4-7. I have updated the pro forma (rate year) amounts by taking the FY 2014 actual  
21 bills and adding an additional 2% for the half year from July 1 – December 30, 2014.



1 Providence Water has already identified several adjustments to the operating costs  
2 that I have included. These include

- 3 • The reduction to Customer Accounting costs (Div 1-39)
- 4 • The reduction to Contractual Services-Engineering for the UDF flushing  
5 (Div 1-30)
- 6 • The further reduction for capital reimbursements (Div 1-10)
- 7 • No increase to power costs as the rate is fixed through the rate year (Div  
8 4-3 and Comm 1-16)<sup>17</sup>

9 I will also address the claimed regulatory expenses which are excessive; however,  
10 the bulk of my testimony on the revenue requirements deals with claimed capital  
11 costs, specifically:

- 12 • The requested \$8,000,000 increase for IFR costs
- 13 • The continued \$2,450,000 funding for the Capital Fund, particularly the  
14 \$2,400,000 per year for a New Central Operations Facility presented in  
15 Mr. Gadoury's Exhibit PG-5

16 In its response to Comm 1-33, Providence Water provided a breakdown of the mis-  
17 cellaneous costs within a number of areas. KCWA submitted a subsequent data  
18 request on several of these items that appear to be one-time costs and should not  
19 have been carried forward in the rate year. At the time this testimony was pre-  
20 pared, I did not have a response upon which I could make any recommendations.

---

<sup>17</sup> While Providence Water states that it did not increase the electric supply costs (see Comm 1-16), the spreadsheets it has provided suggest otherwise. KCWA has asked a late follow-up data request on this matter.

1 Depending on the response from Providence Water, I may supplement this testimo-  
2 ny or address the matter further in surrebuttal testimony.

3  
4 Lastly, I have proposed an adjustment to the claimed operating revenue allowance.

5 **Q: Please discuss your concern with Providence Water's proposed new IFR**  
6 **funding.**

7 A: As discussed in the prefiled testimony and shown on HJS-S2, Providence Water is  
8 proposing to increase its annual Infrastructure Replacement (IFR) spending by  
9 \$8,000,000. This increase accounts for nearly 2/3 of their proposed increase. The  
10 proposal would increase Providence Water's IFR spending from \$16,000,000 per  
11 year to \$24,000,000 per year; the IFR allowance would amount to 1/3 of their total  
12 annual expenses.

13  
14 I understand the critical need to fund the replacement of our nation's water infra-  
15 structure; and while it is aggressive, I do not dispute the infrastructure replacement  
16 spending plan outlined in this docket. My concern is related to the unnecessary  
17 buildup of a massive IFR reserve in conjunction with the huge increase in spending  
18 – both are not needed. Based on HJS-S9C, the balance in the IFR reserve would  
19 increase to more than \$7,500,000 by the end of FY 2015.

20  
21 Schedule HJS-S9C shows activity in the IFR Reserve fund through FY 2015. In-  
22 cluded within the use of funds are bond payments on the 2005 RICWFA Debt (re-

1 financed from 1994) and the RICWFA ARRA Debt. Those payments end in FY  
2 2015, reducing future IFR funding requirements by nearly \$1,500,000. This will re-  
3 duce the use of funds from some \$29.5 million to just over \$28 million.

4  
5 Mr. Smith's HJS-S9C shows more than \$7.5 million in the IFR fund balance at the  
6 end of FY 2015. With the \$24 million of annual rate revenue for IFR (current \$16  
7 million plus requested \$8 million), there will be in excess of \$31.5 million available in  
8 FY 2016. Accordingly, several years *after* the rate year in this docket, Providence  
9 Water will have \$3.5 million more than they need in the fund. Considering the 25%  
10 increase that Providence Water is seeking, I think this is excessive.

11 **Q: What do you propose for the IFR spending allowance?**

12 A: I have proposed an annual allowance of \$20,000,000. This is a \$4,000,000 in-  
13 crease over the current \$16,000,000 allowance. As shown on my attached Sched-  
14 ule CW-S9C, my proposal would provide for an ending reserve balance in FY 2015  
15 in excess of \$1,500,000. The \$20,000,000 of annual rate funded IFR money I have  
16 proposed plus the \$1,500,000 carryover will provide \$21,500,000 of funding in FY  
17 2016 without any additional bond sale and assuming no slippage in the aggressive  
18 construction schedule that Providence Water has proposed. The response to  
19 KCWA 2-7 shows the cash funded projects in FY 2016 drops by almost \$2,000,000  
20 from the FY 2015 amount.

1 The updated IFR plan that Providence Water has provided is a major change from  
2 the prior plan prepared in December 2010. Significant changes are being proposed  
3 in the operations of the treatment facilities. The lead pipe service replacement pro-  
4 gram that had \$8 million per year of annual spending has been abruptly curtailed. I  
5 believe it is prudent to ask Providence Water to begin its new plan with sufficient  
6 funding through FY 2015. If this new plan is still in place and on schedule in anothe-  
7 er 12 to 18 months, Providence Water can submit an abbreviated filing for additional  
8 IFR funds if they are still needed and the plan has not changed.

9 **Q: Aren't you concerned that the fund balance going into FY 2016 is too small?**

10 A: I am not. First, Providence Water's 2010 IFR Plan (Div DR 1-31, page ES-5) never  
11 shows a fund balance in the \$7,500,000 range now proposed by Providence Water.  
12 In fact, the balances of \$0.3 million, \$3.8 million, \$2.2 million, and -\$0.56 million are  
13 far more in line with the \$1.5 million balance I have presented for the end of FY  
14 2015.

15  
16 Perhaps more importantly, the response to KCWA 3-1 included the minutes to sev-  
17 eral Board meetings. The January 16, 2013 minutes (Item 6.3) shows that the  
18 Board approved a \$55 million line of credit with Century Bank that is "only used to  
19 provide cash flow to our restricted IFR fund." That line of credit has never been  
20 mentioned by Providence Water, yet it provides a \$55,000,000 line of credit that is  
21 available for their new IFR program.

1 **Q: To be clear, are you recommended any reduction, delay, or slow down to Prov-**  
2 **idence Water's proposed IFR program?**

3 A: No, I am not suggesting any change what-so-ever. I have reflected the full amount  
4 of spending that was proposed by Providence Water. I have simply recommended  
5 a reduction to the massive increase in rate revenues because they are not needed  
6 to fund the program.

7 **Q: The second capital funding issue you summarized is related to the \$2,450,000**  
8 **per year allowance for the Capital Fund. Can you discuss this matter?**

9 A: While Providence is not requesting any change to the current allowance, they have  
10 not demonstrated the continued need for \$2,450,000 per year. The sole support for  
11 this Fund is provided in Mr. Gadoury's Ex. PG-5, where a mere five line items are  
12 provided and nearly all the proposed expense is for a single item – "New PW Cen-  
13 tral Operations Facility."

14

15 As shown on HJS-S9A, this restricted fund is proposed to have an ending balance  
16 in FY 2015 of \$4,607,230. Putting aside that nearly all of the proposed expendi-  
17 tures are for a somewhat nebulous project that has had no prior review, this \$4.6  
18 million balance is almost twice the projected annual expenses from this fund! Fur-  
19 ther, (according to the debt schedules provided in response to KCWA 2-4) all the  
20 annual debt service expenses paid from this account end in FY 2015 – some  
21 \$240,000 per year of debt service goes to \$0 in FY 2016.

22

1 The Capital Fund does not need a \$4.6 million cash balance going into FY 2016.

2 **Q: Has Providence Water demonstrated that this new building is needed?**

3 A: Absolutely not. The Kent County Water Authority is familiar with requests to the  
4 Commission for new facilities, having requested funding for a new facility in Docket  
5 3311. The basis for Kent County's request was a study performed by the same firm  
6 that performed the study for Providence Water – CDM (now CDM-Smith). In Dock-  
7 et 3311, the Kent County Water Authority submitted a detailed capital plan (that in-  
8 cluded the study recommending a new facility) along with prefiled testimony from  
9 the engineer that had performed the study. That study enumerated numerous rea-  
10 sons for the new facility for KCWA and provided a detailed estimate of the cost --  
11 \$4,612,500. Based on his review of detailed information on KCWA's proposed new  
12 facility that was supplied as part of KCWA's filing, Mr. Aberico Mancini offered tes-  
13 timony on behalf of the Division in that docket that recommended deferral of the  
14 new facilities. Considering the Division's position in Docket 3311, I am not sure how  
15 the Division could support a \$39 million expense in this docket where there is virtu-  
16 ally no supporting information provided by Providence Water.

17  
18 I have mentioned the Authority's request for new facilities in Docket 3311 because  
19 of the sharp contrast between the detailed information submitted by KCWA in sup-  
20 port of its request and the complete lack of information submitted by Providence in  
21 this docket. Mr. Spinelli, the General Manager, does not even mention the new fa-  
22 cility in his testimony. In 16 pages of testimony, Mr. Gadoury, the retired Director of

1 Engineering, does not mention the need for the new facility. The only indication that  
2 Providence was looking for funding for a new facility is buried on the last line of the  
3 last exhibit (PG-5) attached to Mr. Gadoury's testimony where it is indicated that  
4 \$12 million is proposed for "New PW Central Operations Facility." Were it not for  
5 the data requests in this docket we would have nothing more than that \$12 million  
6 on Exhibit PG-5.

7 **Q: Have you gathered any additional information on this proposed facility?**

8 A: Yes, through data requests KCWA 2-5 and KCWA 2-15 we have discovered a bit  
9 more information about this multi-million dollar proposal.

- 10 • "Providence Water has for some time recognized the need." (KCWA 2-5)
- 11 • Based on the memo to the Board attached to KCWA 2-15, Providence  
12 Water has known about this "need" since at least 2009, and in 2010 asked  
13 the Board for approval to "seek Division approval for long term debt to be  
14 used to acquire a central administration building."
- 15 • Apparently Providence Water has conducted several studies over several  
16 years on this matter (attachment to KCWA 2-15)
- 17 • "The most recent comprehensive study was completed by Camp Dresser  
18 & McKee (CDM)" in August 2009.
- 19 • Because the Fruit Hill Ave. bonds were paid for from the Capital Fund and  
20 they were paid off in 2009, Providence Water intended to just bury this  
21 new expenditure within prior authorized amounts intended for capital pro-  
22 jects that had been reviewed and approved by the Commission; however,

1 this was NOT one of those projects that received prior review and approv-  
2 al.

- 3 • The \$2,400,000 included in this filing was based on bonding the “high es-  
4 timated cost” of \$39,000,000 over 30 years at a 4.5% interest rate. (At-  
5 tachment to KCWA 2-15)
- 6 • Unlike KCWA that provided a full engineering report plus written and oral  
7 testimony from the engineer as part of its filing in Docket 3311, Providence  
8 Water has only provided two pages of an executive summary to a phase II  
9 report, and that was only provided after a data request.
- 10 • The two page executive summary provided by Providence Water presents  
11 five possible locations with the following range of costs (attachment  
12 KCWA 2-15)

<u>Site</u>	<u>Low Estim.</u>	<u>High Estim.</u>
Dike Street (T&D)	\$16,210,000	\$23,250,000
Gorham Site (Admin/T&D)	\$30,000,000	\$39,500,000
Cranston (Admin)	\$9,400,000	\$11,700,000
Cranston (T&D)	\$14,350,000	\$19,600,000
Nuetaconkaunut (T&D)	\$14,300,000	\$19,600,000

13  
14  
15  
16  
17  
18  
19  
20 **Q: What is your recommendation for funding of the Capital Fund?**

21 A: I am recommending that funding for the Capital Fund be reduced to \$0 in this dock-  
22 et. Providence Water has the obligation to demonstrate the need for various reve-  
23 nue requirements. In this case they have essentially provided no documentation to  
24 support an annual allowance of \$2,400,000 for an expenditure of more than



1 \$39,000,000. The Providence Water Board authorized a filing with the Division in  
2 2010 and this has yet to be made.

3 **Q: Are you recommending the elimination of the capital fund and all its projects?**

4 A: No I am not. I am only recommending that the Commission deny any additional  
5 funding for a new facility until Providence Water provides some documentation for  
6 this request that can be evaluated by the parties. As shown on my Schedule CW-  
7 S9A, there will be in excess of \$8,000,000 in the restricted capital fund at the end of  
8 FY 2015; that is far more than what is needed for the other capital projects.

9 **Q: You also mentioned that Providence Water has not included any allowance**  
10 **for the one-time increase in cash flow that would result from the change to**  
11 **monthly billing. Can you discuss this?**

12 A: Providence Water has proposed to increase its billing frequency from quarterly bill-  
13 ing to monthly billing. As noted in the response to KCWA 2-12, Providence Water  
14 agrees that there will be an increase in “cash flow” and has suggested that the addi-  
15 tional funds could be used to fund its operating cash.

16  
17 It really does not matter how this is termed – a one-time revenue increase or an im-  
18 proved cash flow – the point is that Providence Water will collect more revenues  
19 over a three month period as a result of the increased billing frequency. Over the  
20 first 12 months under monthly billing, Providence Water will bill and collect an addi-  
21 tional \$2.2 to \$2.7 million over what it would bill and collect under the current quar-

1 terly billing. This is a one-time increase in collections (or cash flow), and will only  
2 occur in the first year of the billing conversion. Nonetheless, this increase in cash  
3 should be accounted for and reflected in the development of the overall revenue re-  
4 quirements for Providence Water. As shown in the attachment to KCWA 2-12 Prov-  
5 idence Water has estimated that the accelerated billing will generate nearly \$2.2  
6 million at the current rates and in excess of \$2.7 million at the 25% increase in rates  
7 they have proposed.

8 **Q: What do you propose be done with this \$2 million plus increase in cash flow?**

9 A: In effect, it will provide additional operating revenue. Providence Water has re-  
10 quested a 3% operating reserve allowance (\$2,141,547), with 2% restricted for the  
11 rate stabilization account (\$1,427,698) and 1% unrestricted as an operating revenue  
12 allowance (\$713,849).

13  
14 Rather than grant a 3% operating revenue allowance (2% restricted/1% unrestrict-  
15 ed), I propose that the additional funds generated by the switch to monthly billing be  
16 reflected in the calculation of the operating revenue allowance in this docket. As-  
17 suming \$2,400,000 of additional revenues<sup>18</sup>, this amounts to \$800,000 per year if  
18 amortized over three years<sup>19</sup>. This \$800,000/year in combination with a 2% overall  
19 allowance will provide Providence Water with slightly more than the 3% overall al-  
20 lowance it has requested. As shown on my Schedule CW-S15, I have proposed

---

<sup>18</sup> Between the \$2.2 with no increase and the \$2.7 with an increase shown in the response to KCWA 2-12

<sup>19</sup> The same period I have proposed for amortizing rate case expenses.

1 splitting the 2% allowance so that 2/3 is restricted and 1/3 is unrestricted just as Mr.  
2 Smith did on his Schedule HJS-S15.

3 **Q: What is the effect of your recommendation?**

4 A: As shown on Schedule CW-S2, I am recommending a restricted stabilization depos-  
5 it of \$859,513 plus an unrestricted operating revenue allowance of \$429,757, for a  
6 total of \$1,289,270. This is 2% of the overall revenue requirements (net of miscel-  
7 laneous revenues). If I add the \$800,000 of one-time cash flow increase  
8 (\$2,400,000 over three years), this provides an overall (restricted plus unrestricted)  
9 allowance of about 3% -- the same as requested by Providence Water.

10 **Q: Do you agree with Providence Water's claim for \$387,693<sup>20</sup> of annual regulato-**  
11 **ry and rate case expenses?**

12 A: No I do not. The basis for this claim is included in Schedule HJS-S7. The \$387,693  
13 claim is made up of two parts: (1) \$233,622 of current rate case costs amortized  
14 over two years (\$116,811 per year), and (2) \$270,882 of pro forma or ongoing regu-  
15 latory costs.

16

17 I disagree with two elements of the claimed regulatory expenses: (1) the two year  
18 amortization period that was proposed for the current docket and (2) the amount of  
19 the pro forma or normal other regulatory expenses.

---

<sup>20</sup> Schedule HJS-S7 shows \$387,693 while HJS-S2 shows \$387,692.

1 **Q: Please discuss your disagreement with the two year amortization of the costs**  
2 **of the current docket.**

3 A: Prior to this filing on March 29, 2013, Providence Water filed rate case as follows:

- 4 • Docket 4061 filed 4/30/2009
- 5 • Docket 3832 filed 3/30/2007
- 6 • Docket 3684 filed 6/30/2005
- 7 • Docket 3446 filed 7/1/2002

8 This is the fourth rate case filed since Docket 3446. The average time between rate  
9 cases is nearly three years. I have proposed amortizing the cost of this case over  
10 three years rather than the two proposed by Providence Water.

11 **Q: What ongoing or pro forma regulatory expenses claimed by Providence Water**  
12 **do you disagree with?**

13 A: Providence Water has included just over \$40,000 of regulatory expenses that I be-  
14 lieve are not ongoing or annual or they are not appropriate for recovery in the pro-  
15 posed rates. These items include:

Docket 4061/Conservation Rate Filing	\$	8,593
Bond Filing/Bond Refunding		10,596
Regional Water District		9,609
Hydrant Fees		9,033
New Headquarters		2,171

16

17 The Docket 4061 rate filing was in April 2009, that cost will have been fully amor-  
18 tized well before the rate year.

19

1 There is no testimony regarding any new bond filing or bond refunding. In addition,  
2 these costs are typically recovered through the bonds proceeds as part of the issu-  
3 ance costs, so it would be inappropriate to recover them again in the rates. Further,  
4 Providence Water has also included \$6,500 for the “Bond Filing \$33 Million” that I  
5 have not excluded. This appears to be a classic example of double counting.

6  
7 Providence Water has included \$9,609 for the “Regional Water District”. Despite  
8 Providence Water’s protestations in the response to KCWA 2-14, there is no evi-  
9 dence in this case regarding the proposed legislation and there is certainly no testi-  
10 mony as to how it will benefit the rate payers. Section 46-32-6 of the proposed  
11 Ocean State Regional Water Authority Act (2013 – H 6099) only provides for one of  
12 nine board members to represent the wholesale customers while these customers  
13 use about half the total water. Section 46-32-10 (1) allows the Authority to “pur-  
14 chase, lease, or lease-purchase” assets; the payment(s) for these assets would  
15 presumably be to the City of Providence and have no benefit to any rate payers  
16 outside the City of Providence.

17  
18 The \$9,033 included for “Hydrant Fees” was an old case and is not recurring except  
19 as those fees are updated as part of a normal rate filing. Those fees are proposed  
20 to be updated in this docket and past costs for an older docket are not properly in-  
21 cluded as an ongoing regulatory expense.

1 Lastly, the \$2,171 of regulatory costs for the “New Headquarters” should be disal-  
2 lowed. The Board authorized the staff of Providence Water to obtain approval from  
3 the Division for the sale of bonds three years ago – to date nothing has been done.  
4 As discussed earlier, no costs should be allowed for this matter; no evidence has  
5 been provided<sup>21</sup> to support it.

6 **Q: What is your recommendation in regards to the regulatory expenses?**

7 A: I recommend that Providence Water provide the actual costs of this docket and that  
8 those costs be amortized over three years. For purposes of my schedules, I have  
9 accepted the current estimate from Providence Water for the “Full Rate Filing” (con-  
10 sultant expenses) and for Division expenses; however, I have reduced the estimat-  
11 ed legal expenses from \$73,632 proposed by Providence Water to \$65,000. Ac-  
12 cording to the response to KCWA 2-16, legal costs have been less than \$60,000  
13 over the past two dockets. I believe the increase to \$65,000 I have provided is  
14 more in line with those past legal amounts than the \$73,632 suggested by Provi-  
15 dence Water.

16  
17 In addition, I recommend that the claimed pro forma costs for the five items dis-  
18 cussed above be denied. In summary, I believe the following should be allowed  
19 (subject to an updating of the costs for the current docket):

---

<sup>21</sup> In response to this testimony, it can be expected that Providence may submit rebuttal testimony to try and support this venture. Any evidence regarding a \$39,000,000 facility should have been included in the direct filing and not surrebuttal testimony after the opportunity for full and meaningful discovery has passed.

1	Pro Forma (ongoing):	\$230,880
2	Current Docket (3 yr amort):	<u>\$74,997</u>
3	Total:	\$305,877

4 **Q: How does the \$305,877 you propose for regulatory expenses compare to**  
5 **Providence Water's past regulatory expenses?**

6 A: Based on their response to KCWA 2-13, Providence Water's cost for regulatory ex-  
7 penses has averaged \$264,822 over the past five years. My recommendation of  
8 \$305,877 is more than \$41,000 greater than their recent average and a 15% in-  
9 crease over their historic average.

10 **Q: Are there any other revenue requirement issues you would like to address?**

11 A: As I have indicated, I expect to have additional recommendations on the overall  
12 revenue requirement after I have reviewed the Division and other intervenor pre-  
13 filed direct testimony.

## 14 **Rate Design**

15 **Q: The final issue you mentioned regards rate design. Can you discuss this mat-**  
16 **ter?**

17 A: While KCWA is not directly impacted by the retail rate design and the adoption (or  
18 not) of the retail conservation rates that were provided in the filing, the proposed  
19 wholesale conservation rate structure would impact the Authority.

20

1 As Mr. Smith points out in his direct testimony, the intent of conservation rates is to  
2 send a price signal to customers to curtail discretionary uses. This price signal is  
3 sent through higher rates for those discretionary uses.

4  
5 To determine discretionary use, it is often helpful to examine changes in water use  
6 over the year. By examining the changes in use, one can see the variations from  
7 month to month, with the higher or peak uses in the summer typically being indica-  
8 tive of discretionary outdoor or irrigation uses.

9  
10 In response to Div 1-7, Providence Water provided “monthly” sales data from July  
11 2008 through March 2013 for the retail and wholesale accounts. It needs to be not-  
12 ed that the information for the wholesale accounts is understood to reflect real  
13 monthly use, while the data for the retail accounts is really quarterly billings, and not  
14 monthly use. In the response to KCWA 2-2, Providence Water notes that only  
15 0.12% of its retail accounts are actually billed monthly. As a result, we do not have  
16 real monthly use data for the retail accounts. Because the use data for retail ac-  
17 counts is really quarterly use, any true peak or maximum monthly demand data is  
18 masked.

19  
20 With that limitation understood, I looked at the ratio of actual “monthly” use to aver-  
21 age use for the retail customers. As expected, the residential customers typically  
22 had the highest uses in the September or October billings (presumably for use in  
23 the June – September period). This was typically true for the commercial retail ac-



1 counts as well. In many years, the ratio of peak to average use for commercial ac-  
2 counts was the same or even greater than the residential peak to average ratios.  
3 To me, this suggests that the commercial retail customers are just as likely to have  
4 high discretionary uses in the summer as the residential accounts. The industrial  
5 accounts had their peaks demands in August, and the ratio of their peak to average  
6 demand was not dissimilar to the ratios of the other classes. In fact, the highest ra-  
7 tio of peak to average use was the industrial class in August 2012. Based on this  
8 rather crude<sup>22</sup> analysis, I see no reason why only the residential class should be  
9 subject to a conservation rate. It seems that there is considerable discretionary use  
10 among the other retail classes as well.

11  
12 Looking at the wholesale customers, the structure of the rates being charged by  
13 Providence to the wholesale customers do not impact individual users where discre-  
14 tionary use can be targeted. As I noted above, the demands provided for the  
15 wholesale customers are real monthly demands; they are not dampened or modu-  
16 lated though quarterly billing. The maximum ratios for the wholesale customers are  
17 less than the retail classes and the minimum ratios are greater than those of the re-  
18 tail classes; the wholesale customers exhibit a better load or peak factor than do the  
19 retail customers.

---

<sup>22</sup> While admittedly crude, there was no analysis by Providence Water to support its claims

1 In short, there does not seem to be any support for Mr. Smith's claim (KCWA 2-3)  
2 that the "demands for wholesale customers have generally been comparable to  
3 those of the entire retail class." The maximum months are not as large for the  
4 wholesale class as they are for the retail class and the minimum months are not as  
5 low.

6 **Q: Doesn't the proposed conservation rate benefit your client, the Kent County**  
7 **Water Authority?**

8 A: Yes it does. As shown on HJS-S30, Kent County would be the biggest beneficiary  
9 of the conservation rates – they would see the biggest savings with no use at the  
10 proposed highest conservation rate.

11 **Q: Do you agree with the position of Providence Water regarding the adoption of**  
12 **conservation rates?**

13 A: I do not. First, I do not believe the evidence provided by Providence Water in this  
14 docket supports the adoption of a conservation rate for retail residential users and  
15 no conservation rate for the non-residential retail users. If anything, the evidence  
16 suggests that all retail customers should all be treated the same and they should all  
17 have a conservation rate imposed on their discretionary uses. I believe that that  
18 monthly use data that Providence Water will have after the adoption of monthly bill-  
19 ing will assist with the development of appropriate conservation rates for all of its re-  
20 tail customers.

21

1 Regarding the wholesale customers, I also do not believe it is appropriate to assess  
2 a conservation rate at this time. While Mr. Smith's proposal seems well conceived  
3 to capture the gross impact of wholesale discretionary uses, it is unclear how or if  
4 the wholesale customers could or would pass this "incentive" along to its customers.  
5 Further, it would make no sense to implement a wholesale conservation rate and no  
6 retail conservation rate where there is a direct impact on the end users.

7  
8 With some additional time and data I am confident that Mr. Smith can examine this  
9 issue in some greater detail to look at where the rate blocks should be set, he can  
10 examine methods whereby incentives to reduce discretionary use by non-residential  
11 retail customers can be provided, and he can get input from the wholesale custom-  
12 ers as to how wholesale incentives can be derived and passed on to their retail cus-  
13 tomers.

14  
15 The conservation alternative that has been put forth by Providence Water is a good  
16 initial step; however, I agree with them that this is not the time.

## 17 **Exhibits**

18 **Q: Did you prepare an exhibit that presents your recommendation on revenues**  
19 **requirements and rates?**

20 A: Yes. I have used the spreadsheet that was provided by Mr. Smith to maintain con-  
21 sistency. I have re-labeled his schedules as "CW-S##" to identify the schedules I  
22 prepared. In addition, I have tried to highlight the cells I have modified in yellow so

1 they can be more easily identified; however, a change in one cell will impact many  
2 others.

3

4 On the attached set of schedules I have included a number of portions of the  
5 spreadsheet that were not provided in the initial filing but are relevant because they  
6 contain back-up information. As has been the custom in these cases, I have also  
7 provided electronic copies of my updated spreadsheet to the other experts --  
8 Messrs. Smith, Catlin, Mierzwa, and Russell. I will gladly provide copies to any oth-  
9 er party that asks as well.

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

11 A: As I have indicated, I would like to review any adjustments proposed by the other  
12 parties and outstanding data requests, and perhaps include some of them in my  
13 calculations. At the time I completed the preparation of this testimony there were a  
14 number of data requests that were still outstanding. New information included in the  
15 responses to these data requests may necessitate further revisions.

**Schedule CW-S1  
Cost of Service Summary**

	Adjusted Test Year	Combined Adjustments	Pro-Forma Old Rates	Additional Revenue Generated	Pro-Forma New Rates
<b>Revenue</b>					
Service Charge	\$ 5,779,434	\$ -	\$ 5,779,434	\$ 1,686,450	\$ 7,465,884
Retail Sales	\$ 32,253,695	\$ -	\$ 32,253,695	\$ 4,279,500	\$ 36,533,195
Wholesale Sales	\$ 16,569,289	\$ -	\$ 16,569,289	\$ (662,895)	\$ 15,906,394
Private Fire Protection	\$ 2,290,098	\$ -	\$ 2,290,098	\$ 338,145	\$ 2,628,243
Retail FPSC	\$ 1,095,131	\$ -	\$ 1,095,131	\$ 626,779	\$ 1,721,910
Public Fire Protection	\$ 960,983	\$ -	\$ 960,983	\$ 546,689	\$ 1,507,672
Miscellaneous Revenue	\$ 1,179,169	\$ -	\$ 1,179,169	\$ -	\$ 1,179,169
Other	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL REVENUE</b>	<b>\$ 60,127,799</b>	<b>\$ -</b>	<b>\$ 60,127,799</b>	<b>\$ 6,814,668</b>	<b>\$ 66,942,467</b>
Total Rate Revenues	\$ 58,948,630	\$ -	\$ 58,948,630	\$ 6,814,668	\$ 65,763,298
<b>Expenses</b>					
Operations and Maintenance	\$ 27,871,725	\$ 2,011,535	\$ 29,883,260	\$ -	\$ 29,883,260
Insurance	\$ 1,959,648	\$ 124,943	\$ 2,084,590	\$ -	\$ 2,084,590
Chemical & Sludge	\$ 3,124,965	\$ 2,333,977	\$ 5,458,942	\$ -	\$ 5,458,942
City Service	\$ 839,167	\$ -	\$ 839,167	\$ -	\$ 839,167
Property Taxes	\$ 5,945,492	\$ 603,519	\$ 6,549,011	\$ -	\$ 6,549,011
Capital Reimbursement	\$ (834,389)	\$ -	\$ (834,389)	\$ -	\$ (834,389)
Net Operations	\$ 38,906,608	\$ 5,073,973	\$ 43,980,581	\$ -	\$ 43,980,581
Capital Fund	\$ 2,450,000	\$ (2,450,000)	\$ -	\$ -	\$ -
Western Cranston	\$ 62,069	\$ -	\$ 62,069	\$ -	\$ 62,069
Infrastructure Replacement Fund	\$ 16,000,000	\$ 4,000,000	\$ 20,000,000	\$ -	\$ 20,000,000
Cash-Funded AMR/Meter Repl. Fund	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000
Equipment Replacment Fund	\$ 600,000	\$ -	\$ 600,000	\$ -	\$ 600,000
Property Tax Refund Fund	\$ -	\$ -	\$ -	\$ -	\$ -
Stabilization Fund (Restricted)	\$ 1,113,852	\$ (254,339)	\$ 859,513	\$ -	\$ 859,513
Capital	\$ 21,225,921	\$ 1,295,661	\$ 22,521,582	\$ -	\$ 22,521,582
<b>TOTAL EXPENSES</b>	<b>\$ 60,132,529</b>	<b>\$ 6,369,634</b>	<b>\$ 66,502,163</b>	<b>\$ -</b>	<b>\$ 66,502,163</b>
Operating Reserve (Unrestricted)	\$ 578,395	\$ -	\$ 429,757	\$ -	\$ 429,757
<b>Revenues Over (Under) Expenses</b>	<b>\$ (583,125)</b>	<b>\$ -</b>	<b>\$ (6,804,121)</b>	<b>\$ -</b>	<b>\$ 10,548</b>
Total Increase to Break-Even			\$ 10,548		11.32%
<b>Rate Revenue Increase to Break-Even</b>					<b>11.54%</b>

**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Source of Supply</b>						
60110	Salaries + Wages - Emp	\$ 619,326	A	\$ 28,148	\$ -	\$ 647,474
60120	Salaries + Wages - Emp	448,278	A	20,374	-	468,652
60320	Sal. + Wages - Officers, Dir	-		-	-	-
60410	Employee Pension + Ben	168,591	D	2,938	-	171,529
60420	Employee Pension + Ben	188,577	D	3,287	-	191,864
61510	Purchase Power	-		-	-	-
61610	Fuel for Power Purch	-		-	-	-
62010	Material + Supplies	18,958	I	1,209	-	20,167
62020	Material + Supplies	73,286	I	4,673	-	77,959
63110	Contractual Services - Engineer	2,460	I	157	-	2,617
63120	Contractual Services - Engineer	-		-	-	-
63310	Contract Services -Legal	18,238	I	1,163	-	19,401
63420	Contractual Services - Mgt. Fees	-		-	-	-
63510	Contractual Services - Other	419,915	I	26,773	-	446,687
63520	Contractual Services - Other	31,771	I	2,026	-	33,797
64210	Rental of Equipment	-		-	-	-
64220	Rental of Equipment	-		-	-	-
65010	Transportation Exp.	146	I	9	-	155
65020	Transportation Exp.	-		-	-	-
67510	Misc. Expenses	69,132	I	4,408	-	73,540
67520	Misc. Expenses	4,550	I	290	-	4,840
	<i>Total Source of Supply Expense</i>	<u>\$ 2,063,227</u>		<u>\$ 95,454</u>	<u>\$ -</u>	<u>\$ 2,158,681</u>
	<b>Check</b>	<b>\$ -</b>				

**Schedule CW-S2**  
**Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Pumping Expenses</b>						
60123	Salaries + Wages - Emp	\$ -		\$ -	\$ -	\$ -
60126	Salaries + Wages - Emp	-		-	-	-
60423	Employee Pension + Ben	-		-	-	-
60426	Employee Pension + Ben	-		-	-	-
61523	Purchase Power	778,684	I	-	-	778,684
61623	Fuel for Power Purch	-		-	-	-
62023	Material + Supplies	-		-	-	-
62026	Material + Supplies	-		-	-	-
63123	Contractual Services - Engineer	-		-	-	-
63126	Contractual Services - Engineer	-		-	-	-
63523	Contractual Services - Other	11,629	I	741	-	12,370
63526	Contractual Services - Other	-		-	-	-
64223	Rental of Equipment	-		-	-	-
64226	Rental of Equipment	-		-	-	-
65023	Transportation Exp.	-		-	-	-
67523	Misc. Expenses	-		-	-	-
67526	Misc. Expenses	-		-	-	-
	<i>Total Pumping Expenses</i>	<u>\$ 790,313</u>		<u>\$ 741</u>	<u>\$ -</u>	<u>\$ 791,054</u>
	<b>Check</b>	-				

**Schedule CW-S2**  
**Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Water Treatment Expenses</b>						
60130	Salaries + Wages - Emp	\$ 2,061,389	A	\$ 93,690	\$ -	\$ 2,155,079
60140	Salaries + Wages - Emp	336,221	A	15,281	-	351,502
60430	Employee Pension + Ben	606,264	D	10,567	-	616,830
60440	Employee Pension + Ben	134,901	D	2,351	-	137,253
61530	Purchase Power	226,424	I	-	-	226,424
61630	Fuel for Power Purch	230,829	I	14,717	-	245,547
61830	Chemicals	-		-	-	-
62030	Material + Supplies	124,833	I	7,959	-	132,792
62040	Material + Supplies	67,060	I	4,276	-	71,336
63130	Contractual Services - Engineer	-		-	-	-
63240	Contract Services - Acctg	-		-	-	-
63430	Contractual Services - Mgt. Fees	-		-	-	-
63530	Contractual Services - Other	141,797	I	9,041	-	150,838
63540	Contractual Services - Other	85,680	I	5,463	-	91,143
64140	Rental Buildg/Real Prop	-		-	-	-
64230	Rental of Equipment	-		-	-	-
64240	Rental of Equipment	-		-	-	-
65030	Transportation Exp.	5,806	I	370	-	6,176
65640	Insurance Vehicle	-		-	-	-
65830	Insurance - W/C	-		-	-	-
65840	Insurance - W/C	-		-	-	-
66730	Regularoty Com Exp. -Other	-		-	-	-
67530	Misc. Expenses	96,719	I	6,167	-	102,885
67540	Misc. Expenses	2,027	I	129	-	2,156
	<i>Total Treatment Expense</i>	<u>\$ 4,119,951</u>		<u>\$ 170,010</u>	<u>\$ -</u>	<u>\$ 4,289,961</u>
	<b>Check</b>	-				



**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements  
Rate Year Ending December 31, 2014**

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Transmission + Dist. Expense:</b>						
60150	Salaries + Wages - Emp	\$ 988,520	A,U	\$ 44,928	\$ 85,030	\$ 1,118,479
60160	Salaries + Wages - Emp	2,246,239	A	102,092	-	2,348,330
60250	Payroll Clearing -Emp	-	A	-	-	-
60260	Payroll Clearing -Emp	-		-	-	-
60450	Employee Pension + Ben	241,316	D, U	4,206	42,515	288,037
60460	Employee Pension + Ben	846,629	D	14,756	-	861,385
60550	Overhead Rate Applied	-		-	-	-
60560	Overhead Rate Applied	-		-	-	-
61550	Purchase Power	12,019	I	-	-	12,019
62050	Material + Supplies	269,822	I	17,203	-	287,025
62060	Material + Supplies	-		-	-	-
62560	Inventory Clearing	-		-	-	-
63150	Contractual Services - Engineer	36,120	I, U	2,303	290,000	328,423
63350	Contractual Services - Legal T&D	-		-	-	-
63460	Contractual Services - Mgt. Fees	-		-	-	-
63550	Contractual Services - Other	453,727	I	28,929	-	482,656
63560	Contractual Services - Other	65,018	I	4,145	-	69,164
64150	Rental Buildg/Real Prop	-		-	-	-
64160	Rental Buildg/Real Prop	-		-	-	-
64250	Rental of Equipment	-		-	-	-
64260	Rental of Equipment	-		-	-	-
65050	Transportation Exp. T&D	2,748	I	175	-	2,923
66750	Regulatory Com Exp - Other T & D	-		-	-	-
66760	Regulatory Com Exp - Other T & D	-		-	-	-
67550	Misc. Expenses	37,994	I	2,422	-	40,416
67560	Misc. Expenses	-		-	-	-
	<i>Total Transmission &amp; Distribution</i>	<u>\$ 5,200,152</u>		<u>\$ 221,159</u>	<u>\$ 417,545</u>	<u>\$ 5,838,857</u>
	<b>Check</b>	-				

**Schedule CW-S2**  
**Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Customer Accounts Expense:</b>						
60170	Salaries + Wages - Emp	\$ 1,916,813	A,M	\$ 87,119	42,452	\$ 2,046,384
60270	Payroll Clearing -Emp	-		-	0	-
60470	Employee Pension + Ben	721,692	D,M	12,578	21,226	755,496
60570	Overhead Rate Applied	-		-	0	-
61670	Fuel for Power Purch	-		-	-	-
62070	Material + Supplies	2,467	I	157	-	2,624
63370	Contractual Services - Legal	-		-	-	-
63570	Contractual Services - Other	10,979	I	700	-	11,679
65070	Transportation Exp. -CAO	1,012	I	65	-	1,077
65870	Insurance - Other	-		-	-	-
65970	Insurance Other	-		-	-	-
67070	Bad Debt Expense - CAO	445,333	I	28,393	-	473,727
67570	Misc. Expenses	194,180	I, M	12,381	319,015	525,576
	<i>Total Customer Accounts</i>	<u>\$ 3,292,477</u>		<u>\$ 141,393</u>	<u>\$ 382,693</u>	<u>\$ 3,816,563</u>
	<b>Check</b>	-				

**Schedule CW-S2**  
**Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>Administrative and General</b>						
60180	Salaries + Wages - Emp	\$ 5,499,360	A	\$ 249,946	\$ -	\$ 5,749,306
60280	Payroll Clearing -Emp	-		-	-	-
60380	Salaries + wages - Officers, Dir.	-	A	-	-	-
60480	Employee Pension + Ben	4,605,608	D	80,271	-	4,685,879
60580	Overhead Rate Applied	-		-	-	-
61580	Purchase Power	113,972		-	-	113,972
61680	Fuel for Power Purch	-		-	-	-
62080	Material + Supplies	515,672		32,878	-	548,550
63180	Contractual Services - Engineer	45,262		2,886	-	48,148
63280	Contract Services - Acctg	-		-	-	-
63380	Contractual Services - Legal	50,841		3,242	-	54,083
63480	Contractual Services - Mgt. Fees	-		-	-	-
63580	Contractual Services - Other	982,614	I, M	62,649	49,000	1,094,263
64180	Rental Buildg/Real Prop	-		-	-	-
64280	Rental of Equipment	-		-	-	-
65080	Transportation Exp.	6,390		407	-	6,797
65780	Ins. Gen. Liability	-		-	-	-
65880	Insurance - W/C	-		-	-	-
65980	Insurance Other	-		-	-	-
66080	Advertising Expense	-		-	-	-
66680	Reg Com Exp - Amort of Rate Case	-		-	-	-
66780	Regulatory Com Exp. -Other	227,469	E	78,407	-	305,876
67580	Misc. Expenses	358,418	I	22,852	-	381,270
	<i>Total Administration + General</i>	\$ 12,405,606		\$ 533,538	\$ 49,000	\$ 12,988,144
	<b>Check</b>	\$ -				

**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements  
Rate Year Ending December 31, 2014**

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
	<b>Total Operation &amp; Maintenance</b>	\$ 27,871,725		\$ 1,162,297	\$ 849,238	\$ 29,883,260
<b>Source of Supply</b>		\$ 2,063,227		\$ 95,454	\$ -	\$ 2,158,681
<b>Pumping</b>		790,313		741	-	791,054
<b>Treatment</b>		4,119,951		170,010	-	4,289,961
<b>Transmission &amp; Distrib.</b>		5,200,152		221,159	417,545	5,838,857
<b>Customer Accounts</b>		3,292,477		141,393	382,693	3,816,563
<b>Administration &amp; General</b>		12,405,606		533,538	49,000	12,988,144
	<i>Total Operation &amp; Maintenance</i>	\$ 27,871,725		\$ 1,162,297	\$ 849,238	\$ 29,883,260
<b>Full O&amp;M</b>		\$ 27,871,725		\$ 1,162,297	\$ 849,238	\$ 29,883,260
<b>857 Insurance Fund</b>						
	65840 Insurance W/C - WTM	\$ -		\$ -	\$ -	\$ -
	65870 Insurance W/C - CAO	-		-	-	-
	62080 Materials + Supplies - A&GO	17,602	C	1,122	-	18,724
	63180 Contractual Services-Engineer	-		-	-	-
	63380 Contract Services - Legal A&GO	-	C	-	-	-
	63580 Contract Services - Other A&GO	-		-	-	-
	Injuries and Damages	54,528	C	3,477	-	58,005
	65780 Ins. Gen. Liability	-		-	-	-
	65980 Insurance-Other A&GO	1,006,353	C	64,163	-	1,070,516
	65880 Insurance - W/C	874,015	C	55,725	-	929,740
	67070 Bad Debt Expense-CAO	-		-	-	-
	67580 Misc. Expense	7,150	C	456	-	7,606
	Funding Requirement	-		-	-	-
	<i>Total Insurance Fund</i>	\$ 1,959,648		\$ 124,943	\$ -	\$ 2,084,590
	Check	-		-	-	-

**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
<b>878 Chemical and Sludge Maintenance Fund</b>						
61830	Chemicals - WTO	\$ 2,572,273	F	\$ 501,607	\$ -	\$ 3,073,881
62030	Materials + Supplies WTO	-		-	-	-
62050	Materials + Supplies T&DO	-		-	-	-
63540	Contract Services - Other WTM	552,692	F	1,147,308	-	1,700,000
	Funding Requirement		F	685,061		685,061
<i>Total Chemical and Sludge Maintenance Fund</i>		<u>\$ 3,124,965</u>		<u>\$ 2,333,977</u>	<u>\$ -</u>	<u>\$ 5,458,942</u>
	Check	\$ -				
<b>Total O&amp;M</b>		<b>\$ 32,956,338</b>		<b>\$ 3,621,216</b>	<b>\$ 849,238</b>	<b>\$ 37,426,792</b>
<b>Property Taxes- Other Local Govern.</b>						
40820	Town of North Providence	\$ 266,581	B	\$ 6,919	\$ -	\$ 273,500
40821	Town of Glocester	51,478	B	5,315	-	56,793
40822	Town of West. Glocester	3,708	B	75	-	3,782
40823	Town Harmony	164	B	10	-	174
40824	Town Chepachet	131	B	10	-	141
40825	Town Scituate	5,087,357	B	590,090	-	5,677,446
40826	Town Warwick	-	B	-	-	-
40827	Town of Johnston	90,117	B	6,688	-	96,805
40828	Town of Foster	331,673	B	(17,614)	-	314,059
40829	City of Cranston	110,523	B	12,032	-	122,555
40830	City of West. Warwick	3,761	B	(5)	-	3,756
Total Property Taxes		<u>\$ 5,945,492</u>		<u>\$ 603,519</u>	<u>\$ -</u>	<u>\$ 6,549,011</u>

**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements  
Rate Year Ending December 31, 2014**

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
	<i>Other Expenditures</i>					
	City Services	\$ 839,167		\$ -	\$ -	\$ 839,167
	Total Property Taxes	5,945,492		603,519	-	6,549,011
	Capital Reimbursement	(798,115)		(36,274)	-	(834,389)
	<i>Total Other Expenditures</i>	<u>\$ 5,986,544</u>		<u>\$ 567,244</u>	<u>\$ -</u>	<u>\$ 6,553,789</u>
	Capital Fund	\$ 2,450,000	G	\$ (2,450,000)	\$ -	\$ -
	Western Cranston Fund (WCWDS Fund)	62,069	G	-	-	62,069
	Infrastructure Replacement Fund	16,000,000	G	4,000,000	-	20,000,000
	AMR/Meter Replacement Fund	1,000,000	G	-	-	1,000,000
	Equipment/Vehicle Replacement Fund	600,000	G	-	-	600,000
	Stabiliz. Fund (Rest. Operat. Reserve)	1,113,852	G	(\$254,339)	-	859,513
	<i>Total Restricted Expenditures</i>	<u>\$ 21,225,921</u>		<u>\$ 1,295,661</u>	<u>\$ -</u>	<u>\$ 22,521,582</u>
	<b>Total Other &amp; Rest. Expenditures</b>	<u>\$ 27,212,465</u>		<u>\$ 1,862,905</u>	<u>\$ -</u>	<u>\$ 29,075,371</u>
	<b>Total</b>	<u>\$ 60,168,803</u>		<u>\$ 5,484,122</u>	<u>\$ 849,238</u>	<u>\$ 66,502,163</u>
	Unrestricted Operating Reserve		R			<u>\$ 429,757</u>
	<b>Grand Total</b>					<u>\$ 66,931,919</u>

**Schedule CW-S2  
Raw Revenue Requirements**

**Raw Revenue Requirements**  
Rate Year Ending December 31, 2014

ACCOUNT	TITLE	Adjusted Test Year	Note	Rate Year Adjustments	Additional Adjustments	Proforma Rate Year
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**Explanation of Notes:**

A	Schedule CW-S3	Payroll Expense Adjustment				
B	Schedule CW-S4	Property Tax Analysis				
C	Schedule CW-S5	Insurance Expense Adjustment				
D	Schedule CW-S6	Pension and Other Benefits				
E	Schedule CW-S7	Regulatory Commission and Rate Case Expense				
F	Schedule CW-S8	Chemical and Sludge Maintenance Expense				
G	Schedule CW-S9	Restricted Fund Adjustments				
U	Additional costs associated with Uni-directional flushing Project					
M	Adjustments associated with switching to monthly billing					
R	Does not include additional \$800,000/yr (estim) from increased cash flow with conversion to monthly billing					
I	Annual Inflation Adjustment			2.50%		
	Total Test Year to Rate Year Inflation Adjustment			6.38%		

Schedule CW-S3  
Payroll Expense Adjustment

PROVIDENCE WATER  
Salaries & Wages

Actual Payroll Expense FY 2012	\$	13,314,287
Normalizing adjustments		801,859
Adjusted Test Year	\$	<u>14,116,146</u>
Contractual Increase *		<u>1.04545</u>
Pro-forma amount	\$	14,757,724
Adjustment	\$	<u>641,579</u>
%		<u>4.55%</u>

\* Source: Union Contract Article VI

3% Increase on July 1, 2013 Per Union Contract

3% Increase on July 1, 2014 Per Union Contract

\*2014 Increase occurs six months into CY 14 and is therefore an effective increase of 1.5% for the 2014 Rate Year.



Schedule CW-S3A  
Detail Payroll Expense

PROVIDENCE WATER SUPPLY BOARD  
Detail Payroll Expense

ACCOUNT DESCRIPTION	Test Year	Normalize Test Year	Adjusted Test Year	Actual x 1.0455*	Pro-Forma Adjustment
<b>SOURCE OF SUPPLY</b>					
60110 Salaries & Wages - Emp	\$ 581,072	\$ 38,254	\$ 619,326	\$ 647,474	\$ 28,148
60120 Salaries & Wages - Emp	\$ 420,589	27,689	448,278	468,652	20,374
60320 Sal & Wages - Officers, Dir	-	-	-	-	-
<b>TOTAL SOURCE OF SUPPLY</b>	<b>1,001,661</b>	<b>65,943</b>	<b>1,067,604</b>	<b>1,116,126</b>	<b>48,523</b>
<b>PUMPING</b>					
60123 Salaries & Wages - Emp	-	-	-	-	-
60126 Salaries & Wages - Emp	-	-	-	-	-
<b>TOTAL PUMPING</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>WATER TREATMENT</b>					
60130 Salaries & Wages - Emp	1,934,063	127,326	2,061,389	2,155,079	93,690
60140 Salaries & Wages - Emp	315,454	20,767	336,221	351,502	15,281
<b>TOTAL WATER TREATMENT</b>	<b>2,249,517</b>	<b>148,093</b>	<b>2,397,610</b>	<b>2,506,581</b>	<b>108,971</b>
<b>TRANSMISSION &amp; DISTRIBUTION</b>					
60150 Salaries & Wages - Emp	927,462	\$ 61,058	988,520	1,033,449	44,928
60160 Salaries & Wages - Emp	2,107,495	138,744	2,246,239	2,348,330	102,092
60250 Payroll Clearing	-	-	-	-	-
60260 Payroll Clearing	-	-	-	-	-
<b>TOTAL TRANSMISSION &amp; DISTRIBUTION</b>	<b>3,034,957</b>	<b>199,802</b>	<b>3,234,759</b>	<b>3,381,779</b>	<b>147,020</b>
<b>CUSTOMER ACCOUNT EXPENSE</b>					
60170 Salaries & Wages - Emp	1,798,417	\$ 118,396	1,916,813	2,003,932	87,119
60270 Payroll Clearing	-	-	-	-	-
<b>TOTAL CUSTOMER ACCTS EXPENSE</b>	<b>1,798,417</b>	<b>118,396</b>	<b>1,916,813</b>	<b>2,003,932</b>	<b>87,119</b>
<b>ADMINISTRATION</b>					
60180 Salaries & Wages - Emp	5,229,735	269,625	5,499,360	5,749,306	249,946
60280 Payroll Clearing	-	-	-	-	-
60380 Sal & Wages - Officers, Dir	-	-	-	-	-
<b>TOTAL ADMINISTRATION EXPENSE</b>	<b>5,229,735</b>	<b>269,625</b>	<b>5,499,360</b>	<b>5,749,306</b>	<b>249,946</b>
<b>O/M LABOR SUMMARY</b>					
SOURCE OF SUPPLY	1,001,661	65,943	1,067,604	1,116,126	48,523
PUMPING	-	-	-	-	-
WATER TREATMENT	2,249,517	148,093	2,397,610	2,506,581	108,971
TRANSMISSION & DISTRIBUTION	3,034,957	199,802	3,234,759	3,381,779	147,020
CUSTOMER ACCOUNTS	1,798,417	118,396	1,916,813	2,003,932	87,119
ADMINISTRATION	5,229,735	269,625	5,499,360	5,749,306	249,946
<b>TOTAL</b>	<b>\$ 13,314,287</b>	<b>\$ 801,859</b>	<b>\$ 14,116,146</b>	<b>\$ 14,757,724</b>	<b>641,579</b>
<b>RECAP:</b>					
Test Year					\$ 13,314,287
Normalizing Adjustments					\$ 801,859
Adjusted Test Year					\$ 14,116,146
Contractual increases					\$ 641,579
<b>Pro-forma CY 2014</b>					<b>\$ 14,757,724</b>

3% Increase on July 1, 2013 Per Union Contract  
 3% Increase on July 1, 2014 Per Union Contract  
 2014 Increase occurs six months into CY 14 and is therefore an effective increase of 1.5% for the 2014 Rate Year.

**Schedule CW-S4  
Property Tax Analysis**

**PROVIDENCE WATER  
Analysis of Property Taxes**

<u>Municipality</u>	<u>FYE 6/30/2012 Test Year</u>	<u>Adjustments</u>	<u>Note</u>	<u>Pro-forma Amount *</u>
North Providence	\$ 266,581	\$ 6,919		\$ 273,500
*Glocester	\$ 51,478	\$ 5,315		\$ 56,793
West Glocester Fire	\$ 3,708	\$ 75		\$ 3,782
Harmony Fire District	\$ 164	\$ 10		\$ 174
Chepachet Fire District	\$ 131	\$ 10		\$ 141
*Scituate	\$ 5,087,357	\$ 590,090		\$ 5,677,446
Warwick	\$ -	\$ -		\$ -
Johnston	\$ 90,117	\$ 6,688		\$ 96,805
Foster	\$ 331,673	\$ (17,614)		\$ 314,059
Cranston	\$ 110,523	\$ 12,032		\$ 122,555
West Warwick	\$ 3,761	\$ (5)		\$ 3,756
Total Expense	\$ 5,945,492	\$ 591,191		\$ 6,549,011
Test Year			\$	5,945,492
Total Adjustment %			\$	603,519 10.15%

Adjustments reflect bills for FY 2014 (per Div 4-7) with additional 2% for 1/2 year

All other amounts are increased by the 4% statutory maximum and averaged to obtain CY 2014 pro forma expense

\*Glocester amount per tax treaty, Scituate amount calculated per Tax Treaty. To be adjusted to actual

**Schedule CW-S4A  
Property Tax Detail**

**PROVIDENCE WATER  
COMPARATIVE SCHEDULE OF PROPERTY TAXES**

Municipality	FISCAL YEAR 2010	FISCAL YEAR 2011	FISCAL YEAR 2012	FISCAL YEAR 2013	FISCAL YEAR 2014	FISCAL YEAR 2015	CY 2014 Average
North Providence	\$ 238,053	\$ 239,090	\$ 266,581	\$ 266,581	\$ 277,244	\$ 288,334	\$ 282,789
*Glocester	\$ 53,363	\$ 49,380	\$ 51,478	\$ 53,537	\$ 55,679	\$ 57,906	\$ 56,793
West Glocester Fire	\$ 3,932	\$ 3,932	\$ 3,708	\$ 3,708	\$ 3,856	\$ 4,010	\$ 3,933
Harmony Fire District	\$ 155	\$ 155	\$ 164	\$ 164	\$ 171	\$ 177	\$ 174
Chepachet Fire District	\$ 120	\$ 120	\$ 131	\$ 133	\$ 138	\$ 144	\$ 141
*Scituate	\$ 5,572,995	\$ 4,974,437	\$ 5,087,357	\$ 5,087,357	\$ 5,731,246	\$ 5,960,495	\$ 5,845,871
Warwick	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Johnston	\$ 88,777	\$ 86,695	\$ 90,117	\$ 90,117	\$ 93,722	\$ 97,471	\$ 95,596
Foster	\$ 322,994	\$ 331,673	\$ 331,673	\$ 306,694	\$ 318,962	\$ 331,720	\$ 325,341
Cranston	\$ 105,624	\$ 107,568	\$ 110,523	\$ 118,597	\$ 123,341	\$ 128,274	\$ 125,807
West Warwick	\$ 4,714	\$ 3,761	\$ 3,761	\$ 3,761	\$ 3,912	\$ 4,068	\$ 3,990
<b>Total</b>	<b>\$ 6,390,727</b>	<b>\$ 5,796,811</b>	<b>\$ 5,945,492</b>	<b>\$ 5,930,648</b>	<b>\$ 6,608,270</b>	<b>\$ 6,872,599</b>	<b>\$ 6,740,435</b>
% Change		-9.29%	2.56%	-0.25%	11.43%	4.00%	-1.92%
% Change (No Scituate or Glocester)		1.13%	4.35%	-2.10%	4.00%	4.00%	-1.92%

All other amounts are increased by the 4% statutory maximum and averaged to obtain CY 2014 pro forma expense

\*Glocester amount per tax treaty, Scituate amount calculated per Tax Treaty

**Schedule CW-S5  
Insurance Expense Adjustment**

	<u>Test Year</u>	<u>Adjustments</u>	<u>Pro-Forma Amount *</u>
Worker's Compensation	\$ 874,015	\$ 55,725	\$ 929,740
Contract Services - Legal A&GO*	\$ -		\$ -
Injuries and Damages	\$ 54,528	\$ 3,477	\$ 58,005
Property and Casualty	\$ 1,006,353	\$ 64,163	\$ 1,070,516
Program Expense	\$ 7,150	\$ 456	\$ 7,606
Safety Supplies & Other	\$ 17,602	\$ 1,122	\$ 18,724
Total Expenses	<u>\$ 1,959,648</u>	<u>\$ 124,943</u>	<u>\$ 2,084,590</u>
Test Year			\$ 1,959,648
Pro-Forma			<u>\$ 2,084,590</u>
Adjustment			\$ 124,943
Inflation Adjustment	6.38%		

Schedule CW-S6  
Pension and Other Benefits

**PROVIDENCE WATER**  
**Pension and Other Benefits**

FRINGE BENEFIT	Notes	Test Year FY 2012	Adjustment	Pro-Forma Amount	% Increase	Reference
1 1033 Union Combined Benefits	3)	\$ 586,821	\$ 24,845	\$ 611,666	4.23%	Per Union Contract
2 Union Pension	4)	331,312	136,542	467,854	41.21%	Per Union Contract
3 Death Benefit Insurance	2)	1,943	124	2,067	6.38%	Adjusted By Inflation
4 Educational Classes/Certification	2)	2,649	169	2,818	6.38%	Adjusted By Inflation
4 FICA	1)	1,014,048	46,139	1,060,187	4.55%	Salary Increase Used
5 State Unemployment Compensation	1)	14,716	670	15,386	4.55%	Salary Increase Used
6 Healthcare EE Cash Payment	2)	9,500	606	10,106	6.38%	Adjusted By Inflation
7 1/2% Wage Assignment	1)	35,820.00	1,630	37,450	4.55%	Salary Increase Used
8 Blue Cross		2,072,201	207,220	2,279,421	10.00%	Estimate
Less Employee Co-Share		(355,216)	(35,522)	(390,738)	10.00%	Estimate
9 Delta Dental		254,556	25,456	280,012	10.00%	Estimate
10 GASB 43/45 Reserve Required		1,230,000	(750,000)	480,000		OPEB Report
11 City Retirement		2,315,228	473,076	2,788,304		Buck Report
Total		\$ 7,513,577.79	\$ 130,954	\$ 7,644,532		
				\$ 7,513,578		
<b>Adjustment</b>				<b>\$ 130,954</b>		

Notes:

- 1) Compounded salary increase used 4.55% 4.55%
- 2) Adjusted by inflation rate of: 6.38%
- 3) 1033 Benefits, per union contracts  
compounded increase used 4.23%
- 4) Union Pension, per Union Contracts  
compounded increase used 41.21%

Schedule CW-S6A

Fringe Allocation to NARUC Accounts

**PROVIDENCE WATER**  
**Fringe Allocation to Naruc Accounts**

Naruc Account	Test Year FY 2012	Allocation	Pro-forma Adjustment
60410	\$ 168,591	2.24%	\$ 2,938
60420	188,577	2.51%	3,287
60423	-	0.00%	-
60426	-	0.00%	-
60430	606,264	8.07%	10,567
60440	134,901	1.80%	2,351
60450	241,316	3.21%	4,206
60460	846,629	11.27%	14,756
60470	721,692	9.61%	12,578
60480	4,605,608	61.30%	80,271
	<hr/>	<hr/>	<hr/>
	\$ 7,513,578	100.00%	\$ 130,954

7,513,577.00

**Schedule CW-S7  
Regulatory Commission and Rate Case Expense**

**PROVIDENCE WATER  
Regulatory Commission and Rate Case Expense**

	<u>Test Year</u>	<u>Pro-Forma</u>
<b>Regulatory Commission Expense:</b>		
Docket 4061/Conservation Rate Filing	\$ 8,527	\$ -
Bond Filing/Bond Refunding	10,091	-
Bond Filing \$33 Million	-	6,500
Regional Water District	9,151	-
Hydrant Fees	8,603	-
New Headquarters	2,068	-
Miscellaneous Legal Matters	9,204	9,665
Miscellaneous PUC Matters	11,834	12,426
Proportionate Share PUC Expenses*	167,992	202,289
		-
Sub-total	<u>\$ 227,470</u>	<u>\$ 230,880</u>
<b><u>This Filing:</u></b>		
Full Rate Filing		\$ 101,415
Legal		65,000 **
Division of Public Utilities estimated		58,575
Rate Case this filing		\$ 224,990
<b>3 Year Amortization</b>		<u>\$ 74,997</u>
Total Estimated R&R Expenses		<u>\$ 305,877</u>
Test Year		\$ 227,470
<b>Adjustment</b>		<b>\$ 78,407</b>
%		34.47%

\*Pro-Forma is actual amount of FY 13 Expense

\*\* See KCWA 2-16

**Schedule CW-S8  
Chemical and Sludge Maintenance Expense**

**PROVIDENCE WATER  
Chemical & Sludge Maintenance Expense**

	FY 2012 Test Year	Rate Year Adjustments	Pro-Forma Amount
Chemicals:			
Ferric Sulfate	\$ 1,580,879	\$ 463,121	\$ 2,044,000
Quicklime	\$ 621,118	\$ 45,763	666,881
Chlorine	\$ 139,822	\$ 20,178	160,000
Flouride	\$ 171,663	\$ 31,337	203,000
CO2	\$ 58,792	\$ (58,792)	-
Sub-total Chemicals	<u>\$ 2,572,273</u>	<u>\$ 501,607</u>	<u>\$ 3,073,881</u>
Calgon	-	-	-
Sludge Maintenance	<u>552,692</u>	<u>1,147,308</u>	<u>1,700,000</u>
Total Expenses	<u>3,124,965</u>	<u>1,648,915</u>	<u>4,773,881</u>
Test Year			3,124,965
Restricted Fund Balancing			(666,023)
Current Funding Requirement			<u>2,458,942</u>
Additional Funding Requirement			3,000,000
Rate Year Adjustments Above			1,648,915
Restricted Fund Balancing			(666,023)
Funding Requirement			<u>685,061</u>
Total Rate Year Adjustment			2,333,977
Pro-Forma C&S			5,458,942



**Schedule CW-S8A  
Adjustment to Chemical Expense**

**PROVIDENCE WATER**  
Adjustment to Chemical Expense  
to Reflect Estimated Quantities and Prices

Chemical		Quantity Used FY 2011	Quantity Used FY 2012	Quantity Used Projected FY 2013	Unit Price	CY 14 Projected Expense	TY 12 Expense	Adjustment
Ferric Sulfate	Gallons	830,283.00	1,113,678.69	1,460,000.00	\$ 1.40	\$ 2,044,000	\$ 1,580,879	\$ 463,121
Quicklime	Tons	1,997.91	2,838.65	3,139.00	\$ 212.45	\$ 666,881	\$ 621,118	\$ 45,763
Chlorine	Tons	161.63	173.30	200.00	\$ 800.00	\$ 160,000	\$139,821.62	\$ 20,178
Flouride	Gallons	77,499.00	56,902.83	70,000.00	\$ 2.90	\$ 203,000	\$ 171,663	\$ 31,337
CO2	Tons	74.91	506	1,000	\$ 109.00	\$ -	\$58,792	\$ (58,792)
<b>Total Projected Costs</b>						<b>\$ 3,073,881</b>	<b>\$ 2,572,273</b>	<b>\$ 501,607</b>
<b>FY 2012</b>						<b>\$ 2,572,273</b>		
<b>Adjustment to Rate Year Expense</b>						<b>\$ 501,607</b>		

Prices		FY 11	FY 12	FY 13	CY14 Projected Price
Ferric Sulfate (gallons)	\$	1.17	\$ 1.40	\$ 1.40	\$1.40
Lime (tons)	\$	208.45	\$ 212.45	\$ 212.45	\$212.45
Chlorine (tons)	\$	840.00	\$ 800.00	\$ 800.00	\$800.00
Flouride liquid (gallons)	\$	2.89	\$ 2.87	\$ 2.90	\$2.90
CO2	\$	106.40	\$ 106.40	\$ 109.00	\$109.00

Schedule CW-S9  
Restricted Fund Adjustments

**PROVIDENCE WATER**  
**Debt Service / Capital Funding Requirements**

	<u>Test Year</u> <u>FYE 2012</u>	<u>Test Year</u> <u>Adjustments</u>	<u>Adjusted</u> <u>TY 2012</u>	<u>Rate Year</u> <u>Adjustments</u>	<u>Notes</u>	<u>Pro-Forma</u> <u>Amount</u> <u>CY 2014</u>
Capital Fund	\$ 2,450,000	\$ -	\$ 2,450,000	\$ (2,450,000)	1)	\$ -
Western Cranston Fund (WCWDS Fund)	\$ 62,069	\$ -	\$ 62,069	\$ -		\$ 62,069
Infrastructure Replacement Fund	\$ 16,000,000	\$ -	\$ 16,000,000	\$ 4,000,000	1)	\$ 20,000,000
AMR/Meter Replacement Fund	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -		\$ 1,000,000
Equipment/Vehicle Replacement Fund	\$ 600,000	\$ -	\$ 600,000	\$ -		\$ 600,000
<b>Sub-total Capital Funds</b>	<b>\$ 20,112,069</b>	<b>\$ -</b>	<b>\$ 20,112,069</b>	<b>\$ 1,550,000</b>		<b>\$ 21,662,069</b>
Insurance Fund	\$ 1,948,485	\$ 11,163	\$ 1,959,648	\$ 124,943		\$ 2,084,590
Chemicals/Sludge Maintenance Fund	\$ 3,124,965	\$ -	\$ 3,124,965	\$ 2,333,977	2)	\$ 5,458,942
Property Tax Refund Fund	\$ -	\$ -	\$ -	\$ -		\$ -
Revenue Reserve Fund	\$ 1,113,852	\$ -	\$ 1,113,852	\$ (254,339)	1)	\$ 859,513
Scituate Watershed Protection Fund	\$ -	\$ -	\$ -	\$ -		\$ -
<b>Sub-total Operational Funds</b>	<b>\$ 6,187,302</b>	<b>\$ 11,163</b>	<b>\$ 6,198,465</b>	<b>\$ 2,204,581</b>		<b>\$ 8,403,045</b>
<b>Total Restricted Funds</b>	<b>\$ 26,299,371</b>	<b>\$ 11,163</b>	<b>\$ 26,310,534</b>	<b>\$ 3,754,581</b>		<b>\$ 30,065,114</b>
Adjusted Test Year						\$ 26,310,534
<b>Total Adjustment</b>						<b>\$ 3,754,581</b>

1) See Woodcock testimony

2) Amount from comparative schedule, adjusted to match restricted funding level from Docket 4061, plus 3 Million additional request

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

**Schedule CW-S9A  
Capital Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	2,450,000	1,225,000	-
Add'l funding from new docket effective 1/1/14	-	-	-
Carryover funds from prior year estimated	<u>7,871,212</u>	<u>8,300,050</u>	<u>8,628,242</u>
<b>Total Sources</b>	10,321,212	9,525,050	8,628,242
<b>Less obligated uses of funds:</b>			
RICWFA Debt (ARRA 2009) (P)	233,452	236,234	238,476
RICWFA (ARRA 2009) (I)	<u>7,710</u>	<u>5,574</u>	<u>2,536</u>
Sub-total Debt Service	241,162	241,808	241,012
Cash Funded Projects	<u>1,780,000</u>	<u>655,000</u>	<u>255,000</u>
<b>Total Uses</b>	2,021,162	896,808	496,012
<b>End of Year Balance</b>	<u><u>8,300,050</u></u>	<u><u>8,628,242</u></u>	<u><u>8,132,230</u></u>

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

**Schedule CW-S9B**

**Western Cranston Fund (WCWDS Fund)**

Source of Funds	FY 2013	FY 2014	FY 2015
D4061 (effective 4/27/10)	62,069	62,069	62,069
Add'l funding from new docket effective 1/1/14	-	-	-
Impact Fees estimated	20,000	20,000	20,000
Carryover funds from prior year estimated	<u>1,657,857</u>	<u>1,568,692</u>	<u>229,602</u>
<b>Total Sources</b>	<b>\$ 1,739,926</b>	<b>\$ 1,650,761</b>	<b>\$ 311,671</b>
<b>Less obligated uses of funds</b>			
RICWFA 2002B (P)	123,252	127,530	131,956
RICWFA 2002 (Pippin Main & WilburPS) (I)	<u>47,981</u>	<u>43,629</u>	<u>39,126</u>
Sub-total Debt Service	<b>\$ 171,233</b>	<b>\$ 171,159</b>	<b>\$ 171,082</b>
Cash Funded Projects	-	1,250,000	-
<b>Total Uses</b>	<b><u>171,233</u></b>	<b><u>1,421,159</u></b>	<b><u>171,082</u></b>
<b>End of Year Balance</b>	<b><u>\$1,568,692</u></b>	<b><u>\$229,602</u></b>	<b><u>\$140,589</u></b>

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

**Schedule CW-S9C**  
**Infrastructure Replacement Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	16,000,000	16,000,000	16,000,000
Add'l funding from new docket effective 1/1/14	-	2,000,000	4,000,000
New Bond 2013 Est(33 million)	10,000,000	10,000,000	10,000,000
Carryover funds from prior year estimated	\$ 3,818,000	\$2,154,436	\$1,114,457
<b>Total Sources</b>	<b>\$ 29,818,000</b>	<b>\$ 30,154,436</b>	<b>\$ 31,114,457</b>
<b>Less obligated uses of funds:</b>			
RICWFA Debt (1994 \$12M) Refi 2005 (P)	861,000	887,000	915,000
RICWFA (various projects) (I)	69,869	43,117	14,640
RICWFA Debt (Arra) (P)	359,079	390,773	393,485
RICWFA ARRA) (I)	105,828	103,164	99,970
RICWFA \$35M 2008 (P)	1,361,000	1,397,000	1,436,000
RICWFA \$35M 2008 (I)	1,091,787	1,053,926	1,013,759
RICWFA \$33M 2013 (P)	-	1,000	1,000
RICWFA \$33M 2013 (I)	22,864	299,676	491,944
Interest on Line of Credit Century	37,620	-	-
Sub-total Debt Service	3,848,564	3,874,979	3,872,854
Cash Funded Projects **	\$ 23,815,000	\$ 25,165,000	\$ 25,680,000
<b>Total Uses</b>	<b>27,663,564</b>	<b>29,039,979</b>	<b>29,552,854</b>
<b>End of Year Balance</b>	<b><u>\$2,154,436</u></b>	<b><u>\$1,114,457</u></b>	<b><u>\$1,561,603</u></b>

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

**Schedule CW-S9D**  
**AMR/Meter Replacement Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	1,000,000	1,000,000	1,000,000
Add'l funding from new docket effective 1/1/14	-	-	-
Carryover funds from prior year estimated	2,273,119	2,492,746	1,898,217
<b>Total Sources</b>	<b>\$ 3,273,119</b>	<b>\$ 3,492,746</b>	<b>\$ 2,898,217</b>
<b>Less obligated uses of funds</b>			
RICWFA Debt (ARRA 2009) (P)	380,895	385,435	389,092
RICWFA (ARRA 2009) (I)	12,580	9,094	4,914
Meter Replacement, Test & Repair	386,898	1,200,000	1,200,000
Payment on Line of Credit	-	-	-
<b>Total Uses</b>	<b>\$ 780,373</b>	<b>\$ 1,594,529</b>	<b>\$ 1,594,006</b>
<b>End of Year Balance</b>	<b><u>\$2,492,746</u></b>	<b><u>\$1,898,217</u></b>	<b><u>\$1,304,211</u></b>

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

**Schedule CW-S9E**

**Equipment/Vehicle Replacement Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
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	<u>1,388,272</u>	<u>939,272</u>	<u>604,272</u>
<b>Total Sources</b>	<b>1,988,272</b>	<b>1,539,272</b>	<b>1,204,272</b>
<b>Less obligated uses of funds</b>			
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	<u>298,000</u>	<u>150,000</u>	<u>200,000</u>
<b>Total Uses</b>	<b>1,049,000</b>	<b>935,000</b>	<b>965,000</b>
<b>End of Year Balance</b>	<b><u>\$ 939,272</u></b>	<b><u>\$ 604,272</u></b>	<b><u>\$ 239,272</u></b>

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

**Schedule CW-S9F  
Insurance Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	1,777,062	1,777,062	1,777,062
Add'l funding from new docket effective 1/1/14	-	153,764	307,528
Carryover funds from prior year estimated	3,273,421	3,041,333	2,910,026
<b>Total Sources</b>	<b>5,050,483</b>	<b>4,972,159</b>	<b>4,994,617</b>
<b>Less obligated uses of funds</b>			
Property & Casualty	1,031,150	1,056,929	1,070,558
Workers Compensation	900,000	922,500	930,000
Injuries & Damages	50,000	54,004	58,007
Safety Supplies & Other	18,000	18,450	18,911
Program Expense	10,000	10,250	10,506
<b>Total Uses</b>	<b>2,009,150</b>	<b>2,062,133</b>	<b>2,087,982</b>
<b>End of Year Balance</b>	<b><u>\$3,041,333</u></b>	<b><u>\$2,910,026</u></b>	<b><u>2,906,635</u></b>



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

**Schedule CW-S9G  
Chemicals/Sludge Maintenance Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	2,458,942	2,458,942	2,458,942
Add'l funding from new docket effective 1/1/14	-	1,500,000	3,000,000
Add'l funding from IFR deferral	1,113,852	556,926	-
Carryover funds from prior year estimated	224,188	(1,092,018)	(1,356,150)
<b>Total Sources</b>	<b>3,796,982</b>	<b>3,423,850</b>	<b>4,102,792</b>
<b>Less obligated uses of funds</b>			
Chemicals	3,189,000	3,080,000	3,080,000
Sludge Maintenance	1,700,000	1,700,000	1,700,000
<b>Total Uses</b>	<b>4,889,000</b>	<b>4,780,000</b>	<b>4,780,000</b>
<b>End of Year Balance</b>	<b>(1,092,018)</b>	<b>(\$1,356,150)</b>	<b>(\$677,208)</b>

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

**Schedule CW-S9H  
Property Tax Refund Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)			
Add'l funding from new docket effective 1/1/14			
Interest			
Carryover funds from prior year estimated	<u>464,220</u>	<u>439,220</u>	<u>0</u>
<b>Total Sources</b>	<b>464,220</b>	<b>439,220</b>	<b>0</b>
<b>Less obligated uses of funds</b>			
Transfer to Operations	-	439,220	-
Transfer to Operations-Est Legal/Tax fees	<u>25,000</u>	<u>-</u>	<u>-</u>
<b>Total Uses</b>	<b>25,000</b>	<b>439,220</b>	<b>-</b>
<b>End of Year Balance</b>	<b><u>\$439,220</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>

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

**Schedule CW-S9I  
Revenue Reserve Fund**

<b>Source of Funds</b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>
D4061 (effective 4/27/10)	1,113,852	1,113,852	1,113,852
Add'l funding from new docket effective 1/1/14	-	(127,169)	(254,339)
Carryover funds from prior year estimated	<u>3,060,554</u>	<u>4,174,406</u>	<u>5,161,089</u>
<b>Total Sources</b>	<b>4,174,406</b>	<b>5,161,089</b>	<b>6,020,602</b>
<b>Less obligated uses of funds</b>			
<b>Total Uses</b>			
<b>End of Year Balance</b>	<b><u>\$4,174,406</u></b>	<b><u>\$5,161,089</u></b>	<b><u>\$6,020,602</u></b>

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

**Schedule CW-S9J**

**Scituate Watershed Protection Fund**

<b>Source of Funds</b>	<u><b>FY 2013</b></u>	<u><b>FY 2014</b></u>	<u><b>FY 2015</b></u>
D4061 (effective 4/27/10)		-	-
Add'l funding from new docket effective 1/1/14	-	-	-
Carryover funds from prior year estimated	<u>187,572</u>	<u>-</u>	<u>-</u>
<b>Total Sources</b>	<b>\$ 187,572</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Less obligated uses of funds</b>			
Land deposits & appraisal fees	<u>187,572</u>		
<b>Total Uses</b>	<b>\$ 187,572</b>	<b>\$ -</b>	<b>\$ -</b>
<b>End of Year Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Schedule CW-S10**  
**Revenue Under Existing Rates**

**Test Year Revenue Under Existing Rates**  
Rate Year Ending December 31, 2014

**Retail Consumption Charges**

Residential (HCF)	8,574,863	\$	2.488	\$	21,334,260
Commercial (HCF)	4,381,008	\$	2.390	\$	10,470,609
Industrial (HCF)	191,315	\$	2.346	\$	448,825
<b>Total</b>	<b>13,147,187</b>			<b>\$</b>	<b>32,253,695</b>

**Wholesale Consumption Charges**

Consumption (HCF)	13,051,679	\$	1.269514		
Gallons (Million)	9,763	\$	1,697.21	<b>\$</b>	<b>16,569,289</b>

Billing Unit	Units of Service	Current Rates	Service Charge Revenue
--------------	------------------	---------------	------------------------

**Quarterly Service Charges**

5/8"	53,150	\$	18.34	\$	3,899,084.00
3/4"	10,645	\$	19.47	\$	829,032.60
1"	5,067	\$	22.85	\$	463,123.80
1.5"	1,491	\$	27.39	\$	163,353.96
2"	1,468	\$	39.77	\$	233,529.44
3"	80	\$	131.15	\$	41,968.00
4"	25	\$	164.98	\$	16,498.00
6"	42	\$	243.95	\$	40,983.60
8"	28	\$	334.19	\$	37,429.28
10"	2	\$	415.97	\$	3,327.76
12"	-	\$	497.76	\$	-
<b>Total</b>	<b>71,998</b>			<b>\$</b>	<b>5,728,330.44</b>

**Monthly Service Charges**

5/8"	1	\$	10.82	\$	129.84
3/4"	0	\$	11.19	\$	-
1"	0	\$	12.32	\$	-
1.5"	2	\$	13.83	\$	331.92
2"	34	\$	17.97	\$	7,331.76
3"	13	\$	48.42	\$	7,553.52
4"	7	\$	59.70	\$	5,014.80
6"	17	\$	86.02	\$	17,548.08
8"	8	\$	116.11	\$	11,146.56
10"	0	\$	143.37	\$	-
12"	1	\$	170.63	\$	2,047.56
<b>Total</b>	<b>83</b>			<b>\$</b>	<b>51,104.04</b>
<b>Total Service Charge Revenue</b>	<b>72,081</b>			<b>\$</b>	<b>5,779,434.48</b>

**Schedule CW-S10**  
**Revenue Under Existing Rates**  
**Quarterly Fire Protection**  
**Service Charge**  
**(Providence Only)**

	Units of Service (Providence Only)	Current Rates	Fire Protection Revenue
5/8"	25,266	\$ 3.08	\$ 311,277.12
3/4"	4,207	\$ 4.62	\$ 77,745.36
1"	1,998	\$ 11.54	\$ 92,227.68
1.5"	896	\$ 30.77	\$ 110,279.68
2"	874	\$ 73.86	\$ 258,214.56
3"	58	\$ 200.04	\$ 46,409.28
4"	14	\$ 338.52	\$ 18,957.12
6"	18	\$ 692.43	\$ 49,854.96
8"	8	\$ 1,046.34	\$ 33,482.88
10"	1	\$ 1,600.29	\$ 6,401.16
12"	-	\$ 2,646.63	\$ -
<b>Total</b>	<b>33,340</b>		<b>\$ 1,004,849.80</b>

**Monthly Fire Protection**  
**Service Charge**  
**(Providence Only)**

5/8"	1	\$ 1.03	\$ 12.36
3/4"	-	\$ 1.54	\$ -
1"	-	\$ 3.85	\$ -
1.5"	-	\$ 10.26	\$ -
2"	27	\$ 24.62	\$ 7,976.88
3"	11	\$ 66.68	\$ 8,801.76
4"	5	\$ 112.84	\$ 6,770.40
6"	12	\$ 230.81	\$ 33,236.64
8"	8	\$ 348.78	\$ 33,482.88
10"	-	\$ 533.43	\$ -
12"	-	\$ 882.21	\$ -
<b>Total</b>	<b>64</b>		<b>\$ 90,280.92</b>

**Total Retail FPSC (Providence Only)**

**\$ 1,095,130.72**

**Total Service Charge**

**\$ 6,874,565**

**Schedule CW-S10  
Revenue Under Existing Rates**

**Private Fire Service Charges**

3/4"	3	\$	19.67	\$	236
1"	10	\$	23.31	\$	932
1.5"	3	\$	28.70	\$	344
2"	50	\$	42.63	\$	8,526
4"	349	\$	182.72	\$	255,077
6"	1,272	\$	295.45	\$	1,503,250
8"	254	\$	443.93	\$	451,033
10"	4	\$	613.33	\$	9,813
12"	17	\$	816.53	\$	55,524
16"	1	\$	1,340.64	\$	5,363
Total	1,963			\$	2,290,098

**Public Fire Service Charges**

<b>Total Hydrants</b>	<b>6,051</b>		<b>339.33</b>		
Hydrants (Excluding Providence)	2,832	\$	339.33	\$	960,983
<b>Total Rate Revenues</b>				<b>\$</b>	<b>58,948,630</b>





Schedule CW-S11  
O&M Cost Allocation

Allocation of Operating and Maintenance and City Services Expense  
Rate Year Ending December 31, 2014

TITLE		Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>Water Treatment Expenses</b>										
60130	Salaries + Wages - Emp	AA	\$ 2,155,079	\$ 680,952	\$ 506,735	\$ -	\$ -	\$ -	\$ 21,551	\$ 945,841
60140	Salaries + Wages - Emp	AA	\$ 351,502	\$ 111,066	\$ 82,651	\$ -	\$ -	\$ -	\$ 3,515	\$ 154,271
60430	Employee Pension + Ben	AA	\$ 616,830	\$ 194,903	\$ 145,039	\$ -	\$ -	\$ -	\$ 6,168	\$ 270,720
60440	Employee Pension + Ben	AA	\$ 137,253	\$ 43,368	\$ 32,273	\$ -	\$ -	\$ -	\$ 1,373	\$ 60,239
61530	Purchase Power	P	\$ 226,424	\$ 112,306	\$ 22,642	\$ -	\$ -	\$ -	\$ 2,038	\$ 89,438
61630	Fuel for Power Purch	AA	\$ 245,547	\$ 77,587	\$ 57,737	\$ -	\$ -	\$ -	\$ 2,455	\$ 107,768
61830	Chemicals	A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62030	Material + Supplies	AA	\$ 132,792	\$ 41,959	\$ 31,224	\$ -	\$ -	\$ -	\$ 1,328	\$ 58,281
62040	Material + Supplies	AA	\$ 71,336	\$ 22,540	\$ 16,774	\$ -	\$ -	\$ -	\$ 713	\$ 31,309
63130	Contractual Services - Engineer	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63240	Contract Services - Acctg	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63430	Contractual Services - Mgt. Fees	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63530	Contractual Services - Other	AA	\$ 150,838	\$ 47,661	\$ 35,467	\$ -	\$ -	\$ -	\$ 1,508	\$ 66,201
63540	Contractual Services - Other	AA	\$ 91,143	\$ 28,799	\$ 21,431	\$ -	\$ -	\$ -	\$ 911	\$ 40,002
64140	Rental Buildg/Real Prop	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64230	Rental of Equipment	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64240	Rental of Equipment	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65030	Transportation Exp.	AA	\$ 6,176	\$ 1,951	\$ 1,452	\$ -	\$ -	\$ -	\$ 62	\$ 2,711
66730	Regularoty Com Exp. -Other	AA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67530	Misc. Expenses	AA	\$ 102,885	\$ 32,509	\$ 24,192	\$ -	\$ -	\$ -	\$ 1,029	\$ 45,155
67540	Misc. Expenses	AA	\$ 2,156	\$ 681	\$ 507	\$ -	\$ -	\$ -	\$ 22	\$ 946
<b>Total Treatment Expense</b>			\$ 4,289,961	\$ 1,396,285	\$ 978,123	\$ -	\$ -	\$ -	\$ 42,673	\$ 1,872,880
		<b>Check</b>	\$ -							
<b>Transmission + Dist. Expense:</b>										
60150	Salaries + Wages - Emp	HM	\$ 1,118,479	\$ 287,471	\$ 190,814	\$ 134,156	\$ 297,680	\$ -	\$ 125,248	\$ 83,109
60160	Salaries + Wages - Emp	HM	\$ 2,348,330	\$ 603,567	\$ 400,628	\$ 281,671	\$ 625,002	\$ -	\$ 262,968	\$ 174,494
60250	Payroll Clearing -Emp	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60260	Payroll Clearing -Emp	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60450	Employee Pension + Ben	HM	\$ 288,037	\$ 74,031	\$ 49,139	\$ 34,549	\$ 76,660	\$ -	\$ 32,255	\$ 21,403
60460	Employee Pension + Ben	HM	\$ 861,385	\$ 221,393	\$ 146,953	\$ 103,319	\$ 229,255	\$ -	\$ 96,459	\$ 64,006
60550	Overhead Rate Applied	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60560	Overhead Rate Applied	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61550	Purchase Power	P	\$ 12,019	\$ 5,962	\$ 1,202	\$ -	\$ -	\$ -	\$ 108	\$ 4,748
62050	Material + Supplies	F	\$ 287,025	\$ 107,246	\$ 71,186	\$ 50,049	\$ -	\$ -	\$ 5,740	\$ 52,804
62060	Material + Supplies	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62560	Inventory Clearing	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63150	Contractual Services - Engineer	TD	\$ 328,423	\$ 154,157	\$ 102,324	\$ 71,942	\$ -	\$ -	\$ -	\$ -
63350	Contractual Services - Legal T&DO	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63460	Contractual Services - Mgt. Fees	C	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63550	Contractual Services - Other	HOC	\$ 482,656	\$ 177,966	\$ 118,092	\$ 83,078	\$ 1,203	\$ -	\$ 9,231	\$ 93,086
63560	Contractual Services - Other	HMC	\$ 69,164	\$ 17,776	\$ 11,799	\$ 8,296	\$ 18,408	\$ -	\$ 7,745	\$ 5,139
64150	Rental Buildg/Real Prop	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64160	Rental Buildg/Real Prop	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64250	Rental of Equipment	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64260	Rental of Equipment	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65050	Transportation Exp. T&D	F	\$ 2,923	\$ 1,092	\$ 725	\$ 510	\$ -	\$ -	\$ 58	\$ 538
65850	Insurance W/C	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65860	Insurance W/C	HM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67550	Misc. Expenses	F	\$ 40,416	\$ 15,101	\$ 10,024	\$ 7,047	\$ -	\$ -	\$ 808	\$ 7,435
67560	Misc. Expenses	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Transmission &amp; Distribution</b>			\$ 5,838,857	\$ 1,665,763	\$ 1,102,887	\$ 774,617	\$ 1,248,207	\$ -	\$ 540,621	\$ 506,761
		<b>Check</b>	\$ -							

Schedule CW-S11  
O&M Cost Allocation

Allocation of Operating and Maintenance and City Services Expense  
Rate Year Ending December 31, 2014

TITLE		Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<i>Customer Accounts Expense:</i>										
60170	Salaries + Wages - Emp	D	\$ 2,046,384	\$ -	\$ -	\$ -	\$ 1,023,192	\$ 1,023,192	\$ -	\$ -
60270	Payroll Clearing -Emp	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60470	Employee Pension + Ben	DY	\$ 755,496	\$ 755,496	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60570	Overhead Rate Applied	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61670	Fuel for Power Purch	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62070	Material + Supplies	D	\$ 2,624	\$ -	\$ -	\$ -	\$ 1,312	\$ 1,312	\$ -	\$ -
63370	Contractual Services - Legal	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63570	Contractual Services - Other	D	\$ 11,679	\$ -	\$ -	\$ -	\$ 5,840	\$ 5,840	\$ -	\$ -
65070	Transportation Exp. -CAO	D	\$ 1,077	\$ -	\$ -	\$ -	\$ 538	\$ 538	\$ -	\$ -
65870	Insurance - Other	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65970	Insurance Other	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67070	Bad Debt Expense - CAO	D	\$ 473,727	\$ -	\$ -	\$ -	\$ 236,863	\$ 236,863	\$ -	\$ -
67570	Misc. Expenses	D	\$ 525,576	\$ -	\$ -	\$ -	\$ 262,788	\$ 262,788	\$ -	\$ -
<b>Total Customer Accounts</b>			\$ 3,816,563	\$ 755,496	\$ -	\$ -	\$ 1,530,534	\$ 1,530,534	\$ -	\$ -
<b>Check</b>			\$ -							
<i>Administrative and General</i>										
60180	Salaries + Wages - Emp	Y	\$ 5,749,306	\$ 1,446,257	\$ 743,106	\$ 261,684	\$ 1,224,556	\$ 643,904	\$ 267,106	\$ 1,162,693
60280	Payroll Clearing -Emp	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60380	Salaries + wages - Officers, Dir.	YY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60480	Employee Pension + Ben	Y	\$ 4,685,879	\$ 1,178,749	\$ 605,656	\$ 213,281	\$ 998,055	\$ 524,804	\$ 217,701	\$ 947,634
60580	Overhead Rate Applied	Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61580	Purchase Power	Z	\$ 113,972	\$ 35,561	\$ 15,341	\$ 5,364	\$ 18,745	\$ 10,325	\$ 4,127	\$ 24,508
61680	Fuel for Power Purch	Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62080	Material + Supplies	Z	\$ 548,550	\$ 171,157	\$ 73,838	\$ 25,818	\$ 90,220	\$ 49,693	\$ 19,866	\$ 117,957
63180	Contractual Services - Engineer	Y	\$ 48,148	\$ 12,112	\$ 6,223	\$ 2,192	\$ 10,255	\$ 5,392	\$ 2,237	\$ 9,737
63280	Contract Services - Acctg	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63380	Contractual Services - Legal	Y	\$ 54,083	\$ 13,605	\$ 6,990	\$ 2,462	\$ 11,519	\$ 6,057	\$ 2,513	\$ 10,937
63480	Contractual Services - Mgt. Fees	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63580	Contractual Services - Other	Y	\$ 1,094,263	\$ 275,266	\$ 141,435	\$ 49,806	\$ 233,069	\$ 122,554	\$ 50,838	\$ 221,295
64180	Rental Buildg/Real Prop	Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64280	Rental of Equipment	Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65080	Transportation Exp.	Z	\$ 6,797	\$ 2,121	\$ 915	\$ 320	\$ 1,118	\$ 616	\$ 246	\$ 1,462
65780	Ins. Gen. Liability	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65880	Insurance - W/C	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65980	Insurance Other	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66080	Advertising Expense	Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66680	Reg Com Exp - Amort of Rate Case	Com Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66780	Regulatory Com Exp. -Other	Com Z	\$ 305,876	\$ 144,746	\$ 62,444	\$ 21,834	\$ -	\$ -	\$ 11,077	\$ 65,774
67580	Misc. Expenses	Z	\$ 381,270	\$ 118,963	\$ 51,321	\$ 17,945	\$ 62,707	\$ 34,539	\$ 13,808	\$ 81,986
<b>Total Administration + General</b>			\$ 12,988,144	\$ 3,398,536	\$ 1,707,271	\$ 600,706	\$ 2,650,245	\$ 1,397,885	\$ 589,519	\$ 2,643,982
<b>Check</b>			\$ -							
<b>Total Operation &amp; Maintenance</b>			\$ 29,883,260	\$ 8,670,116	\$ 3,981,465	\$ 1,395,898	\$ 5,428,986	\$ 2,928,418	\$ 1,201,372	\$ 6,277,006
<b>Check</b>			\$ -							

Schedule CW-S11  
O&M Cost Allocation

Allocation of Operating and Maintenance and City Services Expense  
Rate Year Ending December 31, 2014

TITLE	Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>857 Insurance Fund</b>									
65840 Insurance W/C - WTM	YY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65870 Insurance W/C - CAO	YY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62080 Materials + Supplies - A&GO	Z	\$ 18,724	\$ 5,842	\$ 2,520	\$ 881	\$ 3,080	\$ 1,696	\$ 678	\$ 4,026
63180 Contractual Services-Engineer	Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63380 Contract Services - Legal A&GO	Com Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63580 Contract Services - Other A&GO	Com Y	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Injuries and Damages	YY	\$ 58,005	\$ 33,442	\$ 7,497	\$ 2,640	\$ -	\$ -	\$ 2,695	\$ 11,730
65780 Ins. Gen. Liability	Com Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65980 Insurance-Other A&GO	Z	\$ 1,070,516	\$ 334,020	\$ 144,098	\$ 50,385	\$ 176,068	\$ 96,978	\$ 38,768	\$ 230,197
65880 Insurance - W/C	YY	\$ 929,740	\$ 536,034	\$ 120,170	\$ 42,318	\$ -	\$ -	\$ 43,195	\$ 188,023
67070 Bad Debt Expense-CAO	Com Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67580 Misc. Expense	Z	\$ 7,606	\$ 2,373	\$ 1,024	\$ 358	\$ 1,251	\$ 689	\$ 275	\$ 1,636
Funding Requirement	Com Z	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Insurance Fund</b>		\$ 2,084,590	\$ 911,712	\$ 275,310	\$ 96,582	\$ 180,398	\$ 99,364	\$ 85,612	\$ 435,613
Check		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>878 Chemical and Sludge Maintenance Fund</b>									
61830 Chemicals - WTO	A	\$ 3,073,881	\$ 1,694,049	\$ -	\$ -	\$ -	\$ -	\$ 30,739	\$ 1,349,093
62030 Materials + Supplies WTO	A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62050 Materials + Supplies T&DO	A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63540 Contract Services - Other WTM	A	\$ 1,700,000	\$ 936,889	\$ -	\$ -	\$ -	\$ -	\$ 17,000	\$ 746,111
Funding Requirement	A	\$ 685,061	\$ 377,545	\$ -	\$ -	\$ -	\$ -	\$ 6,851	\$ 300,666
<b>Total Chemical and Sludge Maintenance Fund</b>		\$ 5,458,942	\$ 3,008,483	\$ -	\$ -	\$ -	\$ -	\$ 54,589	\$ 2,395,870
Check		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Operating and Maintenance Expense</b>		\$ 37,426,792	\$ 12,590,310	\$ 4,256,775	\$ 1,492,480	\$ 5,609,384	\$ 3,027,782	\$ 1,341,573	\$ 9,108,489
Check		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Less Capital Reimbursement</b>	X4	\$ (834,389)	\$ (519,520)	\$ (75,593)	\$ (21,962)	\$ (48,701)	\$ -	\$ (27,333)	\$ (141,281)
<b>Net Operating and Maintenance Expense</b>		\$ 36,592,403	\$ 12,070,791	\$ 4,181,182	\$ 1,470,518	\$ 5,560,683	\$ 3,027,782	\$ 1,314,240	\$ 8,967,208

Schedule CW-S11  
O&M Cost Allocation

Allocation of Operating and Maintenance and City Services Expense  
Rate Year Ending December 31, 2014

<u>TITLE</u>	Allocation <u>Factor</u>	<u>Total</u>	<u>Base</u>	<u>Maximum Day</u>	<u>Maximum Hour</u>	<u>Meters &amp; Services</u>	<u>Billing &amp; Collection</u>	<u>Public Fire Protection</u>	<u>Wholesale</u>
<b>City Services Cost</b>	Z	\$ 839,167	\$ 261,835	\$ 112,957	\$ 39,497	\$ 138,018	\$ 76,020	\$ 30,390	\$ 180,449
New Meters	C	\$ 38,443	\$ -	\$ -	\$ -	\$ 38,443	\$ -	\$ -	\$ -
Lost or Stolen Meters	C	\$ 41,676	\$ -	\$ -	\$ -	\$ 41,676	\$ -	\$ -	\$ -
Abandonment	A	\$ 225	\$ 124	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ 99
Admin Fee from NBC	D	\$ 25,000	\$ -	\$ -	\$ -	\$ 12,500	\$ 12,500	\$ -	\$ -
Misc. Accounts	A	\$ 15,594	\$ 8,594	\$ -	\$ -	\$ -	\$ -	\$ 156	\$ 6,844
Narraganset Shut-Off	D	\$ 6,634	\$ -	\$ -	\$ -	\$ 3,317	\$ 3,317	\$ -	\$ -
Narraganset Shut-Off	D	\$ 37,911	\$ -	\$ -	\$ -	\$ 18,956	\$ 18,956	\$ -	\$ -
Road Restoration	TD	\$ 31,572	\$ 14,819	\$ 9,837	\$ 6,916	\$ -	\$ -	\$ -	\$ -
Shut Off Service Charge	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shut Off For Seasonal	D	\$ 1,408	\$ -	\$ -	\$ -	\$ 704	\$ 704	\$ -	\$ -
Shut Off Service Charge	D	\$ 127,232	\$ -	\$ -	\$ -	\$ 63,616	\$ 63,616	\$ -	\$ -
Subpoena	A	\$ 11	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 5
Title Search Charge	D	\$ 20,538	\$ -	\$ -	\$ -	\$ 10,269	\$ 10,269	\$ -	\$ -
\$ Transaction at Closing	A	\$ 279	\$ 154	\$ -	\$ -	\$ -	\$ -	\$ 3	\$ 123
Turn On Meter	C	\$ 86,086	\$ -	\$ -	\$ -	\$ 86,086	\$ -	\$ -	\$ -
Scrap Meter Fees Garbage Pick-Up	C	\$ 42,330	\$ -	\$ -	\$ -	\$ 42,330	\$ -	\$ -	\$ -
Other Misc.	A	\$ 4,633	\$ 2,553	\$ -	\$ -	\$ -	\$ -	\$ 46	\$ 2,033
Rental Income	Z	\$ 1,200	\$ 374	\$ 162	\$ 56	\$ 197	\$ 109	\$ 43	\$ 258
Interest on Delinquent Accounts	RR	\$ 472,048	\$ 289,544	\$ 62,327	\$ 20,970	\$ 68,620	\$ 30,587	\$ -	\$ -
Forest Product Sales	A	\$ 28,809	\$ 15,877	\$ -	\$ -	\$ -	\$ -	\$ 288	\$ 12,644
Bad Checks	A	\$ 6,180	\$ 3,406	\$ -	\$ -	\$ -	\$ -	\$ 62	\$ 2,712
Federal Grants	A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Loss Disposal Fixed Assets	A	\$ 1,145	\$ 631	\$ -	\$ -	\$ -	\$ -	\$ 11	\$ 502
Misc. Revenue Water Lien	A	\$ 867	\$ 478	\$ -	\$ -	\$ -	\$ -	\$ 9	\$ 381
State 1 Surcharge	A	\$ 189,348	\$ 189,348	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Less: Miscellaneous Revenues</b>		\$ 1,179,169	\$ 525,908	\$ 72,325	\$ 27,942	\$ 386,714	\$ 140,058	\$ 621	\$ 25,601

**Schedule CW-S12  
Capital Cost Allocation**

**Allocation of Capital Costs**

Rate Year Ending December 31, 2014

	Allocation Factor	Adjusted Test Year	Rate Year Adjustments	Pro Forma Rate Year	Base	Maximum Day	Maximum Hour	Meters	Billing & Collection	Fire Protection	Wholesale
Capital Fund	K2			\$ -	-	-	-	-	-	-	-
Western Cranston Fund (WCWDS Fund)	TD			\$ 62,069	29,134	19,338	13,596	-	-	-	-
Infrastructure Replacement Fund	K1			\$ 20,000,000	13,323,071	1,886,575	540,371	-	-	688,942	3,561,042
AMR/Meter Replacement Fund	C			\$ 1,000,000	-	-	-	1,000,000	-	-	-
Equipment Replacement	K2			\$ 600,000	135,345	56,597	16,211	264,347	-	20,668	106,831
				\$ 21,662,069	\$ 13,487,550	\$ 1,962,510	\$ 570,178	\$ 1,264,347	\$ -	\$ 709,610	\$ 3,667,873
				\$ -	-	-	-	-	-	-	-

**Schedule CW-S13  
Property Tax Allocation**

Allocation of Property Taxes  
Rate Year Ending December 31, 2014

	Allocation Factor	Pro Forma Rate Year	Base	Maximum Day	Maximum Hour	Meters	Billing & Collection	Fire Protection	Wholesale
*Scituate	A	\$ 5,677,446	3,128,903	-	-	-	-	56,774	2,491,769
Foster	A	\$ 314,059	173,081	-	-	-	-	3,141	137,837
North Providence	F	\$ 273,500	102,192	67,832	47,691	-	-	5,470	50,315
Johnston	A	\$ 96,805	53,350	-	-	-	-	968	42,487
Cranston	A	\$ 122,555	67,541	-	-	-	-	1,226	53,788
*Glocester	A	\$ 56,793	31,299	-	-	-	-	568	24,926
West Warwick	A	\$ 3,756	2,070	-	-	-	-	38	1,648
West Glocester Fire	A	\$ 3,782	2,084	-	-	-	-	38	1,660
Harmony Fire District	A	\$ 174	96	-	-	-	-	2	76
Chepachet Fire District	A	\$ 141	78	-	-	-	-	1	62
Warwick	A	\$ -	-	-	-	-	-	-	-
		<b>\$ 6,549,011</b>	<b>\$ 3,560,695</b>	<b>\$ 67,832</b>	<b>\$ 47,691</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 68,225</b>	<b>\$ 2,804,569</b>

Schedule CW-S14  
 Allocations Legend

3 4 5 6 7 8 9

Allocation Factor Legend

Allocation	Description	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
A	1% allocated to fire protection, remainder allocated to base and wholesale based on consumption	55.11%	0.00%	0.00%	0.00%	0.00%	1.00%	43.89%
AA	1% allocated to fire protection, remainder allocated to base, maximum day, and wholesale based on consumption	31.60%	23.51%	0.00%	0.00%	0.00%	1.00%	43.89%
C	100% to Meters & Services				100.00%			
Com Y	Allocated Based on Methodology in Docket # 2048, Y - Labor Reallocated from Meters and Billing	44.33%	22.78%	8.02%	0.00%	0.00%	4.65%	20.22%
Com Z	Allocated Based on Methodology in Docket # 2048, Z - O&M Reallocated from Meters and Billing	47.32%	20.41%	7.14%	0.00%	0.00%	3.62%	21.50%
Cran	Cranston Taxes, 16% Allocator F, 84% Allocator A	52.27%	3.97%	2.79%	0.00%	0.00%	1.16%	39.81%
D	50% to Billing and Collections, 50% to Meters and Services				50.00%	50.00%		
F	2% to Fire, Allocated to Base & Wholesale by Proportion of T&D Pipe in Inch Miles, Retail to Base, Max Day	37.36%	24.80%	17.44%	0.00%	0.00%	2.00%	18.40%
FP	100% Fire Protection						100.00%	0.00%
HM	T&D Maintenance Based on FY 2004 - FY 2006 Activities	25.70%	17.06%	11.99%	26.61%	0.00%	11.20%	7.43%
HMY	Reallocation from Billing and Collections and Meters and Services to Base of HM	52.32%	17.06%	11.99%	0.00%	0.00%	11.20%	7.43%
HMC	T&D Contract Maintenance Based on FY 2012 Activities	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
HOC	T&D Contract Operations based on FY 2012 activities	36.87%	24.47%	17.21%	0.25%	0.00%	1.91%	19.29%
K1	Allocated Based on Net Plant Investment less Land, Meters to Retail (left Fire Service)	66.62%	9.43%	2.70%	0.00%	0.00%	3.44%	17.81%
K2	Allocated Based on Net Plant Investment less Land	22.56%	9.43%	2.70%	44.06%	0.00%	3.44%	17.81%
L	Based on Allocation of other Transmission & Distribution Plant except Services & Meters	35.61%	24.49%	11.65%	0.00%	0.00%	13.47%	14.78%
N	Allocation of Pumping Investment and Expenses	47.31%	9.56%	1.67%			0.92%	40.55%
NO	Allocation of Pumping and Investment Expenses Excluding Raw Water	34.66%	25.04%	4.37%			0.80%	35.13%
NP	Allocation Factor NO with Maximum Day and Maximum Hour reallocated to base	33.40%	24.41%	2.57%			0.88%	38.73%
P	10% allocated to maximum day, 90% allocated based on A	49.60%	10.00%	0.00%	0.00%	0.00%	0.90%	39.50%
RR	Retail Revenue	61.34%	13.20%	4.44%	14.54%	6.48%	0.00%	0.00%
T	Allocation of all Non-General Plant	26.29%	8.41%	2.42%	38.91%	0.00%	3.20%	20.76%
TD	Allocation of Base, Max Day and Max Hour of Retail only	46.94%	31.16%	21.91%	0.00%	0.00%	0.00%	0.00%
X1	Allocation within a Particular Group Based on the Relationship between all Other Items in the Group	25.70%	17.06%	11.99%	26.61%	0.00%	11.20%	7.43%
X2	Allocation within a Particular Group Based on the Relationship between all Other Items in the Group	36.87%	24.47%	17.21%	0.25%	0.00%	1.91%	19.29%
X4	Allocation within a Particular Group Based on the Relationship between all Other Items in the Group	62.26%	9.06%	2.63%	5.84%	0.00%	3.28%	16.93%
Y	Based on Labor related O&M Expenses.	25.16%	12.93%	4.55%	21.30%	11.20%	4.65%	20.22%
YY	Reallocation from Billing and Collections and Meters and Services to base of YY	57.65%	12.93%	4.55%			4.65%	20.22%
Z	Based on Total O&M expenses, except for Administrative & General	31.20%	13.46%	4.71%	16.45%	9.06%	3.62%	21.50%
DY	Allocation Factor D with Meters and Services, Billing and Collection Reallocated to Base	100.00%						

**Schedule CW-S14A**  
**Development of Allocation Factor N**

3 4 5 8 9

Station	Retail	Capacity (MGD)	Percent of Capacity	Allocation	Base	Maximum Day	Maximum Hour	Fire Protection	Wholesale	
Raw Water	Average Day	160	61.83%	A	34.08%	0.00%	0.00%	0.62%	27.14%	
Neutaconkanut	75%	38.59	14.91%	AA	4.71%	3.51%	0.00%	0.15%	6.55%	
Bath Street	75%	28.94	11.18%	AA	3.53%	2.63%	0.00%	0.11%	4.91%	
Aqueduct	67%	11.52	4.45%	AA	1.41%	1.05%	0.00%	0.04%	1.95%	
Fruit Hill	100%	4.32	1.67%	TD	0.78%	0.52%	0.37%		0.00%	
Alpine Estates	100%	1.74	0.67%	TD	0.32%	0.21%	0.15%		0.00%	
Cranston	100%	3.83	1.48%	TD	0.69%	0.46%	0.32%		0.00%	
Garden Hills	0%	0	0.00%	TD	0.00%	0.00%	0.00%		0.00%	Taken Out of Service
Dean Estates	100%	4.32	1.67%	TD	0.78%	0.52%	0.37%		0.00%	
Greenville	100%	2.46	0.95%	TD	0.45%	0.30%	0.21%		0.00%	
Ashby Street	100%	1.44	0.56%	TD	0.26%	0.17%	0.12%		0.00%	
Atwood Avenue		1.6	0.62%	TD	0.29%	0.19%	0.14%		0.00%	Added
Totals		258.76	100.00%		47.31%	9.56%	1.67%	0.92%	40.55%	
Excluding Raw Water (Allocation Factor NO)					34.66%	25.04%	4.37%	0.80%	35.13%	100.00% ok

**Development of Allocation Factor NP**

Station	Retail	Capacity (MGD)	Power Cost	Allocation	Base	Maximum Day	Maximum Hour	Fire Protection	Wholesale	
Neutaconkanut	75%	38.59	\$ 210,781	AA	\$66,601.58	\$49,562.00	\$0.00	\$2,107.81	\$92,509.37	43.89%
Bath Street	75%	28.94	\$ 329,874	AA	\$104,232.04	\$77,564.95	\$0.00	\$3,298.74	\$144,777.95	43.89%
Aqueduct	67%	11.52	\$ 140,622	AA	\$44,433.06	\$33,065.15	\$0.00	\$1,406.22	\$61,717.37	43.89%
Fruit Hill	100%	4.32	\$ 35,137	TD	\$16,492.60	\$10,947.24	\$7,696.72		\$0.00	0.00%
Alpine Estates	100%	1.74	\$ 2,256	TD	\$1,058.73	\$702.75	\$494.09		\$0.00	0.00%
Cranston	100%	3.83	\$ 13,035	TD	\$6,118.46	\$4,061.23	\$2,855.35		\$0.00	0.00%
Dean Estates	100%	1.44	\$ 18,908	TD	\$8,875.30	\$5,891.13	\$4,141.90		\$0.00	0.00%
Greenville	100%	2.46	\$ 12,328	TD	\$5,786.44	\$3,840.85	\$2,700.40		\$0.00	0.00%
Ashby Street	100%	0	\$ -	TD	\$0.00	\$0.00	\$0.00		\$0.00	#DIV/0!
<b>Atwood Avenue</b>	<b>100%</b>	<b>1.6</b>	<b>\$ 9,002</b>	<b>TD</b>	<b>\$4,225.39</b>	<b>\$2,804.67</b>	<b>\$1,971.89</b>		<b>\$0.00</b>	0.00%
Totals		94.44	\$ 771,941		\$257,823.60	\$188,439.99	\$19,860.35	\$6,812.76	\$299,004.70	
					33.40%	24.41%	2.57%	0.88%	38.73%	
Excluding Raw Water with no Maximum Day or Maximum Hour (Allocation Factor NP)					60.38%				38.73%	



**Schedule CW-S14B  
Allocations Factor Detail/Comparison**

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	Current	Proposed	Check
A	54.65%					1.00%	44.35%	Current		0.00%
A	55.11%					1.00%	43.89%	Proposed		0.00%

**Methodology: Allocate 1% to fire and split the remaining 99% between base and wholesale according to pro-forma consumption**

	Proposed	Current
Fire Protection	1.00%	1.00%
Remainder to be Split	99.00%	99.00%
Wholesale Pro-Forma Consumption	13,207,154	14,836,697
Retail Pro-Forma Consumption	16,584,161	18,279,662
Total	29,791,315	33,116,360
Wholesale Proportion	44.33%	44.80%
Retail Proportion	55.67%	55.20%
Total	100.00%	100.00%
Wholesale Allocation	43.89%	44.35%
Base Allocation	55.11%	54.65%

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	Current	Proposed	Check
AA	31.47%	20.77%				1.00%	46.76%	Current		0.00%
AA	31.60%	23.51%				1.00%	43.89%	Proposed		0.00%

**Methodology: 1% allocated to fire protection, remainder allocated to base, maximum day, and wholesale based on consumption**

	Proposed	Current		
Fire Protection	1.00%	1.00%		
Remainder to be Split	99.00%	99.00%		
Wholesale Pro-Forma Consumption	13,207,154	14,064,345	44.3%	47.2%
Retail Pro-Forma Consumption	16,584,161	15,712,061	55.7%	52.8%
Total	29,791,315	29,776,406		
Wholesale Proportion	44.33%	47.23%		
Retail Proportion	55.67%	52.77%		
Total	100.00%	100.00%		
Wholesale Allocation	43.89%	46.76%		
Remainder to be allocated to Base and Max Day	55.11%	52.24%		
Base Units of Service	35,921	43,047		
Max Day Units of Service	26,731	28,420		
Total	62,652.33	71,466.78		
Base Proportion	57.33%	60.23%		
Max Day Proportion	42.67%	39.77%		
Base Allocation	31.60%	31.47%		
Max Day Allocation	23.51%	20.77%		

**Schedule CW-S14B**  
**Allocations Factor Detail/Comparison**

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale		Check
P	47.08%	10.00%	0.00%	0.00%	0.00%	0.90%	42.02%	Current	0.00%
P	49.60%	10.00%				0.90%	39.50%	Proposed	0.00%

**Methodology: 10% allocated to maximum day, 90% allocated based on A**

	Proposed	Current
Allocation to Max Day	10.00%	10.00%
Remainder to be Allocated based on A	90.00%	90.00%
1% Allocated to Public Fire	0.90%	0.90%
Reminder to be Allocated to Base and Wholesale	89.10%	89.10%
Wholesale Pro-Forma Consumption	13,207,154	13,876,406
Retail Pro-Forma Consumption	16,584,161	15,545,910
Total	29,791,315	29,422,315
Wholesale Proportion	44.33%	47.16%
Retail Proportion	55.67%	52.84%
Total	100.00%	100.00%
Wholesale Allocation	39.50%	42.02%
Base Allocation	49.60%	47.08%

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale		Check
TD	46.50%	31.10%	22.40%					Current	0.00%
TD	46.94%	31.16%	21.91%					Proposed	0.00%

**Methodology: Allocation of Base, Max Day and Max Hour of Retail only**

	Proposed	Current
Base Demand (Retail Only)	35,921	42,592
Maximum Day (Retail Only)	23,843	28,482
Maximum Hour (Retail Only)	16,764	20,514
Base Allocation (Retail Only)	46.94%	46.50%
Maximum Day Allocation (Retail Only)	31.16%	31.10%
Maximum Hour Allocation (Retail Only)	21.91%	22.40%

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale		Check
X4	40.23%	16.71%	7.06%	8.12%	0.00%	0.06%	27.83%	Current	0.00%
X4	62.26%	9.06%	2.63%	5.84%	0.00%	3.28%	16.93%	Proposed	0.00%

**Schedule CW-S14B**

**Allocations Factor Detail/Comparison**

**Methodology: Allocation within a Particular Goup Based on the Relationship between all Other Items in the Group**

	Proposed	Current
Base, Capital Fund	-	846,739
Sum of Remaining Capital Fund Categories	13,487,550	6,398,767
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15562069
Base Allocation	62.26%	40.23%
Max Day, Capital Fund	-	\$ 2,569,207
Sum of Remaining Capital Fund Categories	1,962,510	2655709.509
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15,562,069
Max Day Allocation	9.06%	29.01%
Max Hour, Capital Fund	-	149203.8591
Sum of Remaining Capital Fund Categories	570,178	1,121,806
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15,562,069
Max Hour Allocation	2.63%	7.06%
Meters and Services, Capital Fund	-	371,971
Sum of Remaining Capital Fund Categories	1,264,347	1,091,095
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15,562,069
Meters and Services Allocation	5.84%	8.12%
Billing and Collection, Capital Fund	-	-
Sum of Remaining Capital Fund Categories	-	-
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15562069
Billing and Collection Allocation	0.00%	0.00%
Public Fire Protection, Capital Fund	-	8,570
Sum of Remaining Capital Fund Categories	709,610	2,720
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15562069
Public Fire Protection, Allocation	3.28%	0.06%
Wholesale, Capital Fund	-	720298.4594
Sum of Remaining Capital Fund Categories	3,667,873	\$ 4,291,972
Total for Capital Fund	\$ -	\$ 2,450,000
Total of All Other Capital	21,662,069	15562069
Wholesale, Allocation	16.93%	27.83%

**Schedule CW-S14B  
Allocations Factor Detail/Comparison**

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale		Check
Y	24.15%	13.40%	4.04%	20.98%	12.76%	1.67%	22.99%	Current	0.00%
Y	25.16%	12.93%	4.55%	21.30%	11.20%	4.65%	20.22%	Proposed	0.00%

**Methodology: Based on Labor related O&M Expenses.**

Proposed	Total	Base	MD	MH	M&S	B&C	PFP	Wholesale
Source of Supply Labor	1,116,126.27	615,109.38	0.00	0.00	0.00	0.00	0.00	11,161.26 489,855.63
Pumping Labor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
Water Treatment Plant Labor	2,506,581.27	792,018.53	589,385.79	0.00	0.00	0.00	0.00	25,065.81 1,100,111.14
T&D Labor	3,466,808.72	891,038.28	591,441.69	415,827.27	922,681.51	0.00	388,216.77	257,603.20
Customer Accounts Labor	2,046,384.02	0.00	0.00	0.00	1,023,192.01	1,023,192.01	0.00	0.00
Administration Labor	5,749,306.12	1,446,257.13	743,105.60	261,683.93	1,224,556.11	643,904.15	267,106.42	1,162,692.78

Proposed Allocation	Base	MD	MH	M&S	B&C	PFP	Wholesale
	25.16%	12.93%	4.55%	21.30%	11.20%	4.65%	20.22%

Current	Total	Base	MD	MH	M&S	B&C	PFP	Wholesale
Source of Supply Labor	\$ 750,591	\$ 392,625	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,506 350,460
Pumping Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Plant Labor	\$ 2,358,221	\$ 739,223	\$ 494,333	\$ -	\$ -	\$ -	\$ 23,582	\$ 1,101,082
T&D Labor	\$ 3,298,881	\$ 891,328	\$ 627,678	\$ 338,806	\$ 772,875	\$ 84,571	\$ 109,207	\$ 474,416
Customer Accounts Labor	\$ 1,968,504	\$ -	\$ -	\$ -	\$ 984,252	\$ 984,252	\$ -	\$ -
Administration Labor	\$ 5,120,545	\$ 1,236,810	\$ 685,909	\$ 207,119	\$ 1,074,169	\$ 653,394	\$ 85,765	\$ 1,177,379

Current Allocation	Base	MD	MH	M&S	B&C	PFP	Wholesale
	24.15%	13.40%	4.04%	20.98%	12.76%	1.67%	22.99%

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale		Check
Z	33.52%	16.91%	5.26%	10.87%	6.70%	1.51%	25.23%	Current	0.00%
Z	31.20%	13.46%	4.71%	16.45%	9.06%	3.62%	21.50%	Proposed	0.00%

**Methodology: Based on Total O&M expenses, except for Administrative & General**

Proposed	Total	Base	MD	MH	M&S	B&C	PFP	Wholesale
Source of Supply	2,158,681	1,189,673	0	0	0	0	0	21,587 947,422
Pumping	791,054	264,363	193,183	20,575	0	0	6,971	305,962
Water Treatment Plant	4,289,961	1,396,285	978,123	0	0	0	42,673	1,872,880
T&D	5,838,857	1,665,763	1,102,887	774,617	1,248,207	0	540,621	506,761
Customer Accounts	3,816,563	755,496	0	0	1,530,534	1,530,534	0	0

Proposed Allocation	Base	MD	MH	M&S	B&C	PFP	Wholesale
	31.20%	13.46%	4.71%	16.45%	9.06%	3.62%	21.50%

Current	Total	Base	MD	MH	M&S	B&C	PFP	Wholesale
Source of Supply	\$ 1,403,154	\$ 733,972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,032 655,150
Pumping	\$ 1,110,085	\$ 518,927	\$ 113,571	\$ -	\$ -	\$ -	\$ 10,014	\$ 467,572
Water Treatment Plant	\$ 4,705,839	\$ 1,692,591	\$ 1,004,092	\$ 103,819	\$ -	\$ -	\$ 56,358	\$ 1,848,978
T&D	\$ 6,671,221	\$ 2,304,123	\$ 1,503,997	\$ 714,401	\$ 803,492	\$ 84,571	\$ 159,636	\$ 1,101,000
Customer Accounts	\$ 3,372,372	\$ 536,948	\$ 297,780	\$ 89,919	\$ 1,072,471	\$ 1,072,471	\$ 20,559	\$ 282,226

Current Allocation	Base	MD	MH	M&S	B&C	PFP	Wholesale
	33.52%	16.91%	5.26%	10.87%	6.70%	1.51%	25.23%

**Schedule CW-S14B**  
**Allocations Factor Detail/Comparison**

**Methodology: 2% to Fire, Allocated to Base & Wholesale by Proportion of T&D Pipe in Inch Miles, Retail to Base, Max Day and Hour**

Factor	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	Proposed	Check
F	37.36%	24.80%	17.44%	0.00%	0.00%	2.00%	18.40%		0.00%
2% Allocated to Fire						2.00%			
Remainder to Be Allocated to Base and Wholesale	98.00%								
Wholesale Share of Unaccounted for Water	4.33%						18.77%		
Wholesale Allocation	4.24%						18.40%		
Remainder to be Allocated to Retail	93.76%						79.60%		
Base	46.94%						46.94%		
Max Day	31.16%						31.16%		
Max Hour	21.91%						21.91%		
Base Allocation	44.01%						37.36%		
Max Day Allocation	29.21%						24.80%		
Max Hour Allocation	20.54%						17.44%		

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>Transmission &amp; Distribution - Salaries &amp; Wages T&amp;D (M) - HM</b>								
FY 2010 Allocation		25.98%	17.24%	12.12%	29.68%	0.00%	8.60%	6.37%
FY 2011 Allocation		26.14%	17.35%	12.20%	24.25%	0.00%	12.34%	7.72%
FY 2012 Allocation		24.99%	16.59%	11.66%	25.91%	0.00%	12.66%	8.20%
<b>Average Allocation</b>		<b>25.70%</b>	<b>17.06%</b>	<b>11.99%</b>	<b>26.61%</b>	<b>0.00%</b>	<b>11.20%</b>	<b>7.43%</b>
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (O) - HOC</b>								
FY 2010 Allocation		37.72%	25.03%	17.60%	0.02%	0.00%	1.91%	17.72%
FY 2011 Allocation		35.59%	23.60%	16.62%	0.70%	0.00%	1.83%	21.65%
FY 2012 Allocation		37.31%	24.76%	17.41%	0.03%	0.00%	1.99%	18.49%
<b>Average Allocation</b>		<b>36.87%</b>	<b>24.47%</b>	<b>17.21%</b>	<b>0.25%</b>	<b>0.00%</b>	<b>1.91%</b>	<b>19.29%</b>
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (M) - HMC</b>								
FY 2010 Allocation		0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
FY 2011 Allocation		0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
FY 2012 Allocation		0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
<b>Average Allocation</b>		<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
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PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC  
FY 2012

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
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Transmission & Distribution - Salaries & Wages T&D (M)

		(Labor Costs)						
TD HYDRANT-REMOVAL T&D OPER	FP	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TD MAIN-REMOVAL T&D OPER	F	1,227	\$ 459	\$ 304	\$ 214	\$ -	\$ -	\$ 25
TD SERVICE-REMOVAL T&D OPER	C	15,752	\$ -	\$ -	\$ -	\$ 15,752	\$ -	\$ -
TD VALVE-REMOVAL T&D OPER	F	389	\$ 145	\$ 96	\$ 68	\$ -	\$ -	\$ 8
TD BLOWOFF-INSTALL IFR	F	2,303	\$ 860	\$ 571	\$ 402	\$ -	\$ -	\$ 46
TD HYDRANT-INSTALL IFR	FP	41,398	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,398
TD MAIN-INSTALL SECTION IFR	F	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TD BLOWOFF-REMOVAL IFR	F	519	\$ 194	\$ 129	\$ 91	\$ -	\$ -	\$ 10
TD HYDRANT-REMOVAL IFR	FP	37,882	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,882
TD MAIN-REMOVAL SECTION IFR	F	1,122	\$ 419	\$ 278	\$ 196	\$ -	\$ -	\$ 22
TD SERVICE-REMOVAL IFR	C	38,340	\$ -	\$ -	\$ -	\$ 38,340	\$ -	\$ -
TD VALVE-REMOVAL IFR	F	19,722	\$ 7,369	\$ 4,891	\$ 3,439	\$ -	\$ -	\$ 394
TD SERVICE-INSTALL 1" IFR	C	34,074	\$ -	\$ -	\$ -	\$ 34,074	\$ -	\$ -
TD SERVICE-INSTALL 1.5" IFR	C	1,130	\$ -	\$ -	\$ -	\$ 1,130	\$ -	\$ -
TD SERVICE-INSTALL 0.75" IFR	C	450	\$ -	\$ -	\$ -	\$ 450	\$ -	\$ -
TD VALVE-INSTALL 12" IFR	F	2,011	\$ 751	\$ 499	\$ 351	\$ -	\$ -	\$ 40
TD VALVE-INSTALL 6" IFR	F	9,574	\$ 3,577	\$ 2,374	\$ 1,669	\$ -	\$ -	\$ 191
TD VALVE-INSTALL 8" IFR	F	4,618	\$ 1,725	\$ 1,145	\$ 805	\$ -	\$ -	\$ 92
TD BLOWOFF/BYPASS-INSTALL NEW	F	1,739	\$ 650	\$ 431	\$ 303	\$ -	\$ -	\$ 35
TD VALVE-INSTALL 6" NEW	F	1,167	\$ 436	\$ 289	\$ 203	\$ -	\$ -	\$ 23
TD SERVICE-INSTALL 1" DOM/FIRE	C	22,931	\$ -	\$ -	\$ -	\$ 22,931	\$ -	\$ -
TD SERVICE-INSTALL 1.5"	C	7,263	\$ -	\$ -	\$ -	\$ 7,263	\$ -	\$ -
TD SERVICE-INSTALL 2" DOM/FIRE	C	11,747	\$ -	\$ -	\$ -	\$ 11,747	\$ -	\$ -
TD SERVICE-INSTALL 4" DOM/FIRE	C	9,148	\$ -	\$ -	\$ -	\$ 9,148	\$ -	\$ -
TD SERVICE-INSTALL 6" DOM/FIRE	C	8,867	\$ -	\$ -	\$ -	\$ 8,867	\$ -	\$ -
TD HYDRANT-INSTALL CUSTODIAN	FP	10,424	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,424
TD HYDRANT-INSTALL NEW	FP	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TD HYDRANT-RELOCATE EXISTING	FP	937	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 937
TD VALVE-EXERCISE (SCHEDULED)	F	45	\$ 17	\$ 11	\$ 8	\$ -	\$ -	\$ 1
TD VALVE-LOCATE	F	298	\$ 111	\$ 74	\$ 52	\$ -	\$ -	\$ 6
TD VALVE-ADJUST GATE BOX	F	26,284	\$ 9,821	\$ 6,519	\$ 4,583	\$ -	\$ -	\$ 526
TD VALVE-REPAIR/REPACK	F	30,577	\$ 11,425	\$ 7,584	\$ 5,332	\$ -	\$ -	\$ 612
TD MAIN-REPAIR LEAK ON A MAIN	F	47,270	\$ 17,662	\$ 11,724	\$ 8,243	\$ -	\$ -	\$ 945
TD BLOWOFF-REPAIR/LOCATE	F	1,450	\$ 542	\$ 360	\$ 253	\$ -	\$ -	\$ 29
TD SERVICE-CLOSE FOR REPAIR	C	721	\$ -	\$ -	\$ -	\$ 721	\$ -	\$ -
TD SERVICE-ADJUST BOX TO GRADE	C	8,182	\$ -	\$ -	\$ -	\$ 8,182	\$ -	\$ -

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
TD SERVICE-DIG UP CURBBOX	C	36,027 \$	- \$	- \$	- \$	36,027 \$	- \$	- \$
TD SERVICE-DIG UP FOR METER	C	1,797 \$	- \$	- \$	- \$	1,797 \$	- \$	- \$
TD SERVICE-LOCATE STOP	C	726 \$	- \$	- \$	- \$	726 \$	- \$	- \$
TD MAIN-BLOW OFF	F	3,403 \$	1,271 \$	844 \$	593 \$	- \$	68 \$	626 \$
TD SERVICE-REPAIR LEAK	C	57,001 \$	- \$	- \$	- \$	57,001 \$	- \$	- \$
TD SERVICE-REPLACE/REPAIR STOP	C	8,303 \$	- \$	- \$	- \$	8,303 \$	- \$	- \$
TD HYDRANT-MAINTENANCE	FP	2,730 \$	- \$	- \$	- \$	- \$	2,730 \$	- \$
TD HYDRANT-REPAIR	FP	13,779 \$	- \$	- \$	- \$	- \$	13,779 \$	- \$
TD COVER-REPLACE SERVICE/VALVE	C	2,574 \$	- \$	- \$	- \$	2,574 \$	- \$	- \$
TD LEAK-CHECK ON VL,WS,WM,HY	F	649 \$	242 \$	161 \$	113 \$	- \$	13 \$	119 \$
TD T&D-MISCELLANEOUS MAINT.	F	3,332 \$	1,245 \$	826 \$	581 \$	- \$	67 \$	613 \$
TD DIG SAFE PROGRAM	F	303,330 \$	113,338 \$	75,230 \$	52,892 \$	- \$	6,067 \$	55,803 \$
105 CT CHECK TRENCH	F	5,090 \$	1,902 \$	1,262 \$	888 \$	- \$	102 \$	936 \$
105RT REPAIR TRENCH	F	9,142 \$	3,416 \$	2,267 \$	1,594 \$	- \$	183 \$	1,682 \$
WATER QUALITY ISSUES	TD	11,777 \$	5,528 \$	3,669 \$	2,580 \$	- \$	- \$	- \$
LOCATE VALVE	F	15,149 \$	5,660 \$	3,757 \$	2,642 \$	- \$	303 \$	2,787 \$
EXERCISE VALVE	F	12,503 \$	4,672 \$	3,101 \$	2,180 \$	- \$	250 \$	2,300 \$
CHECK CONDITION OF VALVE	F	28,037 \$	10,476 \$	6,954 \$	4,889 \$	- \$	561 \$	5,158 \$
CHECK CONDITION OF GATE BOX	F	3,392 \$	1,268 \$	841 \$	592 \$	- \$	68 \$	624 \$
CHECK FOR NO RUSTY WATER	TD	8,872 \$	4,164 \$	2,764 \$	1,943 \$	- \$	- \$	- \$
CLOSE STOP-NO PMT	C	115 \$	- \$	- \$	- \$	115 \$	- \$	- \$
CLOSE STOP-NON USE	C	1,478 \$	- \$	- \$	- \$	1,478 \$	- \$	- \$
CLOSE STOP-REPAIR	C	39,060 \$	- \$	- \$	- \$	39,060 \$	- \$	- \$
OPEN STOP CLOSED-NON USE	C	681 \$	- \$	- \$	- \$	681 \$	- \$	- \$
OPEN STOP CLOSED-REPAIR	C	29,774 \$	- \$	- \$	- \$	29,774 \$	- \$	- \$
OPEN STOP-NON PAYMENTS	C	10,175 \$	- \$	- \$	- \$	10,175 \$	- \$	- \$
MARK OUT	F	22,655 \$	8,465 \$	5,619 \$	3,950 \$	- \$	453 \$	4,168 \$
CLOSE STOP-DEMOLITION	C	1,063 \$	- \$	- \$	- \$	1,063 \$	- \$	- \$
CHECK POSITION AND CONDITION OF STOP	C	13,417 \$	- \$	- \$	- \$	13,417 \$	- \$	- \$
CHECK CONDITION-CURB BOX	C	1,812 \$	- \$	- \$	- \$	1,812 \$	- \$	- \$
CHECK WATER QUALITY ISSUES	TD	27,117 \$	12,728 \$	8,449 \$	5,940 \$	- \$	- \$	- \$
METER MAINTENANCE	C	65 \$	- \$	- \$	- \$	65 \$	- \$	- \$
METER WORK-SET JUMP PIPE	C	229 \$	- \$	- \$	- \$	229 \$	- \$	- \$
CHECK CONDITION OF HYDRANT	FP	36,198 \$	- \$	- \$	- \$	- \$	36,198 \$	- \$
OPEN/CLOSE/FLUSH HYDRANT	FP	23,025 \$	- \$	- \$	- \$	- \$	23,025 \$	- \$
ASSIST A TRUCK	X1	5,393 \$	1,386 \$	920 \$	647 \$	1,435 \$	604 \$	401 \$
REPLACE COVERS	F	2,963 \$	1,107 \$	735 \$	517 \$	- \$	59 \$	545 \$
YARD WORK	TD	869 \$	408 \$	271 \$	190 \$	- \$	- \$	- \$
CHECK LEAK	F	36,186 \$	13,521 \$	8,975 \$	6,310 \$	- \$	724 \$	6,657 \$
T&D MISC.	X1	23,092 \$	5,935 \$	3,939 \$	2,770 \$	6,146 \$	2,586 \$	1,716 \$
SHUT DOWN NOTIFICATIONS	C	2,283 \$	- \$	- \$	- \$	2,283 \$	- \$	- \$
LEAK DETECTION	F	3,825 \$	1,429 \$	949 \$	667 \$	- \$	76 \$	704 \$
TRANSPORTATION AND DELIVERY	X1	290 \$	75 \$	50 \$	35 \$	77 \$	33 \$	22 \$



Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
LAG TIME	200,553	\$ 94,137	\$ 62,485	\$ 43,931	\$ -	\$ -	\$ -	\$ -
EQUIPMENT MAINTENANCE	399	\$ 103	\$ 68	\$ 48	\$ 106	\$ -	\$ 45	\$ 30
TRENCH REPAIR	17,672	\$ 6,603	\$ 4,383	\$ 3,082	\$ -	\$ -	\$ 353	\$ 3,251
CHECK TRENCH	11,742	\$ 4,387	\$ 2,912	\$ 2,047	\$ -	\$ -	\$ 235	\$ 2,160
EXERCISE VALVE	289	\$ 108	\$ 72	\$ 50	\$ -	\$ -	\$ 6	\$ 53
	\$ 1,439,592	\$ 359,738	\$ 238,782	\$ 167,881	\$ 372,951	\$ -	\$ 182,233	\$ 118,008
<b>HM</b>		<b>24.99%</b>	<b>16.59%</b>	<b>11.66%</b>	<b>25.91%</b>	<b>0.00%</b>	<b>12.66%</b>	<b>8.20%</b>

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

	Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (O)</b>									
Unspecified	X2	\$ 6,929	\$ 2,555	\$ 1,695	\$ 1,193	\$ 17	\$ -	\$ 133	\$ 1,336
New Service Applications	C	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uniforms	X2	\$ 43,372	\$ 15,992	\$ 10,612	\$ 7,466	\$ 108	\$ -	\$ 829	\$ 8,365
Equipment	X2	\$ 5,858	\$ 2,160	\$ 1,433	\$ 1,008	\$ 15	\$ -	\$ 112	\$ 1,130
Repair Leak on Service	C	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Road Restoration - Contractor	F	\$ 365,283	\$ 136,486	\$ 90,595	\$ 63,695	\$ -	\$ -	\$ 7,306	\$ 67,201
Road Restoration - Force Work	F	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Markouts/Dig Safe	F	\$ 33,813	\$ 12,634	\$ 8,386	\$ 5,896	\$ -	\$ -	\$ 676	\$ 6,221
Contractor Repair Leak Distribution Main	TD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Switchboard Monitoring	X2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police Details	F	\$ 98,779	\$ 36,908	\$ 24,498	\$ 17,224	\$ -	\$ -	\$ 1,976	\$ 18,172
Pages, cell phones	X2	\$ 5,454	\$ 2,011	\$ 1,335	\$ 939	\$ 14	\$ -	\$ 104	\$ 1,052
<b>Total (used for Allocation factor HOC)</b>		<b>\$ 559,487</b>	<b>\$ 208,747</b>	<b>\$ 138,555</b>	<b>\$ 97,421</b>	<b>\$ 154</b>	<b>\$ -</b>	<b>\$ 11,136</b>	<b>\$ 103,476</b>
<b>Calculated Factor HOC</b>			<b>37.31%</b>	<b>24.76%</b>	<b>17.41%</b>	<b>0.03%</b>	<b>0.00%</b>	<b>1.99%</b>	<b>18.49%</b>
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (M)</b>									
Repair Leak on Service	C	\$ 36,120	\$ -	\$ -	\$ -	\$ 36,120	\$ -	\$ -	\$ -
Plumbing Maintenance	X2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total (used for Allocation factor HMC)</b>		<b>\$ 36,120</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 36,120</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Calculated Factor HMC</b>			<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

		Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
		Allocation Factor	Total	3	4	5	6	7	8	9
		Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>PWSB Response to KCWA 1-13b</b>										
<b>Update of Factors HM, HOC and HMC</b>										
<b>FY 2011</b>										
<b>Transmission &amp; Distribution - Salaries &amp; Wages T&amp;D (M)</b>										
TD COVER-REPLACE SERVICE/VALVE	C	255	\$0	\$0	\$0	\$255	\$0	\$0	\$0	\$0
TD HYDRANT-INSTALL CUSTODIAN	FP	1,325	\$0	\$0	\$0	\$0	\$0	\$1,325	\$0	\$0
TD HYDRANT-INSTALL IFR	FP	38,351	\$0	\$0	\$0	\$0	\$0	\$38,351	\$0	\$0
TD HYDRANT-MAINTENANCE	FP	1,904	\$0	\$0	\$0	\$0	\$0	\$1,904	\$0	\$0
TD HYDRANT-REMOVAL IFR	FP	38,626	\$0	\$0	\$0	\$0	\$0	\$38,626	\$0	\$0
TD HYDRANT-REPAIR	FP	16,838	\$0	\$0	\$0	\$0	\$0	\$16,838	\$0	\$0
TD MAIN-BLOW OFF	F	2,905	\$1,085	\$720	\$507	\$0	\$0	\$58	\$534	\$0
TD MAIN-REMOVAL T&D OPER	F		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TD MAIN-REPAIR LEAK ON A MAIN	F	66,712	\$24,927	\$16,545	\$11,633	\$0	\$0	\$1,334	\$12,273	\$0
TD SERVICE-ADJUST BOX TO GRADE	C	5,824	\$0	\$0	\$0	\$5,824	\$0	\$0	\$0	\$0
TD SERVICE-DIG UP CURBBOX	C	30,590	\$0	\$0	\$0	\$30,590	\$0	\$0	\$0	\$0
TD SERVICE-DIG UP FOR METER	C	2,207	\$0	\$0	\$0	\$2,207	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 1" DOM/FIRE	C	25,691	\$0	\$0	\$0	\$25,691	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 1" IFR	C	23,100	\$0	\$0	\$0	\$23,100	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 1.5"	C	3,830	\$0	\$0	\$0	\$3,830	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 1.5" IFR	C	1,013	\$0	\$0	\$0	\$1,013	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 12"	C	1,899	\$0	\$0	\$0	\$1,899	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 2" DOM/FIRE	C	12,084	\$0	\$0	\$0	\$12,084	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 2" IFR	C	1,684	\$0	\$0	\$0	\$1,684	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 4" DOM/FIRE	C	13,991	\$0	\$0	\$0	\$13,991	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 6" DOM/FIRE	C	11,955	\$0	\$0	\$0	\$11,955	\$0	\$0	\$0	\$0
TD SERVICE-INSTALL 8" DOM/FIRE	C	8,398	\$0	\$0	\$0	\$8,398	\$0	\$0	\$0	\$0
TD SERVICE-LOCATE STOP	C	84	\$0	\$0	\$0	\$84	\$0	\$0	\$0	\$0
TD SERVICE-REMOVAL FIRE OPER	C	1,459	\$0	\$0	\$0	\$1,459	\$0	\$0	\$0	\$0
TD SERVICE-REMOVAL IFR	F	20,853	\$7,792	\$5,172	\$3,636	\$0	\$0	\$417	\$3,836	\$0
TD SERVICE-REMOVAL T&D OPER	F	9,564	\$3,574	\$2,372	\$1,668	\$0	\$0	\$191	\$1,760	\$0
TD SERVICE-REPAIR LEAK	C	57,476	\$0	\$0	\$0	\$57,476	\$0	\$0	\$0	\$0
TD SERVICE-REPLACE/REPAIR STOP	C	7,832	\$0	\$0	\$0	\$7,832	\$0	\$0	\$0	\$0
TD T&D-MISCELLANEOUS MAINT.	F	3,679	\$1,375	\$913	\$642	\$0	\$0	\$74	\$677	\$0
TD VALVE-ADJUST GATE BOX	F	14,751	\$5,512	\$3,658	\$2,572	\$0	\$0	\$295	\$2,714	\$0
TD VALVE-INSTALL 6" IFR	F	4,901	\$1,831	\$1,216	\$855	\$0	\$0	\$98	\$902	\$0
TD VALVE-INSTALL 8" IFR	F	642	\$240	\$159	\$112	\$0	\$0	\$13	\$118	\$0
TD VALVE-LOCATE	F	288	\$108	\$71	\$50	\$0	\$0	\$6	\$53	\$0
TD VALVE-REMOVAL IFR	F	6,442	\$2,407	\$1,598	\$1,123	\$0	\$0	\$129	\$1,185	\$0
TD VALVE-REPAIR/REPACK	F	11,749	\$4,390	\$2,914	\$2,049	\$0	\$0	\$235	\$2,161	\$0
Dig Safe Program	F	228,959	\$85,549	\$56,785	\$39,924	\$0	\$0	\$4,579	\$42,121	\$0
105CT CHECK TRENCH	F	2,427	\$907	\$602	\$423	\$0	\$0	\$49	\$447	\$0

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	
REPAIR TRENCH	F	4,102	\$1,533	\$1,017	\$715	\$0	\$0	\$82	\$755
LOCATE VALVE	F	7,523	\$2,811	\$1,866	\$1,312	\$0	\$0	\$150	\$1,384
EXERCISE VALVE	F	14,222	\$5,314	\$3,527	\$2,480	\$0	\$0	\$284	\$2,616
CHECK CONDITION OF VALVE	F	17,151	\$6,408	\$4,254	\$2,991	\$0	\$0	\$343	\$3,155
CHECK CONDITION OF GATE BOX	F	1,143	\$427	\$284	\$199	\$0	\$0	\$23	\$210
CHECK FOR NO RUSTY WATER	TD	11,063	\$5,193	\$3,447	\$2,423	\$0	\$0	\$0	\$0
CLOSE STOP-NO PAYMENT	C	324	\$0	\$0	\$0	\$324	\$0	\$0	\$0
CLOSE STOP-NONUSE	C	1,964	\$0	\$0	\$0	\$1,964	\$0	\$0	\$0
CLOSE STOP REPAIR	C	42,841	\$0	\$0	\$0	\$42,841	\$0	\$0	\$0
CLOSE STOP SEASONAL	C	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPEN STOP WAS CLOSED NON-USE	C	125	\$0	\$0	\$0	\$125	\$0	\$0	\$0
OPEN STOP CLOSED REPAIR	C	27,088	\$0	\$0	\$0	\$27,088	\$0	\$0	\$0
OPEN STOP NON-PAYMENTS	C	6,315	\$0	\$0	\$0	\$6,315	\$0	\$0	\$0
MARK OUT	F	26,358	\$9,849	\$6,537	\$4,596	\$0	\$0	\$527	\$4,849
OPEN STOP SEASONAL	C	314	\$0	\$0	\$0	\$314	\$0	\$0	\$0
CLOSE STOP DEMOLITION	C	307	\$0	\$0	\$0	\$307	\$0	\$0	\$0
CHECK POSITION AND CONDITION OF STOP	C	9,740	\$0	\$0	\$0	\$9,740	\$0	\$0	\$0
CHECK CONDITION OF CURB BOX	C	1,624	\$0	\$0	\$0	\$1,624	\$0	\$0	\$0
CHECK WATER QUALITY ISSUES	TD	19,001	\$8,919	\$5,920	\$4,162	\$0	\$0	\$0	\$0
METER MAINTENANCE	C	102	\$0	\$0	\$0	\$102	\$0	\$0	\$0
METER WORK SET JUMP PIPE	C	163	\$0	\$0	\$0	\$163	\$0	\$0	\$0
CHECK CONDITION OF HYDRANT	FP	35,040	\$0	\$0	\$0	\$0	\$0	\$35,040	\$0
OPEN/CLOSE/FLUSH HYDRANT	FP	11,959	\$0	\$0	\$0	\$0	\$0	\$11,959	\$0
ASSIST A TRUCK	X1	3,440	\$884	\$587	\$413	\$916	\$0	\$385	\$256
REPLACE COVERS	F	2,793	\$1,044	\$693	\$487	\$0	\$0	\$56	\$514
YARD WORK	TD	39,704	\$18,637	\$12,370	\$8,697	\$0	\$0	\$0	\$0
CHECK LEAK	F	39,160	\$14,632	\$9,712	\$6,828	\$0	\$0	\$783	\$7,204
T&D MISCELLANEOUS	X1	33,416	\$8,589	\$5,701	\$4,008	\$8,894	\$0	\$3,742	\$2,483
SHUT DOWN NOTIFICATIONS	C	1,729	\$0	\$0	\$0	\$1,729	\$0	\$0	\$0
LEAK DETECTION	F	6,873	\$2,568	\$1,705	\$1,199	\$0	\$0	\$137	\$1,264
TRANSPORTATION AND DELIVERY	X1	485	\$125	\$83	\$58	\$129	\$0	\$54	\$36
LAG TIME	TD	208,282	\$97,765	\$64,893	\$45,625	\$0	\$0	\$0	\$0
TRENCH REPAIR	F	18,617	\$6,956	\$4,617	\$3,246	\$0	\$0	\$372	\$3,425
CHECK TRENCH	F	12,972	\$4,847	\$3,217	\$2,262	\$0	\$0	\$259	\$2,386
SNOW REMOVAL	X1	601	\$154	\$102	\$72	\$160	\$0	\$67	\$45
		<b>1,286,831</b>	<b>336,349.74</b>	<b>223,257.81</b>	<b>156,966.76</b>	<b>312,105.33</b>	<b>0.00</b>	<b>158,787.26</b>	<b>99,363.88</b>
Calculated Factor HM	<b>HM</b>		<b>26.14%</b>	<b>17.35%</b>	<b>12.20%</b>	<b>24.25%</b>	<b>0.00%</b>	<b>12.34%</b>	<b>7.72%</b>

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

	Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (O)</b>									
Unspecified	X2	1,053	\$388	\$258	\$181	\$3	\$0	\$20	\$203
New Service Applications	C		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uniforms	X2	44,798	\$16,518	\$10,961	\$7,711	\$112	\$0	\$857	\$8,640
Equipment	X2	9,916	\$3,656	\$2,426	\$1,707	\$25	\$0	\$190	\$1,912
Repair Leak on Service	C		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Road Restoration - Contractor	F	179,156	\$66,941	\$44,433	\$31,240	\$0	\$0	\$3,583	\$32,959
Road Restoration - Force Work	F		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Markouts/Dig Safe	F	37,311	\$13,941	\$9,254	\$6,506	\$0	\$0	\$746	\$6,864
Contractor Repair Leak Distribution Main	TD	26,444	\$12,412	\$8,239	\$5,793	\$0	\$0	\$0	\$0
Switchboard Monitoring	X2		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Police Details	F	68,521	\$25,603	\$16,994	\$11,948	\$0	\$0	\$1,370	\$12,606
Pages, cell phones	X2	9,197	\$3,391	\$2,250	\$1,583	\$23	\$0	\$176	\$1,774
<b>Total (used for Allocation factor HOC)</b>		<b>376,395</b>	<b>\$142,850</b>	<b>\$94,815</b>	<b>\$66,668</b>	<b>\$162</b>	<b>\$0</b>	<b>\$6,942</b>	<b>\$64,958</b>
	<b>Calculated Factor HOC</b>	<b>HOC</b>	<b>35.59%</b>	<b>23.60%</b>	<b>16.62%</b>	<b>0.70%</b>	<b>0.00%</b>	<b>1.83%</b>	<b>21.65%</b>
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (M)</b>									
Repair Leak on Service	C	20,043	\$0	\$0	\$0	\$20,043	\$0	\$0	\$0
Plumbing Maintenance	X2	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total (used for Allocation factor HMC)</b>		<b>20,043</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 20,043</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	<b>Calculated Factor HMC</b>	<b>HMC</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

		Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
PWSB Response to KCWA 1-13b Update of Factors HM, HOC and HMC FY 2010		Allocation		3	4	5	6	7	8	9
	Factor	<b>Total</b>	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	
TD BLOWOFF/BYPASS-INSTALL NEW	F	\$905	\$338	\$225	\$158	\$0	\$0	\$18	\$167	
TD COVER-REPLACE SERVICE/VALVE	C	\$229	\$0	\$0	\$0	\$229	\$0	\$0	\$0	
TD HYDRANT-INSTALL CUSTODIAN	FP	\$7,178	\$0	\$0	\$0	\$0	\$0	\$7,178	\$0	
TD HYDRANT-INSTALL IFR	FP	\$22,244	\$0	\$0	\$0	\$0	\$0	\$22,244	\$0	
TD HYDRANT-INSTALL NEW	FP	\$3,122	\$0	\$0	\$0	\$0	\$0	\$3,122	\$0	
TD HYDRANT-MAINTENANCE	FP	\$1,776	\$0	\$0	\$0	\$0	\$0	\$1,776	\$0	
TD HYDRANT-REMOVAL IFR	FP	\$22,675	\$0	\$0	\$0	\$0	\$0	\$22,675	\$0	
TD HYDRANT-REMOVAL T&D OPER	FP	\$412	\$0	\$0	\$0	\$0	\$0	\$412	\$0	
TD HYDRANT-REPAIR	FP	\$12,249	\$0	\$0	\$0	\$0	\$0	\$12,249	\$0	
TD LEAK DETECTION	F	\$40	\$15	\$10	\$7	\$0	\$0	\$1	\$7	
TD LEAK-CHECK ON VL,WS,WM,HY	F	\$40	\$15	\$10	\$7	\$0	\$0	\$1	\$7	
TD MAIN-BLOW OFF	F	\$3,642	\$1,361	\$903	\$635	\$0	\$0	\$73	\$670	
TD MAIN-INSTALL 6" NEW	F	\$926	\$346	\$230	\$162	\$0	\$0	\$19	\$170	
TD MAIN-REPAIR LEAK ON A MAIN	F	\$53,416	\$19,959	\$13,248	\$9,314	\$0	\$0	\$1,068	\$9,827	
TD SERVICE- WATER QUAL'Y ISSUE	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TD SERVICE-ADJUST BOX TO GRADE	C	\$5,846	\$0	\$0	\$0	\$5,846	\$0	\$0	\$0	
TD SERVICE-CLOSE FOR REPAIR	C	\$283	\$0	\$0	\$0	\$283	\$0	\$0	\$0	
TD SERVICE-DIG UP CURBBOX	C	\$76,805	\$0	\$0	\$0	\$76,805	\$0	\$0	\$0	
TD SERVICE-DIG UP FOR METER	C	\$26,569	\$0	\$0	\$0	\$26,569	\$0	\$0	\$0	
TD SERVICE-INSTALL 1" DOM/FIRE	C	\$21,115	\$0	\$0	\$0	\$21,115	\$0	\$0	\$0	
TD SERVICE-INSTALL 1" IFR	C	\$25,254	\$0	\$0	\$0	\$25,254	\$0	\$0	\$0	
TD SERVICE-INSTALL 1.5"	C	\$7,442	\$0	\$0	\$0	\$7,442	\$0	\$0	\$0	
TD SERVICE-INSTALL 1.5" IFR	C	\$1,547	\$0	\$0	\$0	\$1,547	\$0	\$0	\$0	
TD SERVICE-INSTALL 12"	C	\$442	\$0	\$0	\$0	\$442	\$0	\$0	\$0	
TD SERVICE-INSTALL 2" DOM/FIRE	C	\$13,076	\$0	\$0	\$0	\$13,076	\$0	\$0	\$0	
TD SERVICE-INSTALL 2" IFR	C	\$426	\$0	\$0	\$0	\$426	\$0	\$0	\$0	
TD SERVICE-INSTALL 4" DOM/FIRE	C	\$16,825	\$0	\$0	\$0	\$16,825	\$0	\$0	\$0	
TD SERVICE-INSTALL 6" DOM/FIRE	C	\$10,735	\$0	\$0	\$0	\$10,735	\$0	\$0	\$0	
TD SERVICE-INSTALL 8" DOM/FIRE	C	\$2,077	\$0	\$0	\$0	\$2,077	\$0	\$0	\$0	
TD SERVICE-LOCATE STOP	C	\$1,795	\$0	\$0	\$0	\$1,795	\$0	\$0	\$0	
TD SERVICE-NO/RUSTY/POOR WATER	C	\$83	\$0	\$0	\$0	\$83	\$0	\$0	\$0	
TD SERVICE-REMOVAL IFR	C	\$19,249	\$0	\$0	\$0	\$19,249	\$0	\$0	\$0	
TD SERVICE-REMOVAL T&D OPER	C	\$9,466	\$0	\$0	\$0	\$9,466	\$0	\$0	\$0	
TD SERVICE-REPAIR LEAK	C	\$51,231	\$0	\$0	\$0	\$51,231	\$0	\$0	\$0	
TD SERVICE-REPLACE/REPAIR STOP	C	\$3,234	\$0	\$0	\$0	\$3,234	\$0	\$0	\$0	
TD T&D-MISCELLANEOUS MAINT.	F	\$1,330	\$497	\$330	\$232	\$0	\$0	\$27	\$245	
TD TRENCH-CHECK (IFR)	F	\$76	\$28	\$19	\$13	\$0	\$0	\$2	\$14	
TD VALVE-ADJUST GATE BOX	F	\$11,186	\$4,180	\$2,774	\$1,951	\$0	\$0	\$224	\$2,058	

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale	
TD VALVE-EXERCISE (SCHEDULED)	F	\$642	\$240	\$159	\$112	\$0	\$0	\$13	\$118
TD VALVE-INSTALL 12" IFR	F	\$1,335	\$499	\$331	\$233	\$0	\$0	\$27	\$246
TD VALVE-INSTALL 6" IFR	F	\$14,323	\$5,352	\$3,552	\$2,498	\$0	\$0	\$286	\$2,635
TD VALVE-INSTALL 6" NEW	F	\$1,802	\$673	\$447	\$314	\$0	\$0	\$36	\$331
TD VALVE-INSTALL 8" IFR	F	\$2,406	\$899	\$597	\$420	\$0	\$0	\$48	\$443
TD VALVE-REMOVAL IFR	F	\$14,991	\$5,601	\$3,718	\$2,614	\$0	\$0	\$300	\$2,758
TD VALVE-REPAIR/REPACK	F	\$1,012	\$378	\$251	\$176	\$0	\$0	\$20	\$186
105CT CHECK TRENCH	F	\$1,549	\$579	\$384	\$270	\$0	\$0	\$31	\$285
REPAIR TRENCH	F	\$2,296	\$858	\$569	\$400	\$0	\$0	\$46	\$422
LOCATE VALVE	F	\$10,390	\$3,882	\$2,577	\$1,812	\$0	\$0	\$208	\$1,911
EXERCISE VALVE	F	\$16,656	\$6,224	\$4,131	\$2,904	\$0	\$0	\$333	\$3,064
CHECK CONDITION OF VALVE	F	\$30,490	\$11,393	\$7,562	\$5,317	\$0	\$0	\$610	\$5,609
CHECK CONDITION OF GATE BOX	F	\$2,923	\$1,092	\$725	\$510	\$0	\$0	\$58	\$538
CHECK FOR NO RUSTY WATER	TD	\$7,193	\$3,376	\$2,241	\$1,576	\$0	\$0	\$0	\$0
CLOSE STOP-NO PAYMENT	C	\$231	\$0	\$0	\$0	\$231	\$0	\$0	\$0
CLOSE STOP-NONUSE	C	\$1,968	\$0	\$0	\$0	\$1,968	\$0	\$0	\$0
CLOSE STOP REPAIR	C	\$40,751	\$0	\$0	\$0	\$40,751	\$0	\$0	\$0
OPEN STOP WAS CLOSED NON-USE	C	\$290	\$0	\$0	\$0	\$290	\$0	\$0	\$0
OPEN STOP CLOSED REPAIR	C	\$28,651	\$0	\$0	\$0	\$28,651	\$0	\$0	\$0
OPEN STOP NON-PAYMENTS	C	\$11,089	\$0	\$0	\$0	\$11,089	\$0	\$0	\$0
MARK OUT	F	\$173,831	\$64,951	\$43,112	\$30,311	\$0	\$0	\$3,477	\$31,979
OPEN STOP SEASONAL	C	\$105	\$0	\$0	\$0	\$105	\$0	\$0	\$0
CLOSE STOP DEMOLITION	C	\$821	\$0	\$0	\$0	\$821	\$0	\$0	\$0
CHECK POSITION AND CONDITION OF STOP	C	\$3,422	\$0	\$0	\$0	\$3,422	\$0	\$0	\$0
CHECK CONDITION OF CURB BOX	C	\$3,246	\$0	\$0	\$0	\$3,246	\$0	\$0	\$0
CHECK WATER QUALITY ISSUES	TD	\$19,335	\$9,076	\$6,024	\$4,235	\$0	\$0	\$0	\$0
METER WORK SET JUMP PIPE	C	\$278	\$0	\$0	\$0	\$278	\$0	\$0	\$0
CHECK CONDITION OF HYDRANT	FP	\$22,257	\$0	\$0	\$0	\$0	\$0	\$22,257	\$0
OPEN/CLOSE/FLUSH HYDRANT	FP	\$10,197	\$0	\$0	\$0	\$0	\$0	\$10,197	\$0
ASSIST A TRUCK	X1	\$2,866	\$737	\$489	\$344	\$763	\$0	\$321	\$213
REPLACE COVERS	F	\$2,847	\$1,064	\$706	\$496	\$0	\$0	\$57	\$524
YARD WORK	TD	\$85,070	\$39,931	\$26,505	\$18,635	\$0	\$0	\$0	\$0
CHECK LEAK	F	\$35,821	\$13,384	\$8,884	\$6,246	\$0	\$0	\$716	\$6,590
T&D MISCELLANEOUS	X1	\$28,244	\$7,259	\$4,818	\$3,388	\$7,517	\$0	\$3,163	\$2,099
SHUT DOWN NOTIFICATIONS	C	\$2,859	\$0	\$0	\$0	\$2,859	\$0	\$0	\$0
LEAK DETECTION	F	\$9,765	\$3,648	\$2,422	\$1,703	\$0	\$0	\$195	\$1,796
TRANSPORTATION AND DELIVERY	X1	\$594	\$153	\$101	\$71	\$158	\$0	\$66	\$44
LAG TIME	TD	\$251,623	\$118,108	\$78,396	\$55,118	\$0	\$0	\$0	\$0
TRENCH REPAIR	F	\$30,648	\$11,451	\$7,601	\$5,344	\$0	\$0	\$613	\$5,638
CHECK TRENCH	F	\$23,892	\$8,927	\$5,925	\$4,166	\$0	\$0	\$478	\$4,395
		\$1,333,656	346,473.65	229,977.73	161,691.36	395,878.02	0.00	114,644.09	84,990.93
	HM		25.98%	17.24%	12.12%	29.68%	0.00%	8.60%	6.37%

Schedule CW-S14C  
PWSB Response to KCWA 1-13b  
Update of Factors HM, HOC and HMC

	Allocation Factor	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection	Wholesale
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (O)</b>									
Unspecified	X2	\$5,261	\$1,940	\$1,287	\$906	\$13	\$0	\$101	\$1,015
New Service Applications	C		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uniforms	X2	\$39,126	\$14,427	\$9,573	\$6,735	\$98	\$0	\$748	\$7,546
Equipment	X2		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repair Leak on Service	C		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Road Restoration - Contractor	F	\$611,183	\$228,366	\$151,582	\$106,573	\$0	\$0	\$12,224	\$112,438
Road Restoration - Force Work	F		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Markouts/Dig Safe	F	\$41,858	\$15,640	\$10,381	\$7,299	\$0	\$0	\$837	\$7,701
Contractor Repair Leak Distribution Main	TD	\$33,246	\$15,605	\$10,358	\$7,283	\$0	\$0	\$0	\$0
Switchboard Monitoring	X2		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Police Details	F	\$85,247	\$31,852	\$21,142	\$14,865	\$0	\$0	\$1,705	\$15,683
Pages, cell phones	X2	\$11,252	\$4,149	\$2,753	\$1,937	\$28	\$0	\$215	\$2,170
<b>Total (used for Allocation factor HOC)</b>		<b>\$827,171</b>	<b>\$311,978</b>	<b>\$207,076</b>	<b>\$145,596</b>	<b>\$139</b>	<b>\$0</b>	<b>\$15,830</b>	<b>\$146,552</b>
<b>HOC</b>			<b>37.72%</b>	<b>25.03%</b>	<b>17.60%</b>	<b>0.02%</b>	<b>0.00%</b>	<b>1.91%</b>	<b>17.72%</b>
<b>Transmission &amp; Distribution - Contract Services Other T&amp;D (M)</b>									
Repair Leak on Service	C	\$36,120	\$0	\$0	\$0	\$36,120	\$0	\$0	\$0
Plumbing Maintenance	X2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total (used for Allocation factor HMC)</b>		<b>\$36,120</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$36,120</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>HMC</b>			<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Calculated Factor HMC</b>									



**Schedule CW-S15  
Summary of Cost Allocations**

**Summary of Costs to be Recovered Through Rates**  
Rate Year Ending December 31, 2014

	Total	Base	Maximum Day	Maximum Hour	Meters	Billing & Collection	Fire Protection	Wholesale
Net Operations and Maintenance Expense	36,592,403	12,070,791	4,181,182	1,470,518	5,560,683	3,027,782	1,314,240	8,967,208
Capital Expense	\$ 21,662,069	\$ 13,487,550	\$ 1,962,510	\$ 570,178	\$ 1,264,347	\$ -	\$ 709,610	\$ 3,667,873
City Services Expense	\$ 839,167	\$ 261,835	\$ 112,957	\$ 39,497	\$ 138,018	\$ 76,020	\$ 30,390	\$ 180,449
Property Taxes Expense	\$ 6,549,011	\$ 3,560,695	\$ 67,832	\$ 47,691	\$ -	\$ -	\$ 68,225	\$ 2,804,569
<b>Total Expenses Allocated</b>	<b>65,642,650</b>	<b>29,380,871</b>	<b>6,324,481</b>	<b>2,127,883</b>	<b>6,963,048</b>	<b>3,103,802</b>	<b>2,122,465</b>	<b>15,620,099</b>
Less: Miscellaneous Revenues	\$ (1,179,169)	\$ (525,908)	\$ (72,325)	\$ (27,942)	\$ (386,714)	\$ (140,058)	\$ (621)	\$ (25,601)
Plus: Net Operating Revenue Allowance	\$ 1,289,270	\$ 577,099	\$ 125,043	\$ 41,999	\$ 131,527	\$ 59,275	\$ 42,437	\$ 311,890
<b>Net Revenue Requirement</b>	<b>65,752,750</b>	<b>29,432,062</b>	<b>6,377,200</b>	<b>2,141,940</b>	<b>6,707,861</b>	<b>3,023,019</b>	<b>2,164,281</b>	<b>15,906,388</b>
Total Revenue Reserve	\$1,289,269.62							
Restricted (Stabilization Fund)	\$859,513.08	66.67%						
Unrestricted Operating Reserve	\$429,756.54	33.33%						
Current (Restricted) Revenue Reserve Fundir	\$1,113,852.00							
Necessary (Restricted) Funding	\$859,513.08							
Rate Year Adjustment	(\$254,338.92)							

**Schedule CW-S16  
Units of Service**

**Units of Service**

	Base		Maximum Day			Maximum Hour			Equivalent	
	Annual Use (HCF)	Average Rate (HCF/Day)	Demand Factor	Total Capacity (HCF/Day)	Extra Capacity (HCF/Day)	Demand Factor	Total Capacity (HCF/Day)	Extra Capacity (HCF/Day)	Meters & Services (Equivalent Meters)	Bills
<b><u>Retail</u></b>		366								
Residential	8,574,863	23,429	1.7	39,829	16,400	2.2	51,543	11,714.29		
Commercial	4,381,008	11,970	1.6	19,152	7,182	2	23,940	4,787.99		
Industrial	191,315	523	1.5	784	261	2	1,045	261.36		
Fire Protection				2888	2888		11551	8663		
<b>Total Retail</b>	<b>13,147,187</b>	<b>35,921</b>		<b>62,652</b>	<b>26,731</b>		<b>88,079</b>	<b>25,427</b>	<b>122,941.70</b>	<b>296,840</b>
<b><u>Wholesale</u></b>										
Wholesale	13,051,679	35,660.32	1.7	60,623	24,962	2.15	76669.70	16,047		
<b>Total</b>	<b>26,198,865</b>	<b>71,581.60</b>		<b>123,274.88</b>	<b>51,693.28</b>		<b>164,748.77</b>	<b>41,473.89</b>	<b>122,941.70</b>	<b>296,840.00</b>

**Schedule CW-S17**  
**Unit Cost of Service**

Unit Costs  
Rate Year Ending December 31, 2014

	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection
Retail Units of Service							
Number		13,147,187	26,731	25,427	122,942	296,840	6,051
Units		Ccf	Ccf/Day	Ccf/Day	Equiv. Meters	Bills	Hydrants
O&M Expense							
Retail	27,001,059	11,775,780	4,191,034	1,471,427	5,277,449	2,945,478	1,339,891
Retail Unit Cost (\$/Unit)		\$0.90	\$156.79	\$57.87	\$42.93	\$9.92	\$221.43
Wholesale O&M Expense	9,120,439	9,120,439					
Capital Expense							
Retail Capital Expense	\$ 18,354,080	\$ 13,757,301	\$ 2,001,761	\$ 581,582	\$ 1,289,634	\$ -	\$ 723,802
Retail Cost (\$/Unit)		\$1.05	\$74.89	\$22.87	\$10.49	\$0.00	\$119.62
Wholesale Capital Expense	\$ 3,741,230	\$ 3,741,230					
City Services Expense							
Retail City Services Expense	\$ 671,892	\$ 267,072	\$ 115,217	\$ 40,286	\$ 140,778	\$ 77,541	\$ 30,998
Retail Cost (\$/Unit)		\$0.02	\$4.31	\$1.58	\$1.15	\$0.26	\$5.12
Wholesale City Services Expense	\$ 184,058	\$ 184,058					
Property Tax Expense							
Retail Property Tax Expense	\$ 3,819,331	\$ 3,631,909	\$ 69,188	\$ 48,644	\$ -	\$ -	\$ 69,590
Retail Cost (\$/Unit)		\$0.28	\$2.59	\$1.91	\$0.00	\$0.00	\$11.50
Wholesale Property Tax Expense	\$ 2,860,660	\$ 2,860,660					
Total Unit Cost of Service							
Retail Cost of Service	\$ 49,846,362	\$ 29,432,062	\$ 6,377,200	\$ 2,141,940	\$ 6,707,861	\$ 3,023,019	\$ 2,164,281
Retail Total Unit Cost (\$/Unit)		\$2.24	\$238.57	\$84.24	\$54.56	\$10.18	\$357.67
Wholesale Cost of Service	\$ 15,906,388	\$ 15,906,388	\$ -	\$ -	\$ -	\$ -	\$ -
Total Cost of Service	\$ 65,752,750						

**Schedule CW-S18**  
**Cost Distribution to Customer Class**

Allocated Costs by Customer Class  
Rate Year Ending December 31, 2014

	Total	Base	Maximum Day	Maximum Hour	Meters & Services	Billing & Collection	Public Fire Protection
Total Retail Units of Service	13,625,177	13,147,187	26,731	25,427	122,942	296,840	6,051
Total Retail Cost of Service	49,846,362	\$ 29,432,061.93	\$ 6,377,199.53	\$ 2,141,939.82	\$ 6,707,861.11	\$ 3,023,019.14	\$ 2,164,280.72
<b>Retail</b>							
Unit Cost of Service (\$/Unit)		\$2.24	\$238.57	\$84.24	\$54.56	\$10.18	\$357.67
<b>Retail Service:</b>							
<b>Residential Volume Charge</b>							
Units of Service - HCF		8,574,863	16400.01205	11,714.29			
Allocation Cost of Service - \$	24,095,534	19,196,192	3,912,534	986,808			
Consumption Rate - \$/HCF	\$2.810						
<b>Commercial Volume Charge</b>							
Units of Service - HCF		4,381,008	7181.980557	4,787.99			
Allocation Cost of Service - \$	11,924,317	9,807,581	1,713,398	403,338			
Consumption Rate - \$/HCF	\$2.722						
<b>Industrial Volume Charge</b>							
Units of Service - HCF		191,315	261.3592577	261.36			
Allocation Cost of Service - \$	512,658	428,289	62,352	22,017			
Consumption Rate - \$/HCF	\$2.680						
<b>Retail Service Charge</b>							
Units of Service					82,867.50	288,988	
Allocation Cost of Service	\$7,464,414				\$4,521,359.97	\$2,943,054.36	
<b>Fire Protection Service</b>							
Units of Service			2,888	8,663	40,074	7,852	6,051
Allocation Cost of Service	\$5,849,439		\$688,915.73	\$729,776.63	\$2,186,501.15	\$79,964.78	\$2,164,280.72
Total Retail Allocated Cost of Service	<u>49,846,362</u>	29,432,061.93	6,377,199.53	2,141,939.82	6,707,861.11	3,023,019.14	2,164,280.72
Sumcheck	-	-	-	-	-	-	-
<b>Wholesale</b>							
<b>Wholesale:</b>							
Units of Service		13,051,679					
Allocation Cost of Service	\$ 15,906,388	\$ 15,906,388					
Consumption Rate		1.218724					
Total System Allocated Cost of Service	<u><u>65,752,750</u></u>						

**Schedule CW-S19  
Proposed Rates and Impacts**

Proposed Rates and Impacts  
Rate Year Ending December 31, 2014

Billing Unit	Current Units of Service	Proposed Units of Service	Proposed Retail Service Charge	Retail Service Charge Revenues	Current Rates	% Change
<b>Quarterly Service Charges</b>						
5/8"	53,150	-	\$ -	-	\$ 18.34	
3/4"	10,645	-	\$ -	-	\$ 19.47	
1"	5,067	-	\$ -	-	\$ 22.85	
1.5"	1,491	-	\$ -	-	\$ 27.39	
2"	1,468	-	\$ -	-	\$ 39.77	
3"	80	-	\$ -	-	\$ 131.15	
4"	25	-	\$ -	-	\$ 164.98	
6"	42	-	\$ -	-	\$ 243.95	
8"	28	-	\$ -	-	\$ 334.19	
10"	2	-	\$ -	-	\$ 415.97	
12"	-	-	\$ -	-	\$ 497.76	
Total	71,998	-				
<b>Monthly Service Charges</b>						
5/8"	1	53,151	\$ 7.95	5,070,605.40	\$ 10.82	-26.52%
3/4"	-	10,645	\$ 8.41	1,074,293.40	\$ 11.19	-24.84%
1"	-	5,067	\$ 9.77	594,055.08	\$ 12.32	-20.70%
1.5"	2	1,493	\$ 11.59	207,646.44	\$ 13.83	-16.20%
2"	34	1,502	\$ 16.59	299,018.16	\$ 17.97	-7.68%
3"	13	93	\$ 53.42	59,616.72	\$ 48.42	10.33%
4"	7	32	\$ 67.06	25,751.04	\$ 59.70	12.33%
6"	17	59	\$ 98.89	70,014.12	\$ 86.02	14.96%
8"	8	36	\$ 135.26	58,432.32	\$ 116.11	16.49%
10"	-	2	\$ 168.23	4,037.52	\$ 143.37	17.34%
12"	1	1	\$ 201.19	2,414.28	\$ 170.63	17.91%
Total	83	72,081		7,465,884.48		
Total Retail Service Charge Revenue				7,465,884.48	\$ 5,779,434	29.18%

**Schedule CW-S19  
Proposed Rates and Impacts**

Proposed Rates and Impacts  
Rate Year Ending December 31, 2014

Billing Unit	Current Units of Service	Proposed Units of Service	Proposed Fire Service Charge	Fire Service Charge Revenues	Current Rates	% Change
<b>Quarterly Service Charges</b>						
5/8"	25,266	-	\$ -	\$ -	\$ 3.08	
3/4"	4,207	-	\$ -	\$ -	\$ 4.62	
1"	1,998	-	\$ -	\$ -	\$ 11.54	
1.5"	896	-	\$ -	\$ -	\$ 30.77	
2"	874	-	\$ -	\$ -	\$ 73.86	
3"	58	-	\$ -	\$ -	\$ 200.04	
4"	14	-	\$ -	\$ -	\$ 338.52	
6"	18	-	\$ -	\$ -	\$ 692.43	
8"	8	-	\$ -	\$ -	\$ 1,046.34	
10"	1	-	\$ -	\$ -	\$ 1,600.29	
12"	-	-	\$ -	\$ -	\$ 2,646.63	
<b>Total</b>	<b>33,340</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>		
<b>Monthly Service Charges</b>						
5/8"	1	25,267	\$ 1.62	\$ 491,190.48	\$ 1.03	57.28%
3/4"	-	4,207	\$ 2.42	\$ 122,171.28	\$ 1.54	57.14%
1"	-	1,998	\$ 6.04	\$ 144,815.04	\$ 3.85	56.88%
1.5"	-	896	\$ 16.11	\$ 173,214.72	\$ 10.26	57.02%
2"	27	901	\$ 38.65	\$ 417,883.80	\$ 24.62	56.99%
3"	11	69	\$ 104.67	\$ 86,666.76	\$ 66.68	56.97%
4"	5	19	\$ 177.12	\$ 40,383.36	\$ 112.84	56.97%
6"	12	30	\$ 362.29	\$ 130,424.40	\$ 230.81	56.96%
8"	8	16	\$ 547.46	\$ 105,112.32	\$ 348.78	56.96%
10"	-	1	\$ 837.29	\$ 10,047.48	\$ 533.43	56.96%
12"	-	-	\$ -	\$ -	\$ 882.21	56.96%
<b>Total</b>	<b>64</b>	<b>33,404</b>	<b>\$ 1,384.74</b>	<b>\$ 1,721,909.64</b>		
<b>Total Retail Fire Protection Service Charge Revenue</b>				<b>\$ 1,721,909.64</b>	<b>\$ 1,095,130.72</b>	<b>57%</b>
<b>Total Retail Service Charge Revenue</b>				<b>\$ 9,187,794.12</b>	<b>\$ 6,874,565.20</b>	<b>33.65%</b>

**Schedule CW-S19  
Proposed Rates and Impacts**

Proposed Rates and Impacts  
Rate Year Ending December 31, 2014

**Retail Consumption Charges**

Residential (HCF)	8,574,863	\$	2.810	\$	24,095,366.28	\$	2.488	12.94%
Commercial (HCF)	4,381,008	\$	2.722	\$	11,925,104.16	\$	2.390	13.89%
Industrial (HCF)	191,315	\$	2.680	\$	512,724.14	\$	2.346	14.24%
<b>Total</b>	<b>13,147,187</b>				<b>\$ 36,533,194.57</b>		<b>\$ 32,253,695</b>	<b>13.27%</b>

**Wholesale Charges**

*Volume Charge*

Consumption (HCF)	13,051,679	\$	1.218724		15,906,394.11	\$	16,569,289	-4.00%
Consumption (MGD)	9,763							

**Total Consumption Charge Revenue**

**52,439,588.68**      **48,822,983.51**      **7.41%**

<b>Private Fire Service Charges</b>	Current Units of Service	Proposed Units of Service	Proposed Monthly Pvt. Fire Charge	Private Fire Charge Revenues	Current Quarterly Pvt. Fire Charge		
3/4"	3	3	\$8.46	304.56	\$	19.67	
1"	10	10	\$9.90	1,188.00	\$	23.31	
1-1/2"	3	3	\$11.96	430.56	\$	28.70	
2"	50	50	\$17.39	10,434.00	\$	42.63	
4"	349	349	\$72.07	301,829.16	\$	182.72	
6"	1,272	1,272	\$113.44	1,731,548.16	\$	295.45	
8"	254	254	\$166.28	506,821.44	\$	443.93	
10"	4	4	\$224.01	10,752.48	\$	613.33	
12"	17	17	\$291.30	59,425.20	\$	816.53	
16"	1	1	\$459.15	5,509.80	\$	1,340.64	
<b>Total</b>	<b>1,963</b>	<b>1,963</b>		<b>2,628,243.36</b>	<b>\$</b>	<b>2,290,098</b>	<b>14.77%</b>

<b>Public Fire Service Charges</b>		Proposed Rate	Revenue	Cu Revenue Rate	% Change
Hydrants	2,832	\$532.37	\$1,507,671.84	\$ 960,983	56.89%

**Total Fire Protection Charge Revenue**

**\$4,135,915.20**      **\$3,251,080.88**      **27.22%**

Miscellaneous Revenues      \$ (1,179,169.01)      \$ (1,179,169.01)

**Total Revenues**      65,763,298.00      58,948,629.59      11.56%

\$ 64,584,128.99      \$ 57,769,460.58      11.80%

**Schedule CW-S20**

**Comparison of Revenues by Customer Class**

**Comparison of Revenues by Customer Class**

Rate Year Ending December 31, 2014

	Existing Rates	Proposed Rates	% Change
<b>Retail</b>			
Monthly Service Charge	\$ 5,779,434	\$ 7,465,884	29.2%
Periodic FPSC	\$ 1,095,131	\$ 1,721,910	57.2%
Volume Charge			
Residential	\$ 21,334,260	\$ 24,095,366	12.9%
Commercial	\$ 10,470,609	\$ 11,925,104	13.9%
Industrial	\$ 448,825	\$ 512,724	14.2%
<b>Total Retail</b>	<b>\$ 39,128,260</b>	<b>\$ 45,720,989</b>	<b>16.8%</b>
<b>Wholesale</b>			
East Providence	\$ 2,647,860	\$ 2,541,926	-4.0%
East Smithfield	\$ 377,408	\$ 362,309	-4.0%
Greenville	\$ 557,435	\$ 535,134	-4.0%
Kent County	\$ 3,436,728	\$ 3,299,233	-4.0%
Smithfield	\$ 527,457	\$ 506,355	-4.0%
Warwick	\$ 5,498,900	\$ 5,278,903	-4.0%
Lincoln	\$ 1,316,240	\$ 1,263,581	-4.0%
Johnston	\$ 346,960	\$ 333,079	-4.0%
Bristol County	\$ 1,860,301	\$ 1,785,875	-4.0%
<b>Total Wholesale</b>	<b>\$ 16,569,289</b>	<b>\$ 15,906,394</b>	<b>-4.0%</b>
<b>Fire Protection</b>			
Private Fire Protection	\$ 2,290,098	\$ 2,628,243	14.8%
Public Fire Protection	\$ 960,983	\$ 1,507,672	56.9%
<b>Total Fire Protection</b>	<b>\$ 3,251,081</b>	<b>\$ 4,135,915</b>	<b>27.2%</b>
<b>Total Rate Revenues</b>	<b>\$ 58,948,630</b>	<b>\$ 65,763,298</b>	<b>11.6%</b>
Miscellaneous Revenues	\$ (1,179,169)	\$ (1,179,169)	
<b>Total Revenues</b>	<b>\$ 60,127,799</b>	<b>\$ 66,942,467</b>	<b>11.33%</b>



**Schedule CW-S21  
Typical Bill Comparison**

**Comparison of Typical Annual Charges**  
Rate Year Ending December 31, 2014

	Proposed Rates	Existing Rates	% Change
<b>Residential - (5/8" Meter, 100 HCF)</b>			
Service Charge*	\$ 95.40	\$ 73.36	30.0%
Volume Charge	\$ 281.00	\$ 248.80	12.9%
<b>Total</b>	<b>\$ 376.40</b>	<b>\$ 322.16</b>	<b>16.8%</b>
<b>Commercial - (2" Meter, 2,000 HCF)</b>			
Service Charge*	\$ 199.08	\$ 159.08	25.1%
Volume Charge	5,444.00	4,780.00	13.9%
<b>Total</b>	<b>\$ 5,643.08</b>	<b>\$ 4,939.08</b>	<b>14.3%</b>
<b>Industrial - (6" Meter, 10,000 HCF)</b>			
Service Charge *	\$ 1,186.68	\$ 975.80	21.6%
Volume Charge	\$ 26,800.00	\$ 23,460.00	14.2%
<b>Total</b>	<b>\$ 27,986.68</b>	<b>\$ 24,435.80</b>	<b>14.5%</b>

\*Existing rates based on Quarterly billing, proposed based on Monthly Billing, for Wholesale Impacts see HJS-20

**Schedule CW-S22****Revenue Proof****Revenue Proof**

Rate Year Ending December 31, 2014

Net Operations & Maintenance Expense	\$	36,592,403
Capital Expense	\$	21,662,069
City Services Expense	\$	839,167
Property Taxes Expense	\$	6,549,011
Total Expenses Allocated	\$	65,642,650
plus: Net Operating Revenue		\$1,289,270
<b>Net Revenue Requirement</b>	<b>\$</b>	<b>66,931,919</b>
Retail		
Monthly Service Charge	\$	7,465,884
Retail FPSC	\$	1,721,910
Volume Charge		
Residential	\$	24,095,366
Commercial	\$	11,925,104
Industrial	\$	512,724
Total Retail	\$	45,720,989
Wholesale		
East Providence	\$	2,541,926
East Smithfield	\$	362,309
Greenville	\$	535,134
Kent County	\$	3,299,233
Smithfield	\$	506,355
Warwick	\$	5,278,903
Lincoln	\$	1,263,581
Johnston	\$	333,079
Bristol County	\$	1,785,875
Total Wholesale	\$	15,906,394
Fire Protection		
Private Fire Protection	\$	2,628,243
Public Fire Protection	\$	1,507,672
Total Fire Protection	\$	4,135,915
Total Rate Revenues	\$	65,763,298
Miscellaneous Revenues	\$	1,179,169
<b>Total Revenues</b>	<b>\$</b>	<b>66,942,467</b>
<b>Total Surplus / (Deficit)</b>	<b>\$</b>	<b>10,548</b>

Note: Surplus due rounding

**Schedule CW-S23  
Projected Volumes**

**Calculation of Rate Year Sales Volumes**  
Rate Year Ending December 31, 2014  
(Volumes in HCF)

	FY 2009	FY 2010	FY 2011	FY 2012	Four Year Average	Adjustments	Pro Forma Rate Yr 3 Yr Avg
Retail							
Residential	9,201,454	8,482,954	8,754,316	8,487,320	8,731,511	(156,648)	8,574,863
% Change from previous			-14.11%	-3.05%			
Commercial	4,636,996	4,465,417	4,284,895	4,392,712	4,445,005	(63,997)	4,381,008
Industrial	198,132	190,880	181,838	201,227	193,019	(1,704)	191,315
Sub-total Retail	14,036,582	13,139,251	13,221,050	13,081,259	13,369,535	(222,349)	13,147,187
Wholesale							
East Providence	2,034,591	2,024,316	2,217,299	2,015,566	2,072,943	12,784	2,085,727
East Smithfield	318,002	300,103	311,937	279,817	302,465	(5,179)	297,286
Greenville	459,960	423,935	450,932	442,414	444,310	(5,217)	439,093
Kent County	2,663,178	2,602,627	2,717,984	2,800,752	2,696,135	10,986	2,707,121
Smithfield	454,602	394,162	413,570	438,706	425,260	(9,781)	415,479
Warwick	4,674,254	4,195,038	4,526,769	4,272,694	4,417,189	(85,688)	4,331,500
Lincoln	1,016,655	1,016,536	1,075,944	1,017,940	1,031,769	5,038	1,036,807
Johnston (1)	302,765	248,060	309,030	262,814	280,667	(7,366)	273,301
Bristol County (2)	1,283,706	1,210,901	1,502,205	1,682,988	1,419,950	45,415	1,465,365
Narr. Bay Comm (3)							
Sub-total Wholesale	13,207,713	12,415,678	13,525,669	13,213,689	13,090,687	(39,009)	13,051,679
<b>Grand Total</b>	<b>27,244,295</b>	<b>25,554,929</b>	<b>26,746,719</b>	<b>26,294,948</b>	<b>26,460,223</b>	<b>(261,357)</b>	<b>26,198,865</b>
<b>Unaccounted for Water</b>							
Volume	3,114,862	3,572,170	3,380,059	3,825,119	3,473,053		3,592,449
Percentage	11.43%	13.98%	12.64%	14.55%	13.13%		29,791,315
Total Lost Water - Pro Forma	3,592,449						
Retail Share	95.67%						
Wholesale Share	4.33%						
Losses Allocated to Retail	3,436,974						
Total Retail w/Lost Water	16,584,161	55.67%					
Total Wholesale w/Lost Water	13,207,154	44.33%					
	29,791,315						

**Schedule CW-S23A  
Inch-Mile Calculations**

	<u>Pipe Size</u> (inches)	<u>Length</u> (miles)		<u>Inch-Miles</u>	
	Service Pipes *	350.59		0.00	
	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	
<b>Totals</b>		<hr/> 1,336.43		<hr/> 10,229.98	
Local Distribution & Service (12" or less)		1,220.33	91.31%	6,375.12	62.32%
Transmission (16" and greater)		116.10	8.69%	3,854.86	37.68%
<b><u>Unaccounted for Water Responsibility</u></b>					
<i>Retail Customers</i>					
Local Distribution		91.31%		62.32%	
Transmission		4.36%		18.91%	
<b>Total Retail Share of Unaccounted for Water</b>		<hr/> 95.67%		<hr/> 81.23%	
<i>Wholesale Customers</i>					
Local Distribution		0.00%		0.00%	
Transmission		4.33%		18.77%	
<b>Total Wholesale Share of Unaccounted for Water</b>		<hr/> 4.33%		<hr/> 18.77%	

\* Service pipe based on # of retail accounts times assumed length (ft) per account of and diameter = 1"

Schedule CW-A1  
Comparative Schedule of Expenses

PROVIDENCE WATER  
COMPARATIVE SCHEDULE OF EXPENSES

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12		Test Year Adjustments	Adjusted Test Year
<b>Source of Supply</b>									
60110	Salaries + Wages - Emp	332,332	378,557	366,835	608,420	581,072	A	\$38,253.94	619,326
60120	Salaries + Wages - Emp	364,716	463,317	465,527	515,865	420,589	A	\$27,688.79	448,278
60320	Sal. + Wages - Officers, Dir	-	-	-	(1,474)				-
60410	Employee Pension + Ben	180,684	201,272	210,067	184,061	168,591			168,591
60420	Employee Pension + Ben	198,291	246,141	266,316	195,337	188,577			188,577
61510	Purchase Power	-	-	-					-
61610	Fuel for Power Purch	-	-	-					-
62010	Material + Supplies	9,580	11,842	14,084	25,892	18,958			18,958
62020	Material + Supplies	45,309	53,546	73,695	75,671	73,286			73,286
63110	Contractual Services - Engineer	4,500	1,350	4,900	1,295	2,460			2,460
63120	Contractual Services - Engineer	-	-	-					-
63310	Contract Services -Legal	-	-	-		18,238			18,238
63420	Contractual Services - Mgt. Fees	-	-	-					-
63510	Contractual Services - Other	84,131	15,851	92,524	444,560	419,915			419,915
63520	Contractual Services - Other	19,754	15,561	15,011	25,714	31,771			31,771
64210	Rental of Equipment	-	-	-					-
64220	Rental of Equipment	-	-	-					-
65010	Transportation Exp.	-	-	-	2,817	146			146
65020	Transportation Exp.	-	-	-					-
67510	Misc. Expenses	19,414	3,066	3,052	99,393	69,132			69,132
67520	Misc. Expenses	3,799	2,295	13,804	7,075	4,550			4,550
<b>Total Source of Supply Expense</b>		<b>1,262,510</b>	<b>1,392,798</b>	<b>1,525,813</b>	<b>2,184,626</b>	<b>1,997,284</b>		<b>\$65,942.73</b>	<b>2,063,227</b>
<b>Pumping Expenses</b>									
60426	Employee Pension + Ben	-	-	-	-				-
61523	Purchased Power	701,668	734,820	862,000	852,085	778,684			778,684
61623	Fuel for Power Purch	16,651	32,088	39,980					-
62023	Material + Supplies	453	-	-					-
62026	Material + Supplies	-	518	1,816					-
63123	Contractual Services - Engineer	-	-	-					-
63126	Contractual Services - Engineer	-	-	-					-
63523	Contractual Services - Other	4,871	6,694	3,007	18,835	11,629			11,629
63526	Contractual Services - Other	-	6,915	1,931					-
64223	Rental of Equipment	-	-	-					-
64226	Rental of Equipment	-	-	-					-
65023	Transportation Exp.	-	-	-					-
67523	Misc. Expenses	-	-	4,889					-
67526	Misc. Expenses	-	-	1,164					-
<b>Total Pumping Expenses</b>		<b>723,642</b>	<b>781,034</b>	<b>914,787</b>	<b>870,920</b>	<b>790,313</b>		<b>-</b>	<b>790,313</b>

Schedule CW-A1  
Comparative Schedule of Expenses

**PROVIDENCE WATER**  
**COMPARATIVE SCHEDULE OF EXPENSES**

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12		Test Year Adjustments	Adjusted Test Year
<b>Water Treatment Expenses</b>									
60130	Salaries + Wages - Emp	1,902,231	2,008,959	1,942,308	1,905,015	1,934,063	A	\$127,325.91	2,061,389
60140	Salaries + Wages - Emp	287,769	323,220	281,181	220,960	315,454	A	\$20,767.39	336,221
60430	Employee Pension + Ben	991,095	1,066,963	1,111,445	576,480	606,264			606,264
60440	Employee Pension + Ben	156,456	171,261	161,294	91,573	134,901			134,901
61530	Purchase Power	179,721	194,083	204,246	244,896	226,424			226,424
61630	Fuel for Power Purch	122,959	177,174	280,906	243,122	230,829			230,829
61830	Chemicals	-	-	-	-	-			-
62030	Material + Supplies	94,329	95,393	98,736	124,907	124,833			124,833
62040	Material + Supplies	92,559	69,342	106,793	58,030	67,060			67,060
63130	Contractual Services - Engineer	-	2,788	21,969	-	-			-
63240	Contract Services - Acctg	-	-	-	-	-			-
63430	Contractual Services - Mgt. Fees	14,710	8,864	9,466	-	-			-
63530	Contractual Services - Other	182,083	210,061	189,833	113,334	141,797			141,797
63540	Contractual Services - Other	55,705	42,759	57,155	49,811	85,680			85,680
64140	Rental Buidg/Real Prop	-	-	-	-	-			-
64230	Rental of Equipment	2,245	2,000	500	-	-			-
64240	Rental of Equipment	-	-	-	-	-			-
65030	Transportation Exp.	-	1,010	-	-	5,806			5,806
65640	Insurance Vehicle	-	-	-	-	-			-
65830	Insurance - W/C	-	-	-	-	-			-
65840	Insurance - W/C	-	-	-	-	-			-
66730	Regularoty Com Exp. -Other	-	-	-	-	-			-
67530	Misc. Expenses	60,381	27,965	2,258	72,139	96,719			96,719
67540	Misc. Expenses	171	86	85	-	2,027			2,027
<b>Total Treatment Expense</b>		<b>4,142,413</b>	<b>4,401,928</b>	<b>4,468,176</b>	<b>3,700,267</b>	<b>3,971,857</b>		<b>\$148,093.29</b>	<b>4,119,951</b>

Schedule CW-A1  
Comparative Schedule of Expenses

PROVIDENCE WATER  
COMPARATIVE SCHEDULE OF EXPENSES

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12		Test Year Adjustments	Adjusted Test Year
<b>Transmission + Dist. Expense:</b>									
60150	Salaries + Wages - Emp	834,719	991,335	827,908	1,011,461	927,462	A	\$61,057.99	988,520
60160	Salaries + Wages - Emp	2,228,839	2,134,007	2,102,082	1,867,293	2,107,495	A	\$138,743.53	2,246,239
60250	Payroll Clearing -Emp	(375,518)	(461,465)	(508,181)	(279,167)	(216,355)		216,355	-
60260	Payroll Clearing -Emp	-	-	-	-	-		-	-
60450	Employee Pension + Ben	453,824	526,391	473,349	271,568	241,316		-	241,316
60460	Employee Pension + Ben	1,211,787	1,134,076	1,204,461	776,358	846,629		-	846,629
60550	Overhead Rate Applied	(1,746,342)	(1,266,377)	(456,546)	(811,616)	(604,034)		604,034	-
60560	Overhead Rate Applied	-	-	-	-	-		-	-
61550	Purchase Power	9,027	8,733	79,896	14,445	12,019		-	12,019
62050	Material + Supplies	138,933	102,076	681,173	341,235	269,822		-	269,822
62060	Material + Supplies	12,637	5,687	15,075	-	-		-	-
62560	Inventory Clearing	-	-	-	-	-		-	-
63150	Contractual Services - Engineer	-	-	1,360	20,043	36,120		-	36,120
63350	Contractual Services - Legal T&D0	-	-	256	-	-		-	-
63460	Contractual Services - Mgt. Fees	-	-	-	-	-		-	-
63550	Contractual Services - Other	1,028,353	927,318	1,085,202	312,640	453,727		-	453,727
63560	Contractual Services - Other	37,731	96,748	-	26,444	65,018		-	65,018
64150	Rental Buildg/Real Prop	-	-	-	-	-		-	-
64160	Rental Buildg/Real Prop	-	-	-	-	-		-	-
64250	Rental of Equipment	4,009	1,097	2,081	-	-		-	-
64260	Rental of Equipment	-	-	-	-	-		-	-
65050	Transportation Exp. T&D	-	1,145	1,290	-	2,748		-	2,748
66760	Regulatory Com Exp - Other T & D	-	-	-	-	-		-	-
67550	Misc. Expenses	3,625	3,784	5,326	38,106	37,994		-	37,994
67560	Misc. Expenses	675	529	274	-	-		-	-
<b>Total Transmission &amp; Distribution</b>		<b>3,842,301</b>	<b>4,205,083</b>	<b>5,515,007</b>	<b>3,588,810</b>	<b>4,179,962</b>		<b>\$1,020,190.28</b>	<b>5,200,152</b>

Schedule CW-A1  
Comparative Schedule of Expenses

PROVIDENCE WATER  
COMPARATIVE SCHEDULE OF EXPENSES

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12		Test Year Adjustments	Adjusted Test Year
<b>Customer Accounts Expense:</b>									
60170	Salaries + Wages - Emp	1,828,083	2,063,837	1,956,675	1,826,717	1,798,417	A	\$118,395.88	1,916,813
60270	Payroll Clearing -Emp	(13,397)	(11,090)	-	-	(93,057)		93,057	-
60470	Employee Pension + Ben	993,902	1,096,073	1,119,835	737,780	721,692			721,692
60570	Overhead Rate Applied	(52,345)	(37,458)	-	(30,666)	(377,449)		377,449	-
61670	Fuel for Power Purch	-	-	-	-	-			-
62070	Material + Supplies	10,731	15,630	6,848	(50,128)	2,467			2,467
63370	Contractual Services - Legal	-	-	-	-	-			-
63570	Contractual Services - Other	33,883	39,027	50,435	47,519	10,979			10,979
65070	Transportation Exp. -CAO	-	-	-	-	1,012			1,012
65870	Insurance - Other	-	-	-	-	-			-
65970	Insurance Other	-	-	-	-	-			-
67070	Bad Debt Expense - CAO	(740,181)	782,012	(417,668)	(524,135)	445,333			445,333
67570	Misc. Expenses	121,241	104,000	93,468	409,883	194,180			194,180
	<b>Total Customer Accounts</b>	<b>2,181,916</b>	<b>4,052,032</b>	<b>2,809,592</b>	<b>2,416,970</b>	<b>2,703,575</b>		<b>\$588,901.65</b>	<b>3,292,477</b>
<b>Administrative and General</b>									
60180	Salaries + Wages - Emp	4,718,358	5,030,220	4,981,168	5,014,514	5,229,735	A	\$269,625.20	5,499,360
60280	Payroll Clearing -Emp	-	-	-	(568,495)	(488,703)		488,703	-
60380	Salaries + wages - Officers, Dir.	36,918	40,257	32,955	15,221	-			-
60480	Employee Pension + Ben	2,569,882	4,160,597	3,295,736	4,588,712	4,605,608			4,605,608
60580	Overhead Rate Applied	-	-	-	(306,238)	(221,236)		221,236	-
61580	Purchase Power	119,872	118,145	87,444	120,287	113,972			113,972
61680	Fuel for Power Purch	184,535	184,178	229,065	-	-			-
62080	Material + Supplies	184,160	99,500	124,798	444,812	515,672			515,672
63180	Contractual Services - Engineer	24,377	201,937	36,268	30,357	45,262			45,262
63280	Contract Services - Acctg	-	-	-	-	-			-
63380	Contractual Services - Legal	87,716	114,369	41,728	-	50,841			50,841
63480	Contractual Services - Mgt. Fees	32,000	-	-	-	-			-
63580	Contractual Services - Other	364,356	277,060	514,962	875,444	982,614			982,614
64180	Rental Buildg/Real Prop	-	-	-	-	-			-
64280	Rental of Equipment	9,646	11,045	9,184	-	-			-
65080	Transportation Exp.	104,702	114,752	107,657	-	6,390			6,390
66080	Advertising Expense	3,351	611	8,508	-	-			-
66680	Reg Com Exp - Amort of Rate Case	-	1,059	-	-	-			-
66780	Regulatory Com Exp. -Other	202,951	282,184	305,530	235,386	227,469			227,469
67580	Misc. Expenses	289,175	186,018	358,452	403,077	358,418			358,418
	<b>Total Administration + General</b>	<b>8,931,999</b>	<b>10,821,934</b>	<b>10,133,454</b>	<b>10,853,078</b>	<b>11,426,042</b>		<b>\$979,564.08</b>	<b>12,405,606</b>
	<b>Total Operation &amp; Maintenance</b>	<b>21,084,781</b>	<b>25,654,810</b>	<b>25,366,829</b>	<b>23,614,671</b>	<b>25,069,033</b>			<b>27,871,725</b>



Schedule CW-A1  
Comparative Schedule of Expenses

**PROVIDENCE WATER**  
**COMPARATIVE SCHEDULE OF EXPENSES**

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12		Test Year Adjustments	Adjusted Test Year
<b>Source of Supply</b>		1,262,510	1,392,798	1,525,813	2,184,626	1,997,284		\$65,942.73	2,063,227
<b>Pumping</b>		723,642	781,034	914,787	870,920	790,313		-	790,313
<b>Treatment</b>		4,142,413	4,401,928	4,468,176	3,700,267	3,971,857		148,093	4,119,951
<b>Transmission &amp; Distrib.</b>		3,842,301	4,205,083	5,515,007	3,588,810	4,179,962		1,020,190	5,200,152
<b>Customer Accounts</b>		2,181,916	4,052,032	2,809,592	2,416,970	2,703,575		588,902	3,292,477
<b>Administration &amp; General</b>		8,931,999	10,821,934	10,133,454	10,853,078	11,426,042		979,564	12,405,606
<b>Total Operation &amp; Maintenance</b>		21,084,781	25,654,810	25,366,829	23,614,671	25,069,033		2,802,692	27,871,725
<b>Capitalized Overheads</b>					1,148,520	1,202,718			1,202,718
<b>Full Operation &amp; Maint. Operating Fund</b>					24,763,190	26,271,752			26,271,752
<b>857 Insurance Fund</b>									
65840	Insurance W/C - WTM	-	-	-	-	-			-
65870	Insurance W/C - CAO	25,512	-	-	-	-			-
62080	Materials + Supplies - A&GO	612	21,097	763	36,627	17,602			17,602
63180	Contractual Services-Engineer	-	-	-	-	-			-
63380	Contract Services - Legal A&GO	-	-	-	-	(11,163)	B	11,163	-
63580	Contract Services - Other A&GO	1,875	4,515	4,755	-	-			-
	Injuries and Damages	-	-	-	28,851	54,528			54,528
65780	Ins. Gen. Liability	1,253,949	1,296,107	1,227,230	-	-			-
65980	Insurance-Other A&GO	-	-	-	753,247	1,006,353			1,006,353
65880	Insurance - W/C	533,567	(69,285)	672,370	837,689	874,015			874,015
67070	Bad Debt Expense-CAO	-	-	-	-	-			-
67580	Misc. Expense	152,140	71,527	(6,954)	1,800	7,150			7,150
<b>Total Insurance Fund</b>		1,967,654	1,323,960	1,898,164	1,658,214	1,948,485		11,163	1,959,648
<b>878 Chemical and Sludge Maintenance Fund</b>									
61830	Chemicals - WTO	1,493,366	1,574,797	1,682,829	1,801,907	2,572,273			2,572,273
62030	Materials + Supplies WTO	15,545	-	-	-	-			-
62050	Materials + Supplies T&DO	-	17,827	-	-	-			-
63540	Contract Services - Other WTM	550,000	954,125	500,000	535,644	552,692			552,692
<b>Total Chemical and Sludge Maintenance Fund</b>		2,058,912	2,546,749	2,182,829	2,337,551	3,124,965			3,124,965
<b>Full Operation and Maintenance</b>		25,111,348	29,525,519	29,447,822	28,758,956	32,143,316		2,813,855	31,356,364
<b>City Services</b>		729,994	729,994	784,581	839,167	839,167			839,167

Schedule CW-A1  
Comparative Schedule of Expenses

**PROVIDENCE WATER**  
**COMPARATIVE SCHEDULE OF EXPENSES**

ACCOUNT	TITLE	FISCAL YEAR 06/30/06	FISCAL YEAR 06/30/07	FISCAL YEAR 06/30/08	FISCAL YEAR 06/30/11	FISCAL YEAR 06/30/12	Test Year Adjustments	Adjusted Test Year
<b>Property Taxes- Other Local Govern.</b>								
40820	North Providence	224,715	231,643	234,826	239,090	266,581	-	266,581
40821	Glocester	43,112	45,275	49,655	49,380	51,478	-	51,478
40822	West. Glocester	3,536	3,928	3,928	3,932	3,708	-	3,708
40823	Harmony	120	142	155	155	164	-	164
40824	Chepachet	145	115	115	-	251	(120)	131
40825	Scituate	4,857,897	5,131,469	5,468,314	4,974,437	5,087,356	0	5,087,357
40826	Warwick	21	22	101	-	-	-	-
40827	Johnston	56,424	64,195	86,135	86,695	90,117	(0)	90,117
40828	Foster	308,492	278,751	292,391	331,673	331,673	-	331,673
40829	Cranston	531,739	(1,334,393)	88,629	107,568	110,522	1	110,523
40830	West. Warwick	3,855	4,040	4,294	3,761	3,761	-	3,761
<b>Total Property Taxes</b>		<b>6,030,056</b>	<b>4,425,185</b>	<b>6,228,544</b>	<b>5,796,691</b>	<b>5,945,612</b>		<b>5,945,492</b>
Full Operation & Maint.		25,111,348	29,525,519	29,447,822	28,758,956	32,143,316	2,813,855	34,957,171
City Services		729,994	729,994	784,581	839,167	839,167	-	839,167
Total Property Taxes		6,030,056	4,425,185	6,228,544	5,796,691	5,945,612		5,945,612
Capitalized Labor and Overheads		2,187,603	1,776,390	964,727	1,996,182	2,000,833	(2,000,833)	-
<b>Grand Total</b>		<b>34,059,000</b>	<b>36,457,088</b>	<b>37,425,673</b>	<b>37,390,996</b>	<b>40,928,928</b>	<b>813,022</b>	<b>41,741,950</b>
					From Original File	\$36,550,443	30,981,650	
Capital Reimbursement						(798,115)	(36,274)	(834,389)
A	Adjustment to Normalize Payroll See:			Check	840,553			
B	Adjustment to Remove Non-Recurring Expense due to Insurance reimbursement							

**Schedule CW-AS2**

**Calculation of Public Fire (Hydrant) Charge**

**Costs Allocated Directly to Public Fire Protection**

Cost of Service Allocated to Public Fire (1)	\$2,164,280.72	
Units of Service (Public Fire Hydrants) (2)	6,051	
Cost Per Hydrant (3)	<u>\$357.67</u>	(1)/(2)

**Demand Costs Allocating to Fire Protection Class**

Max Day (4)	\$688,915.73	
Max Hour (5)	<u>\$729,776.63</u>	
Total Demand Costs (6)	\$1,418,692.36	(4)+(5)

Total Equivalent 6" Connections (Public and Private) (7) 8,121.14

Cost Per Equivalent 6" Connection (8) \$174.69 (6)/(7)

Hydrant Charge (per Hydrant) \$532.37 (8)+(3)

**Schedule CW-AS3****Calculation of Providence Only Fire Protection Service Charge****Total Cost to be Recovered from Providence Retail Customer**

Providence Hydrants	3219
Charge per Hydrant	\$532.37
Total Cost to Recovered from Retail Custo	\$1,713,699.03
Total 5/8" Equivalent Accounts	88,692
Annual Cost Per 5/8" Equivalent Account	\$19.32

**Fire Protection Service Charge for Providence Retail Customer**

## Retail Fire Protection Service Charge (Monthly)

Meter Size	Units of Service	Equivalency Factor	Equivalent Accounts	Annual Cost	Monthly Service Charge
5/8"	25,446	1	25,446	\$19.32	\$1.62
3/4"	4,258	1.5	6,387	\$28.98	\$2.42
1"	1,996	3.75	7,485	\$72.46	\$6.04
1.5"	894	10	8,940	\$193.22	\$16.11
2"	891	24	21,384	\$463.73	\$38.65
3"	69	65	4,485	\$1,255.92	\$104.67
4"	21	110	2,310	\$2,125.41	\$177.12
6"	31	225	6,975	\$4,347.43	\$362.29
8"	14	340	4,760	\$6,569.45	\$547.46
10"	1	520	520	\$10,047.39	\$837.29
12"	0	860	0	\$16,616.84	\$1,384.74
	33621		88,692		

**Schedule CW-AS4**

**Calculation of Private Fire Service Charge**

Meter Size (1)	Units of Service (2)	Factor (3)	(2) x (3) Equiv. Meters (4)	(1)^2.63 Demand (5)	6" Equivalency Factor (6)	(2) x (6) 6" Equivalents (7)
0.75	3	1.1	\$ 3	0.47	0.004	0.01
1	10	1.4	14.00	1	0.009	0.09
1.5	3	1.8	5.40	2.9	0.026	0.08
2	50	2.9	145.00	6.2	0.056	2.78
4	349	14	4,886.00	38.3	0.344	120.14
6	1,272	21	26,712.00	111.3	1.000	1272.00
8	254	29	7,366.00	237.2	2.131	541.28
10	4	36.25	145.00	426.6	3.832	15.33
12	17	43.5	739.50	689.0	6.190	105.23
16	1	58	58.00	1468.4	13.192	13.19
	<u>1,963</u>		<u>40,074</u>			<u>2070.14</u>

**Customer Costs**

Meters and Services Cost Allocated to Fire Protection	\$2,186,501.15
Equivalent Meters	40,074
Annual Cost Per Equivalent Meter	\$54.56
Monthly Cost	\$4.55
Billing and Collection Cost Allocated to Fire Protection	\$79,964.78
Number of Monthly Bills	23,556
Cost Per Bill	\$3.39
<b>Total Customer Costs Monthly Per Eq. Meter</b>	<b>\$7.94</b>

**Schedule CW-AS4**

**Calculation of Private Fire Service Charge**

**Demand Costs**

Max Day	\$688,915.73
Max Hour	\$729,776.63
	<hr/>
	\$1,418,692.36

Number of 6" Equivalent Connections (Public and Private) 8,121.14

Annual Cost per 6" Equivalent Connection \$174.69

Monthly Cost **\$14.56**

**Private Fire Service Charges**

	Customer Costs	Demand Costs	Total Pvt. Fire Charge
0.75	\$8.40	\$0.06	\$8.46
1	\$9.76	\$0.13	\$9.90
1.5	\$11.58	\$0.38	\$11.96
2	\$16.58	\$0.81	\$17.39
4	\$67.05	\$5.01	\$72.07
6	\$98.88	\$14.56	\$113.44
8	\$135.25	\$31.02	\$166.28
10	\$168.22	\$55.79	\$224.01
12	\$201.18	\$90.12	\$291.30
16	\$267.11	\$192.04	\$459.15

