

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND**

**PAWTUCKET WATER                    )  
SUPPLY BOARD                        )     DOCKET NO. 3674**

**DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN**

**ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**JULY 2005**

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**EXETER**

ASSOCIATES, INC.  
5565 Sterrett Place  
Suite 310  
Columbia, Maryland 21044

BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND

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Direct Testimony of Thomas S. Catlin

**Introduction**

Q.           WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A.   My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices are located at 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044. Exeter is a firm of consulting economists specializing in issues pertaining to public utilities.

Q.           PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A.   I hold a Master of Science Degree in Water Resources Engineering and Management from Arizona State University (1976). Major areas of study for this degree included pricing policy, economics, and management. I received my Bachelor of Science Degree in Physics and Math from the State University of New York at Stony Brook in 1974. I have also completed graduate courses in financial and management accounting.

Q.           WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL  
EXPERIENCE?

A.   From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic feasibility, financial and implementation analyses in conjunction with utility construction projects. I also served as project engineer for two utility valuation studies.

From June 1977 until September 1981, I was employed by Camp Dresser & McKee, Inc. (CDM). Prior to transferring to the Management Consulting Division of

1 CDM in April 1978, I was involved in both project administration and design. My  
2 project administration responsibilities included budget preparation as well as labor and  
3 cost monitoring and forecasting. As a member of CDM's Management Consulting  
4 Division, I performed cost of service, rate, and financial studies involving approximately  
5 15 municipal and private water, wastewater and storm drainage utilities. These projects  
6 included: determining total costs of service; developing capital asset and depreciation  
7 bases; preparing cost allocation studies; evaluating alternative rate structures and  
8 designing rates; preparing bill analyses; developing cost and revenue projections; and  
9 preparing rate filings and expert testimony.

10 In September 1981, I accepted a position as a utility rates analyst with Exeter  
11 Associates, Inc. I became a principal and vice-president of the firm in 1984. Since  
12 joining Exeter, I have continued to be involved in the analysis of the operations of public  
13 utilities, with particular emphasis on utility rate regulation. I have been extensively  
14 involved in the review and analysis of utility rate filings, as well as other types of  
15 proceedings before state and federal regulatory authorities. My work in utility rate filings  
16 has focused on revenue requirements issues, but has also addressed service cost and rate  
17 design matters. I have also been involved in analyzing affiliate relations, alternative  
18 regulatory mechanisms, and regulatory restructuring issues. This experience has  
19 involved electric, natural gas transmission and distribution, and telephone utilities, as  
20 well as water and wastewater companies.

21 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY  
22 PROCEEDINGS ON UTILITY RATES?

23 A. Yes. I have previously presented testimony on more than 200 occasions before  
24 the Federal Energy Regulatory Commission and the public utility commissions of  
25 Arizona, California, Colorado, Delaware, the District of Columbia, Florida,

1 Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Montana,  
2 Nevada, New Jersey, Ohio, Oklahoma, Pennsylvania, Utah, Virginia and West  
3 Virginia, as well as before this Commission. I have also filed rate case evidence  
4 by affidavit with the Connecticut Department of Public Utility Control.

5 Q. HAVE YOU PREVIOUSLY TESTIFIED ON WATER UTILITY ISSUES  
6 BEFORE THIS COMMISSION?

7 A. Yes, I have been asked by the Division to address water utility issues on numerous  
8 occasions. I testified on revenue requirement, cost of service and/or rate design issues in  
9 Newport Water Division, Docket No. 2029, 2985, 3457 and 3578; Providence Water  
10 Supply Board, Docket Nos. 2022, 2048, 2304, and 2961, 3163; and 3446; Kent County  
11 Water Authority, Docket No. 2098; Woonsocket Water Department, Docket Nos. 2099  
12 and 2904; and United Water Rhode Island, Inc., (formerly Wakefield Water Company),  
13 in Docket Nos. 2006 and 2873. In addition, I testified on cost allocation and rate design  
14 issues in the Pawtucket Water Supply Board's proceedings in Docket Nos. 3193, 3378  
15 and 3497.

16 Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

17 A. Yes. I am a member of the American Water Works Association (AWWA) and the  
18 Chesapeake Section of the AWWA. I serve on the AWWA's Rates and Charges  
19 Committee and on the AWWA Water Utility Council's Technical Advisory Group on  
20 Economics.

21 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

22 A. Exeter Associates was retained by the Division to assist it in the evaluation of the class  
23 cost of service study and rate design proposals incorporated in the filing of the Pawtucket  
24 Water Supply Board (PWSB). This testimony presents my findings and  
25 recommendations with regard to cost allocation and the design of rates.

1 Q. HAVE YOU PREPARED AN EXHIBIT TO ACCOMPANY YOUR  
2 TESTIMONY?

3 A. Yes. I have prepared Exhibit TSC-1. This exhibit presents the cost of service study  
4 which I have prepared on behalf of the Division. I would note that this study is based on  
5 PWSB's filed revenue requirement. At the surrebuttal stage of the case, I will provide a  
6 study based on the Division's recommended overall revenue requirement.  
7

8 **Summary of Findings and Recommendations**

9 Q. HAVE YOU REVIEWED THE COST OF SERVICE STUDY SUBMITTED BY  
10 PWSB IN THIS PROCEEDING?

11 A. Yes. I have reviewed the cost of service study which was presented by Mr. Christopher  
12 Woodcock in his testimony on behalf of PWSB. In addition, I have also reviewed the  
13 responses to the discovery request submitted by the Division and the Commission PWSB.

14 Q. PLEASE SUMMARIZE YOUR FINDINGS WITH REGARD TO THE COST  
15 ALLOCATION STUDY SUBMITTED BY PWSB.

16 A. Cost allocation issues were addressed in detail in Docket Nos. 3193 and 3378 and the  
17 cost study presented by Mr. Woodcock is generally consistent with the cost study  
18 findings in those dockets. In my review of the study presented here, I have identified  
19 several modifications which I believe should be made to that study. These include:  
20

- 21 • Adjusting the level of unaccounted-for water to be more consistent with actual  
22 experience and to recognize that not all unaccounted-for water is the  
23 responsibility of retail customers.  
24

- Adjusting the plant allocator utilized to allocate engineering and debt service related costs to include certain plant additions which were inadvertently excluded.
- Revising the determination of private fire service costs to include service line capital costs as well as service line maintenance costs.
- Separately identifying all and allocating certain elements of miscellaneous revenue.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS WITH REGARD TO RATE DESIGN.

A. PWSB's rate design proposals are also presented by Mr. Woodcock. Mr. Woodcock has generally proposed to adjust existing rates to reflect costs. I agree with the overall approach followed by Mr. Woodcock, subject to adjusting PWSB's proposed rates to reflect the cost study changes which I have recommended and the changes to PWSB's approved revenue requirements.

As part of the rate design proposal, PWSB is seeking to implement a surcharge applicable to customers in the City of Cumberland. The purpose of this surcharge is to recover the tax assessed on tangible property in the City of Cumberland which is not assessed by any other taxing jurisdiction within PWSB's service territory. For the reasons discussed subsequently, I agree with this proposal.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. The remainder of my testimony is organized into sections corresponding to the issue or topic being addressed. These sections are set forth in the table of contents for this testimony.

**Unaccounted for Water**

Q. HOW WAS UNACCOUNTED FOR WATER BEEN TREATED IN PWSB'S CLASS COST OF SERVICE STUDY?

A. To allocate costs between wholesale and retail water service, Mr. Woodcock has added unaccounted-for water to base water use to obtain total production. The percentage of base costs allocable to wholesale service, wholesale base water use has been divided by total production (base water use plus unaccounted for water). As a result, all costs associated with unaccounted-for water have been assigned to retail service.

Q. WHAT CONCERNS DO YOU HAVE WITH THIS APPROACH?

A. I have two concerns. First, unaccounted-for water has been estimated to be equal to 15 percent of base water use. This percentage is in excess of PWSB's experienced level of unaccounted-for water. Second, while the majority to unaccounted-for water is attributable to distribution losses and metering error, some portion of unaccounted-for water is attributable to transmission losses and uses by the utility. Accordingly not all unaccounted-for water should be treated as attributable to retail customers.

Q. WHAT MODIFICATION ARE YOU MAKING TO THE TREATMENT OF UNACCOUNTED-FOR WATER IN THE COST OF SERVICE STUDY.

A. Over the four years from fiscal year (FY) 2001 through FY 2004, total unaccounted-for water plus utility use on PWSB's system has averaged approximately 10 percent per year. Hence, I am proposing to adjust the overall level of unaccounted for from 15 percent to ten percent. I have further adjusted the level of unaccounted-for water which is added to base water use to determine total production for allocation purposes to seven percent. This has the effect of treating 70 percent of total unaccounted-for plus utility use as allocable solely to retail customers for distribution losses distribution main flushing and metering error. By including only seven percentage points for unaccounted-for as an

1 increment to base water use, the remaining three percentage points, or 30 percent of total  
2 unaccounted for is effectively being treated as the shared responsibility of retail and  
3 wholesale customers for transmission losses, transmission main flushing, and other utility  
4 uses.

5  
6 **Plant Allocator**

7 Q. WHAT CHANGE ARE YOU PROPOSING TO MAKE TO THE PLANT  
8 ALLOCATOR UTILIZED TO ALLOCATE ENGINEERING AND DEBT  
9 SERVICE COSTS?

10 A. In developing the plant allocator utilized to allocate engineering expenses and debt  
11 service costs, Mr. Woodcock added the projected plant additions included in PWSB's  
12 Capital Improvement Program to existing plant. However, because of the way in which  
13 meters, service and hydrant replacements were included in the Engineers' Report which  
14 Mr. Woodcock utilized as his data source, those capital additions were inadvertently  
15 excluded from the allocator. I have revised the plant allocator to reflect the planned  
16 capital additions for meter, service and hydrant replacements. I also included the cost of  
17 repainting the Stump Hill storage tank which is listed in the Capital Improvement Project  
18 Status Report provided as part of PWSB's filing requirements.

19  
20 **Private Fire Service Costs**

21 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO PRIVATE FIRE SERVICE  
22 COSTS.

23 A. In PWSB's study, service line maintenance costs were included in the determination of  
24 the costs associated with providing private fire services. However, none of the capital



1 costs attributable to service lines were allocated to private fire service.<sup>1</sup> I have adjusted  
2 the costs attributable to the provision of private fire service to include service line related  
3 capital costs. I have based this allocation on the number of equivalent fire services  
4 compared to the total number of equivalent services. This is the same allocator used for  
5 service line maintenance costs.  
6

7 **Miscellaneous Revenue**

8 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE TREATMENT OF  
9 MISCELLANEOUS REVENUE.

10 A. In his study, Mr. Woodcock allocated all miscellaneous revenue to cost functions based  
11 on the overall allocation of costs. I am proposing to separately identify and assign  
12 service installation revenue and state surcharge revenue. I have directly assigned service  
13 installation revenue to the metering function because the costs associated with service  
14 line installation are all assigned to this function. I have assigned state surcharge revenue  
15 to the base usage function because this surcharge is collected on each unit of water sold.  
16 The remainder of miscellaneous revenue consists primarily of penalty revenue and I have  
17 continued to allocate those revenues to functions in proportion to the overall costs  
18 assigned to each function.  
19

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<sup>1</sup> The capital costs allocated to service lines consist primarily of debt service and lease related costs which are allocated on total investment. All infrastructure replacement (IFR) costs are treated as recoverable through commodity rates consistent with Commission precedent. Hence, none are included as service line costs.

**Rate Design**

Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.

A. Consistent with the recommendation made by Mr. Woodcock on behalf of PWSB, I am proposing to adjust rates to reflect the results of the cost of service study.

Q. HAVE YOU PREPARED SCHEDULES WHICH COMPARE THE CURRENT AND PROPOSED RATES?

A. Yes. Schedules 8 through 12 of Exhibit TSC-1 provide comparisons of current and proposed rates based on PWSB's filed revenue requirement. Schedule 8 provides a comparison of current and cost based rates without adjustment to separately recover tangible property taxes through a separate surcharge. Schedule 9 provides the corresponding comparison of typical bills. Schedule 11 provides a comparison of current and cost based rates for those rates which would change if tangible property taxes are recovered through the proposed separate surcharge. Schedule 12 shows the corresponding bill comparison. Schedule 10 provides a proof of revenue.

Q. PLEASE SUMMARIZE PWSB'S PROPOSAL TO IMPLEMENT A SURCHARGE APPLICABLE TO CUSTOMERS IN THE TOWN OF CUMBERLAND.

A. PWSB is proposing to implement a separate surcharge applicable to customers within the Town of Cumberland. The purpose of this surcharge would be to recover the property taxes assessed on tangible property within the Town of Cumberland.

Q. WHAT IS PWSB'S RATIONALE FOR IMPLEMENTING SUCH A SURCHARGE?

A. As discussed in detail by Mr. Woodcock in his direct testimony, the reasons that PWSB is proposing to recover these property taxes through a surcharge relate to the fact that the assessment of taxes on PWSB tangible property is unique to Cumberland. That is, while

1 all of PWSB's real property (land and above ground structures) is subject to taxation by  
2 all of the applicable taxing authorities, the only PWSB tangible property that is subject to  
3 taxation is that located in the Town of Cumberland.

4 Q. WHAT IS INCLUDED IN THE TANGIBLE PROPERTY THAT IS SUBJECT  
5 TO TAXATION?

6 A. The tangible property upon which the Town of Cumberland assesses property taxes  
7 consists almost exclusively of distribution pipes located in the Town. However, it also  
8 includes a *de minimus* amount for computers and miscellaneous equipment used at  
9 PWSB facilities located in Cumberland.

10 Q. DO YOU AGREE WITH PWSB'S PROPOSAL?

11 A. Yes. I agree that it is appropriate to recover the property taxes assessed by Cumberland  
12 on tangible property in the Town of Cumberland from customers in the Town.

13 Q. WHY DO YOU SUPPORT THIS PROPOSAL?

14 A. I support the proposal to recover property taxes on tangible property in Cumberland  
15 through a surcharge because of the particular circumstances. In the case of real property,  
16 that property is normally utilized for the general benefit of all customers. Accordingly,  
17 recovery of the property taxes on that property from all customers is appropriate. In  
18 contrast, the tangible property subject to taxation in Cumberland is not property utilized  
19 for the general benefit of all ratepayers. Rather, that property is in place to serve the  
20 customers in Cumberland.

21 The issue is also one of fairness. Only the Town of Cumberland assesses property  
22 taxes on tangible property located there. Neither the City of Central Falls nor the Town  
23 of Pawtucket assess property taxes on the distribution pipes (or any other tangible  
24 property) located in their jurisdiction. Hence, the taxpayers of Cumberland receive a  
25 unique benefit from the taxation of tangible property. Moreover, if Central Falls and

1 Pawtucket did tax tangible property, rates would need to be higher for all customers.  
2 Accordingly, I agree that it is appropriate to recover the taxes on tangible property in  
3 Cumberland from ratepayers in Cumberland as proposed by PWSB.

4 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

5 A. Yes, it does.  
6  
7

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SUPPLY BOARD                        )     DOCKET NO. 3674**

**EXHIBIT ACCOMPANYING THE  
DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN**

**ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**JULY 2005**

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**EXETER**

ASSOCIATES, INC.  
5565 Sterrett Place  
Suite 310  
Columbia, Maryland 21044

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA</u> <u>EXPENSE</u>	<u>ALLOC.</u> <u>SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT</u> <u>FIRE</u>
<b>ADMINISTRATION</b>								
Admin Salaries	\$599,450	L	\$171,043	\$71,592	\$51,993	\$176,887	\$39,773	\$88,162
Admin Overtime	\$7,952	L	\$2,269	\$950	\$690	\$2,346	\$528	\$1,169
Police Payroll	\$19,809	L	\$5,652	\$2,366	\$1,718	\$5,845	\$1,314	\$2,913
Out of Class Pay	\$0	L	\$0	\$0	\$0	\$0	\$0	\$0
Admin. Longevity	\$27,832	L	\$7,941	\$3,324	\$2,414	\$8,213	\$1,847	\$4,093
Admin. Vacation & Sick Pay	\$0	L	\$0	\$0	\$0	\$0	\$0	\$0
FICA Payroll Tax	\$37,595	L	\$10,727	\$4,490	\$3,261	\$11,094	\$2,494	\$5,529
Medicare Payroll Tax	\$9,211	L	\$2,628	\$1,100	\$799	\$2,718	\$611	\$1,355
Health/Dental Benefits	\$724,100	L	\$206,610	\$86,479	\$62,804	\$213,669	\$48,043	\$106,495
MERS Contribution	\$32,975	L	\$9,409	\$3,938	\$2,860	\$9,730	\$2,188	\$4,850
Education & Training	\$14,950	E	\$8,296	\$2,352	\$831	\$1,912	\$520	\$1,038
Outside Services	\$123,592	E	\$68,586	\$19,447	\$6,872	\$15,806	\$4,299	\$8,582
Pagers/Cell Phones	\$18,487	E	\$10,259	\$2,909	\$1,028	\$2,364	\$643	\$1,284
Maint. of Gen'l Plant	\$20,111	E	\$11,160	\$3,164	\$1,118	\$2,572	\$700	\$1,396
Repairs & Main/water plant	\$1,707	E	\$947	\$269	\$95	\$218	\$59	\$119
Telephone	\$13,803	E	\$7,660	\$2,172	\$767	\$1,765	\$480	\$958
Heating Fuel	\$22,313	E	\$12,383	\$3,511	\$1,241	\$2,854	\$776	\$1,549
Other Utilities	\$2,667	E	\$1,480	\$420	\$148	\$341	\$93	\$185
Unemployment Insurance	\$4,584	L	\$1,308	\$547	\$398	\$1,353	\$304	\$674
Workers Compensation	\$98,323	L	\$28,055	\$11,743	\$8,528	\$29,013	\$6,524	\$14,461
Property Insurance	\$179,466	P	\$97,585	\$43,777	\$24,319	\$11,573	\$141	\$2,070
Advertising/Classified	\$10,342	E	\$5,739	\$1,627	\$575	\$1,323	\$360	\$718
Printing	\$8,793	E	\$4,880	\$1,384	\$489	\$1,125	\$306	\$611
Dues & Subscriptions	\$31,722	E	\$17,604	\$4,991	\$1,764	\$4,057	\$1,104	\$2,203
Office Supplies/Other	\$19,016	E	\$10,553	\$2,992	\$1,057	\$2,432	\$662	\$1,320
Postage	\$13,320	E	\$7,392	\$2,096	\$741	\$1,703	\$463	\$925
Housekeeping Supplies	\$8,477	E	\$4,704	\$1,334	\$471	\$1,084	\$295	\$589
Municipal Charges	\$148,486	E	\$82,401	\$23,364	\$8,256	\$18,990	\$5,165	\$10,310
Capitalized Materials	\$48,142	E	\$26,716	\$7,575	\$2,677	\$6,157	\$1,675	\$3,343
Materials & Supplies	\$1,877	E	\$1,042	\$295	\$104	\$240	\$65	\$130
Bad Debt Expense	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
Damage Claims	\$8,172	E	\$4,535	\$1,286	\$454	\$1,045	\$284	\$567
Bond Trustee Fees	\$13,000	P	\$7,069	\$3,171	\$1,762	\$838	\$10	\$150
Cent Falls Franch. Fee/Purchase	\$172,831	C	\$125,934	\$30,507	\$16,390	\$0	\$0	\$0
Regulatory Comm. Expense	\$206,667	E	\$114,688	\$32,518	\$11,491	\$26,430	\$7,189	\$14,350
Other Miscellaneous	<u>\$10,511</u>	E	<u>\$5,833</u>	<u>\$1,654</u>	<u>\$584</u>	<u>\$1,344</u>	<u>\$366</u>	<u>\$730</u>
Subtotal - Admin	\$2,660,282		\$1,083,087	\$379,343	\$218,700	\$567,041	\$129,282	\$282,829
<b>CUSTOMER SERVICE</b>								
Payroll	\$135,161	B	\$0	\$0	\$0	\$0	\$135,161	\$0
Overtime	\$2,514	B	\$0	\$0	\$0	\$0	\$2,514	\$0
Out of Class Pay	\$627	B	\$0	\$0	\$0	\$0	\$627	\$0
Longevity	\$6,888	B	\$0	\$0	\$0	\$0	\$6,888	\$0
Vacation & Sick Time	\$0	B	\$0	\$0	\$0	\$0	\$0	\$0
FICA	\$9,002	B	\$0	\$0	\$0	\$0	\$9,002	\$0
Medicare	\$2,105	B	\$0	\$0	\$0	\$0	\$2,105	\$0
MERS Contribution	\$7,731	B	\$0	\$0	\$0	\$0	\$7,731	\$0
Education & Training	\$3,105	B	\$0	\$0	\$0	\$0	\$3,105	\$0
Outside Services	\$17,322	B	\$0	\$0	\$0	\$0	\$17,322	\$0
Vehicle Maint - Fuel & Misc.	\$2,101	B	\$0	\$0	\$0	\$0	\$2,101	\$0
Main. of Misc Equipment	\$1,293	B	\$0	\$0	\$0	\$0	\$1,293	\$0
Telephone	\$1,402	B	\$0	\$0	\$0	\$0	\$1,402	\$0
Other Utilities	\$0	B	\$0	\$0	\$0	\$0	\$0	\$0
Printing	\$17,549	B	\$0	\$0	\$0	\$0	\$17,549	\$0
Dues & Subscriptions	\$0	B	\$0	\$0	\$0	\$0	\$0	\$0
Postage	\$28,161	B	\$0	\$0	\$0	\$0	\$28,161	\$0
Miscellaneous Supplies	\$142	B	\$0	\$0	\$0	\$0	\$142	\$0
Other Misc.	<u>\$1,936</u>	B	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$1,936</u>	<u>\$0</u>
Subtotal - Customer Accts	\$237,040		\$0	\$0	\$0	\$0	\$237,040	\$0

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA EXPENSE</u>	<u>ALLOC. SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<i>SOURCE OF SUPPLY</i>								
Salaries	\$145,624	A	\$145,624	\$0	\$0	\$0	\$0	\$0
Overtime	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Source of Supply Beeper	\$2,175	A	\$2,175	\$0	\$0	\$0	\$0	\$0
Longevity	\$12,299	A	\$12,299	\$0	\$0	\$0	\$0	\$0
Vacation & Sick Time	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
FICA	\$9,926	A	\$9,926	\$0	\$0	\$0	\$0	\$0
Medicare Payroll Tax	\$2,321	A	\$2,321	\$0	\$0	\$0	\$0	\$0
MERS Contribution	\$8,113	A	\$8,113	\$0	\$0	\$0	\$0	\$0
Education Training	\$2,000	A	\$2,000	\$0	\$0	\$0	\$0	\$0
Security Services	\$74,060	A	\$74,060	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Fuel & Misc.	\$2,000	A	\$2,000	\$0	\$0	\$0	\$0	\$0
Maint of Structures	\$7,010	A	\$7,010	\$0	\$0	\$0	\$0	\$0
Maint - Collection Reservoirs	\$130,500	A	\$130,500	\$0	\$0	\$0	\$0	\$0
Maint - Wells	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Misc. Plant	\$1,000	A	\$1,000	\$0	\$0	\$0	\$0	\$0
Maint - Wells & Springs	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Light & Power	\$28,290	A	\$28,290	\$0	\$0	\$0	\$0	\$0
Other Utilities	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Materials & Supplies	\$6,739	A	\$6,739	\$0	\$0	\$0	\$0	\$0
Property Tax	\$702,828	A	\$702,828	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$7,152	A	\$7,152	\$0	\$0	\$0	\$0	\$0
Subtotal - Supply	\$1,142,038		\$1,142,038	\$0	\$0	\$0	\$0	\$0
<i>PUMPING</i>								
Salaries	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Overtime	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Longevity	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Vacation & Sick Time	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
FICA	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Medicare Payroll Tax	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
MERS Contribution	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Telephone	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Heating	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Purchased Power	\$564,045	A	\$564,045	\$0	\$0	\$0	\$0	\$0
Depreciation	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Property Tax	\$25,641	D	\$16,258	\$9,383	\$0	\$0	\$0	\$0
Miscellaneous	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal - Pumping	\$589,685		\$580,303	\$9,383	\$0	\$0	\$0	\$0
<i>PURIFICATION</i>								
DBO O&M Contract	\$1,559,852	D	\$989,044	\$570,807	\$0	\$0	\$0	\$0
Overtime	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Out of Class Pay	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Beeper Stipend	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Longevity	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Vacation & Sick Time	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
FICA	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Medicare	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
MERS Contribution	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Education & Training	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Lab Testing	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Tires	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Batteries	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Outside Parts	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Fuel & Misc	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Structures	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Distrib. Reservoirs	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Wells	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Equipment	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Maint - Facilities	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0

PAWTUCKET WATER SUPPLY BOARD

**ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS**

<u>EXPENSE ITEM</u>	<u>PRO FORMA EXPENSE</u>	<u>ALLOC. SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Telephone	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Light & Power	\$210,263	A	\$210,263	\$0	\$0	\$0	\$0	\$0
Heating	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Other Utilities	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Advertising/Classified	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Dues & Subscriptions	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Property Tax	\$52,438	D	\$33,249	\$19,189	\$0	\$0	\$0	\$0
Other Miscellaneous	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal - Purification	\$1,822,553		\$1,232,557	\$589,996	\$0	\$0	\$0	\$0
<i>TRANSMISSION &amp; DISTRIBUTION</i>								
Payroll	\$903,347	O	\$202,892	\$135,412	\$113,370	\$180,669	\$0	\$271,004
Overtime	\$98,362	O	\$22,092	\$14,744	\$12,344	\$19,672	\$0	\$29,509
Out of Class Pay	\$2,091	O	\$470	\$313	\$262	\$418	\$0	\$627
Beeper Stipend	\$7,611	O	\$1,709	\$1,141	\$955	\$1,522	\$0	\$2,283
Longevity	\$55,191	O	\$12,396	\$8,273	\$6,926	\$11,038	\$0	\$16,557
Vacation & Sick Time	\$54,298	O	\$12,195	\$8,139	\$6,814	\$10,860	\$0	\$16,289
FICA	\$65,009	O	\$14,601	\$9,745	\$8,159	\$13,002	\$0	\$19,503
Medicare	\$16,253	O	\$3,650	\$2,436	\$2,040	\$3,251	\$0	\$4,876
MERS Contribution	\$50,537	O	\$11,351	\$7,575	\$6,342	\$10,107	\$0	\$15,161
Education & Training	\$7,288	O	\$1,637	\$1,092	\$915	\$1,458	\$0	\$2,186
Vehicle Maint-Registration	\$105	O	\$23	\$16	\$13	\$21	\$0	\$31
Vehicle Maint - Inspection	\$669	O	\$150	\$100	\$84	\$134	\$0	\$201
Vehicle Maint - Tires	\$958	O	\$215	\$144	\$120	\$192	\$0	\$287
Vehicle Maint - Batteries	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Outside Parts	\$34,482	O	\$7,745	\$5,169	\$4,328	\$6,896	\$0	\$10,345
Vehicle Maint - Fuel & Misc	\$18,707	O	\$4,202	\$2,804	\$2,348	\$3,741	\$0	\$5,612
Maint - Misc Plant	\$3,040	O	\$683	\$456	\$381	\$608	\$0	\$912
Maint - T&D Mains	\$21,296	T	\$9,870	\$5,696	\$5,730	\$0	\$0	\$0
Maint - Services	\$12,233	M	\$0	\$0	\$0	\$12,233	\$0	\$0
Maint - Hydrants	\$4,636	F	\$0	\$0	\$0	\$0	\$0	\$4,636
Telephone	\$2,104	O	\$472	\$315	\$264	\$421	\$0	\$631
Advertising & Classified	\$1,606	O	\$361	\$241	\$201	\$321	\$0	\$482
Dues & Subscriptions	\$33	O	\$7	\$5	\$4	\$7	\$0	\$10
Postage	-\$539	O	-\$121	-\$81	-\$68	-\$108	\$0	-\$162
Capitalized Materials	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Misc. Tools & Supplies/Inventory	\$46,634	O	\$10,474	\$6,990	\$5,853	\$9,327	\$0	\$13,990
Inventory Water Material	\$5,890	O	\$1,323	\$883	\$739	\$1,178	\$0	\$1,767
Road Surface Restoration	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Other Misc Supplies	\$950	O	\$213	\$142	\$119	\$190	\$0	\$285
Central Falls System Operations	\$399,097	T	\$184,965	\$106,749	\$107,384	\$0	\$0	\$0
Property Tax	\$137,514	O	\$30,886	\$20,613	\$17,258	\$27,503	\$0	\$41,254
Other Miscellaneous	\$31,732	O	\$7,127	\$4,757	\$3,982	\$6,346	\$0	\$9,520
Subtotal - T&D	\$1,981,132		\$541,588	\$343,871	\$306,869	\$321,007	\$0	\$467,797
<i>ENGINEERING</i>								
Payroll	\$392,131	P	\$213,221	\$95,653	\$53,138	\$25,287	\$309	\$4,522
Overtime	\$5,687	P	\$3,092	\$1,387	\$771	\$367	\$4	\$66
Out of Class Pay	\$1,965	P	\$1,069	\$479	\$266	\$127	\$2	\$23
Beeper Stipend	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Longevity	\$23,309	P	\$12,674	\$5,686	\$3,159	\$1,503	\$18	\$269
Vacation & Sick Time	\$6,395	P	\$3,477	\$1,560	\$867	\$412	\$5	\$74
FICA	\$26,628	P	\$14,479	\$6,495	\$3,608	\$1,717	\$21	\$307
Medicare	\$6,228	P	\$3,386	\$1,519	\$844	\$402	\$5	\$72
MERS Contribution	\$22,654	P	\$12,318	\$5,526	\$3,070	\$1,461	\$18	\$261
Education & Training	\$3,726	P	\$2,026	\$909	\$505	\$240	\$3	\$43
Vehicle Maint-Registration	\$61	P	\$33	\$15	\$8	\$4	\$0	\$1
Vehicle Maint - Inspec	\$83	P	\$45	\$20	\$11	\$5	\$0	\$1
Vehicle Maint - Tires	\$492	P	\$268	\$120	\$67	\$32	\$0	\$6
Vehicle Maint - Batteries	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0



PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

EXPENSE ITEM	PRO FORMA EXPENSE	ALLOC. SYMBOL	BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
Vehicle Maint - Outside Parts	\$2,224	P	\$1,209	\$542	\$301	\$143	\$2	\$26
Vehicle Maint - Fuel & Misc	\$5,758	P	\$3,131	\$1,405	\$780	\$371	\$5	\$66
Maint - Misc Equipment	\$161	P	\$87	\$39	\$22	\$10	\$0	\$2
Telephone	\$3,506	P	\$1,906	\$855	\$475	\$226	\$3	\$40
Advertising and Classifieds	\$613	P	\$334	\$150	\$83	\$40	\$0	\$7
Printing	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Dues & Subscriptions	\$38	P	\$21	\$9	\$5	\$2	\$0	\$0
Office Supplies & Other	\$21,149	P	\$11,500	\$5,159	\$2,866	\$1,364	\$17	\$244
Postage	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Capitalized Materials	\$101	P	\$55	\$25	\$14	\$6	\$0	\$1
Other Misc. Expense	\$3,462	P	\$1,882	\$845	\$469	\$223	\$3	\$40
Miscellaneous Expense	<u>\$9,848</u>	P	<u>\$5,355</u>	<u>\$2,402</u>	<u>\$1,335</u>	<u>\$635</u>	<u>\$8</u>	<u>\$114</u>
Subtotal - Engineering	\$536,219		\$291,570	\$130,801	\$72,663	\$34,579	\$423	\$6,184
<i>METER DEPARTMENT</i>								
Payroll	\$386,422	M	\$0	\$0	\$0	\$386,422	\$0	\$0
Overtime	\$1,283	M	\$0	\$0	\$0	\$1,283	\$0	\$0
Out of Class Pay	\$314	M	\$0	\$0	\$0	\$314	\$0	\$0
Beeper Stipend	\$1,359	M	\$0	\$0	\$0	\$1,359	\$0	\$0
Longevity	\$20,110	M	\$0	\$0	\$0	\$20,110	\$0	\$0
Vacation & Sick Time	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
FICA	\$25,388	M	\$0	\$0	\$0	\$25,388	\$0	\$0
Medicare	\$5,938	M	\$0	\$0	\$0	\$5,938	\$0	\$0
MERS Contribution	\$21,447	M	\$0	\$0	\$0	\$21,447	\$0	\$0
Education & Training	\$688	M	\$0	\$0	\$0	\$688	\$0	\$0
Vehicle Maint - Inspec	\$9	M	\$0	\$0	\$0	\$9	\$0	\$0
Vehicle Maint - Batteries	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maint - Tires	\$111	M	\$0	\$0	\$0	\$111	\$0	\$0
Vehicle Maint - Outside Parts	\$1,807	M	\$0	\$0	\$0	\$1,807	\$0	\$0
Vehicle Maint - Fuel & Misc	\$7,387	M	\$0	\$0	\$0	\$7,387	\$0	\$0
Maint - Misc Equipment	\$3,288	M	\$0	\$0	\$0	\$3,288	\$0	\$0
Maint - Meters	\$921	M	\$0	\$0	\$0	\$921	\$0	\$0
Telephone	\$1,636	M	\$0	\$0	\$0	\$1,636	\$0	\$0
Advertising & Classified	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$1,694	M	\$0	\$0	\$0	\$1,694	\$0	\$0
Supplies	\$2,989	M	\$0	\$0	\$0	\$2,989	\$0	\$0
Postage	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
Capitalized Materials	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
Merchandising & Jobbing	\$28,403	M	\$0	\$0	\$0	\$28,403	\$0	\$0
Meter Maint. Expense	\$0	M	\$0	\$0	\$0	\$0	\$0	\$0
Meter Reading Expense	\$5,304	M	\$0	\$0	\$0	\$5,304	\$0	\$0
Meter Inventory	\$739	M	\$0	\$0	\$0	\$739	\$0	\$0
Other Misc. Expense	<u>\$148</u>	M	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$148</u>	<u>\$0</u>	<u>\$0</u>
Subtotal - Meter Department	<u>\$517,384</u>		<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$517,384</u>	<u>\$0</u>	<u>\$0</u>
TOTAL O&M	\$9,486,334	I	\$4,871,142	\$1,453,394	\$598,233	\$1,440,010	\$366,745	\$756,811

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

	<u>PRO FORMA</u> <u>EXPENSE</u>	<u>ALLOC.</u> <u>SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT</u> <u>FIRE</u>
<i>CAPITAL EXPENSE</i>								
PBA Misc. Exp.	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
CWFA Fees	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Restrict. Bond Principal & Interest	\$5,736,014	P	\$3,118,960	\$1,399,195	\$777,290	\$369,895	\$4,521	\$66,154
Lease Principal	\$135,729	P	\$73,803	\$33,109	\$18,393	\$8,753	\$107	\$1,565
Lease Interest	\$15,233	P	\$8,283	\$3,716	\$2,064	\$982	\$12	\$176
Capitalized Labor	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Capitalized Material & Supply	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
IFR	\$3,100,000	A	\$3,100,000	\$0	\$0	\$0	\$0	\$0
WRB - Settlement	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
Cent Falls Franch. Fee Settlement	\$0	C	\$0	\$0	\$0	\$0	\$0	\$0
Lead Pipe Replacement	\$0	T	\$0	\$0	\$0	\$0	\$0	\$0
T&D Replacement	\$0	T	\$0	\$0	\$0	\$0	\$0	\$0
Rate Stabiliz/Capital Program	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
O&M Reserve Deposit	\$158,721	E	\$88,081	\$24,974	\$8,825	\$20,298	\$5,522	\$11,021
R & R Reserve Deposit	\$0	P	\$0	\$0	\$0	\$0	\$0	\$0
WTP Reserve	<u>\$389,000</u>	D	<u>\$246,651</u>	<u>\$142,349</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
TOTAL CAPITAL COSTS	\$9,534,698		\$6,635,777	\$1,603,343	\$806,572	\$399,928	\$10,161	\$78,916
TOTAL EXPENSES	\$19,021,032		\$11,506,918	\$3,056,738	\$1,404,804	\$1,839,939	\$376,906	\$835,727
Plus: Operating Income	\$951,052	I	\$488,356	\$145,710	\$59,976	\$144,368	\$36,768	\$75,874
Less: Service Installation Revenue	-\$106,352	M	\$0	\$0	\$0	-\$106,352	\$0	\$0
Less: State Surcharge Revenue	-\$64,364	A	-\$64,364	\$0	\$0	\$0	\$0	\$0
Less Other Misc. Revenue	<u>-\$132,509</u>	I	<u>-\$68,042</u>	<u>-\$20,302</u>	<u>-\$8,356</u>	<u>-\$20,115</u>	<u>-\$5,123</u>	<u>-\$10,571</u>
REQUIRED FROM RATES	\$19,668,858		\$11,862,868	\$3,182,146	\$1,456,424	\$1,857,840	\$408,551	\$901,029

PAWTUCKET WATER SUPPLY BOARD

**ALLOCATION OF PROJECTED PLANT IN SERVICE TO COST COMPONENTS**

<u>EXPENSE ITEM</u>	<u>PROJECTED PLANT*</u>	<u>ALLOC. SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<i>SOURCE OF SUPPLY</i>								
Land & Land Rights	\$4,050,849	A	\$4,050,849	\$0	\$0	\$0	\$0	\$0
Structures & Improvements	\$16,499,969	A	\$16,499,969	\$0	\$0	\$0	\$0	\$0
Wells & Springs	\$726,712	A	\$726,712	\$0	\$0	\$0	\$0	\$0
<i>PUMPING</i>								
Land & Land Rights	\$30,133	D	\$19,106	\$11,027	\$0	\$0	\$0	\$0
Structures & Improvements	\$937,301	D	\$594,308	\$342,993	\$0	\$0	\$0	\$0
Electric Pumping Equipment	\$1,566,482	D	\$993,248	\$573,233	\$0	\$0	\$0	\$0
<i>PURIFICATION</i>								
Land & Land Rights	\$26,046	D	\$16,515	\$9,531	\$0	\$0	\$0	\$0
Structures & Improvements	\$51,603,859	D	\$32,720,100	\$18,883,759	\$0	\$0	\$0	\$0
Purification Equipment	\$635,768	D	\$403,117	\$232,651	\$0	\$0	\$0	\$0
CWIP - Purif Plant	\$71,584	D	\$45,389	\$26,195	\$0	\$0	\$0	\$0
<i>TRANSM &amp; DISTRIBUTION</i>								
Land & Land Rights	\$1,590	H	\$672	\$388	\$530	\$0	\$0	\$0
Distribution Reservoirs	\$1,893,080	H	\$800,221	\$461,832	\$631,027	\$0	\$0	\$0
Transmission Mains	\$17,465,935	D	\$11,074,504	\$6,391,431	\$0	\$0	\$0	\$0
Distribution mains	\$73,124,828	H	\$30,910,500	\$17,839,385	\$24,374,943	\$0	\$0	\$0
Fire Mains	\$0	F	\$0	\$0	\$0	\$0	\$0	\$0
Services	\$7,912,417	M	\$0	\$0	\$0	\$7,912,417	\$0	\$0
Meters	\$3,559,586	M	\$0	\$0	\$0	\$3,559,586	\$0	\$0
Hydrants	\$1,855,210	F	\$0	\$0	\$0	\$0	\$0	\$1,855,210
<i>GENERAL</i>								
Miscellaneous Equipment	\$141,833	E	\$78,709	\$22,317	\$7,886	\$18,139	\$4,934	\$9,848
Structures & improvements	\$2,152,888	E	\$1,194,725	\$338,748	\$119,702	\$275,328	\$74,894	\$149,490
Office Furniture & Improvements	\$512,614	E	\$284,470	\$80,658	\$28,502	\$65,557	\$17,833	\$35,594
Transportation Equipment	\$1,209,691	E	\$671,307	\$190,340	\$67,260	\$154,705	\$42,082	\$83,997
Stores Equipment	\$7,525	E	\$4,176	\$1,184	\$418	\$962	\$262	\$523
Tools & Shop Equipment	\$41,651	E	\$23,114	\$6,554	\$2,316	\$5,327	\$1,449	\$2,892
Laboratory Equipment	\$85,723	A	\$85,723	\$0	\$0	\$0	\$0	\$0
Power Operated Equipment	\$50,343	E	\$27,937	\$7,921	\$2,799	\$6,438	\$1,751	\$3,496
Communication Equipment	\$103,470	E	\$57,420	\$16,281	\$5,753	\$13,233	\$3,599	\$7,185
TOTAL PLANT	\$186,267,087		\$101,282,792	\$45,436,428	\$25,241,135	\$12,011,691	\$146,805	\$2,148,236
PERCENT		P	54.38%	24.39%	13.55%	6.45%	0.08%	1.15%

Note: Projected Plant = Test Year Net Plant plus proposed Treatment Plant and Distribution Improvements

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF NON-ADMINISTRATIVE LABOR COSTS TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA EXPENSE</u>	<u>ALLOC. SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<i>CUSTOMER SERVICE</i>								
Payroll	\$135,161	B	\$0	\$0	\$0	\$0	\$135,161	\$0
Overtime	\$2,514	B	\$0	\$0	\$0	\$0	\$2,514	\$0
Out of Class Pay	\$627	B	\$0	\$0	\$0	\$0	\$627	\$0
Longevity	\$6,888	B	\$0	\$0	\$0	\$0	\$6,888	\$0
<i>SOURCE OF SUPPLY</i>								
Salaries	\$145,624	A	\$145,624	\$0	\$0	\$0	\$0	\$0
Overtime	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Longevity	\$12,299	A	\$12,299	\$0	\$0	\$0	\$0	\$0
<i>TRANSMISSION &amp; DISTRIBUTION</i>								
Payroll	\$903,347	O	\$202,892	\$135,412	\$113,370	\$180,669	\$0	\$271,004
Overtime	\$98,362	O	\$22,092	\$14,744	\$12,344	\$19,672	\$0	\$29,509
Out of Class Pay	\$2,091	O	\$470	\$313	\$262	\$418	\$0	\$627
Longevity	\$55,191	O	\$12,396	\$8,273	\$6,926	\$11,038	\$0	\$16,557
<i>ENGINEERING</i>								
Payroll	\$392,131	P	\$213,221	\$95,653	\$53,138	\$25,287	\$309	\$4,522
Overtime	\$5,687	P	\$3,092	\$1,387	\$771	\$367	\$4	\$66
Out of Class Pay	\$1,965	P	\$1,069	\$479	\$266	\$127	\$2	\$23
Longevity	\$23,309	P	\$12,674	\$5,686	\$3,159	\$1,503	\$18	\$269
<i>METER DEPARTMENT</i>								
Payroll	\$386,422	M	\$0	\$0	\$0	\$386,422	\$0	\$0
Overtime	\$1,283	M	\$0	\$0	\$0	\$1,283	\$0	\$0
Out of Class Pay	\$314	M	\$0	\$0	\$0	\$314	\$0	\$0
Longevity	<u>\$20,110</u>	M	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$20,110</u>	<u>\$0</u>	<u>\$0</u>
TOTALS	\$2,193,326		\$625,829	\$261,948	\$190,237	\$647,210	\$145,524	\$322,577
PERCENT		L	28.5%	11.9%	8.7%	29.5%	6.6%	14.7%

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION TO FIRE, WHOLESALE & RETAIL SERVICE

<u>UNITS OF SERVICE</u>	<u>TOTAL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>FIRE</u>
Number		5,087,083	21,444	13,860	26,254	91,869	1,912
Units		ccf/yr	ccf/day	ccf/day	equiv meters	bills	hydrants
Revenue Requirements	\$19,668,858	\$11,862,868	\$3,182,146	\$1,456,424	\$1,857,840	\$408,551	\$901,029
Allocation to Fire Protection	\$1,439,429	<b>\$59,314</b>	\$428,511	\$50,574	included in calculation		\$901,029
Allocation to Wholesale *	\$1,403,438	\$1,194,665	\$183,689	\$25,084			
Net To Retail Metered Rates	\$16,825,991	\$10,608,889	\$2,569,946	\$1,380,765	\$1,857,840	\$408,551	\$0

\* Allocation to wholesale based on:

BASE

Total Sales (ccf)	5,087,083
Plus Unacctd For (7%)	356,096
Total Production	5,443,179
Wholesale Sales	548,162
Percent	10.07%
Wholesale Allocation	<u>\$1,194,665</u>

MAX DAY

Total Max Day Allocation	\$3,182,146	
Less: Distribution Costs		
80.7% of T&D	-\$277,573	
80.7% of Engineering	-\$105,582	
Admin Share	-\$100,005	26.1%
Capital Items	-\$950,403	59.28% (Less Distribution Mains & Gen'l Items allocated to Max Day)
Total Net of Distribution	\$1,748,583	
Wholesale Max Day %	10.51%	See Sch. 2.1
Wholesale Allocation	\$183,689	

PEAK HOUR

Total Peak Hour Allocation	\$1,456,424	
Less: Distribution Costs		
80.7% of T&D	-\$247,705	
80.7% of Engineering	-\$58,654	
Admin Share	-\$111,998	36.6%
Capital Items	-\$806,572	100.00%
Total Net of Distribution	\$231,496	
Wholesale Peak Hr %	10.84%	See Sch. 2.1
Wholesale Allocation	\$25,084	

**PAWTUCKET WATER SUPPLY BOARD**

**UNITS OF SERVICE**

**METERS**

<u>Meter Size</u>	<u>Quarterly</u>	<u>Monthly</u>	<u>Total</u>	<u>Equiv Factor</u>	<u># of Equivs</u>
5/8	21,243	8	21,251	1.00	21,251
3/4	239	4	243	1.39	337
1	474	11	485	2.00	970
1 1/2	230	6	236	4.07	961
2	374	28	402	5.29	2,125
3	24	16	40	6.00	240
4	10	6	16	14.00	224
6	4	3	7	21.00	147
8	0	0	0	30.00	0
Totals	22,598	82	22,680		26,254

**PUBLIC FIRE HYDRANTS**

	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
Pawtucket	1,514	0	1,514
Central Falls	201	0	201
Valley Falls	197	0	197
Totals	1,912	0	1,912

**PRIVATE FIRE SERVICE**

<u>Size</u>	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>	<u>Equiv Factor</u>	<u># of Equivs</u>
2	18	0	18	5.3	95
4	29	0	29	14.0	406
6	354	0	354	21.0	7,434
8	88	0	88	30.0	2,640
10	4	0	4	30.0	120
12	0	0	0	30.0	0
Total	493	0	493		10,695

**METERED WATER USE (ccf/year)**

<u>Retail</u>	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
Small (5/8 - 1")	3,095,831	0	3,095,831
Medium (1.5 - 2" & By pass)	763,379	0	763,379
Large (3" and up)	367,351	0	367,351
Very Large (6" and up)	312,360	0	312,360
Total	4,538,921	0	4,538,921
<u>Wholesale</u>			
Cumberland	548,162	0	548,162
Seekonk	0	0	0
Total	548,162	0	548,162
Total	5,087,083		5,087,083

PAWTUCKET WATER SUPPLY BOARD

UNITS OF SERVICE - DEMAND FACTORS

	<u>BASE</u>			<u>MAXIMUM DAY</u>			<u>PEAK HOUR</u>		<u>Equivalent</u>	
	<u>Annual Use</u>	<u>Average Day</u>	<u>Demand</u>	<u>Maximum Day</u>	<u>Extra Capacity</u>	<u>Demand</u>	<u>Maximum Hour</u>	<u>Extra Capacity</u>	<u>Meters &amp;</u>	<u>Bills</u>
	<u>ccf/year</u>	<u>ccf/day</u>	<u>Factor</u>	<u>ccf/day</u>	<u>ccf/day</u>	<u>Factor</u>	<u>ccf/day</u>	<u>ccf/day</u>	<u>Services</u>	
<u>Inside - Retail</u>										
Small (5/8 - 1")	3,095,831	8,482	2.50	21,204	12,723	3.50	29,686	8,482	22,558	88,100
Medium (1.5 - 2" & By pass)	763,379	2,091	2.00	4,183	2,091	3.00	6,274	2,091	3,086	2,824
Large (3" and up)	679,711	1,862	1.80	3,352	1,490	2.50	4,656	1,304	611	452
<u>Fire Protection</u>	6,000 gal/min for 6 hours per Docket 319:			2,888	2,888		481	481		493
<u>Wholesale</u>										
Cumberland	548,162	1,502	2.50	3,755	2,253	3.50	5,256	1,502		
Seekonk	0	0	2.50	0	0	3.50	0	0		
Totals	5,087,083	13,937		35,381	21,444		46,354	13,860	26,254	91,869

UNITS OF SERVICE-MILES OF MAINS

<u>Size</u>	<u>Miles</u>	<u>Inch-Miles</u>	<u>Percent</u>	
2	1.29	2.6		
4	1.50	6.0		
6	113.08	678.5		
8	77.97	623.8		
10	1.78	17.8		
12	45.76	549.1	80.7%	Distribution
16	4.24	67.8		
20	9.13	182.6		
24	6.06	145.4		
30	0.10	3.0		
36	0.35	12.6		
48	0.04	1.9		
54	0.65	35.1	19.3%	Transmission
Totals		2,326		

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION FACTORS

	ALLOCATION SYMBOL	BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE	
100.00%	A	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Supply & Treatment
100.00%	B	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	Billing
100.00%	C	72.87%	17.65%	9.48%	0.00%	0.00%	0.00%	Central Falls Franchise Fee
100.00%	D	63.41%	36.59%	0.00%	0.00%	0.00%	0.00%	Max Day Demand
100.00%	E	55.49%	15.73%	5.56%	12.79%	3.48%	6.94%	O&M less A&G
100.00%	F	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	Fire Service
100.00%	H	42.27%	24.40%	33.33%	0.00%	0.00%	0.00%	Max Hour Demand
100.00%	I	51.35%	15.32%	6.31%	15.18%	3.87%	7.98%	Total O&M
100.00%	L	28.53%	11.94%	8.67%	29.51%	6.63%	14.71%	Labor
100.00%	M	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	Meters
100.00%	O	22.46%	14.99%	12.55%	20.00%	0.00%	30.00%	Mains, Hydrants & Services
100.00%	P	54.38%	24.39%	13.55%	6.45%	0.08%	1.15%	Plant
100.00%	T	46.35%	26.75%	26.91%	0.00%	0.00%	0.00%	T&D Mains

Symbol D      MGD      Percent

Avg Day	12.746	63.41%
Max Day Incr	<u>7.356</u>	<u>36.59%</u>
Total Max Day	20.101	100.00%

Symbol E

Total		<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Amount	\$6,826,052	\$3,788,055	\$1,074,051	\$379,533	\$872,970	\$237,463	\$473,981
Percent	E	55.5%	15.7%	5.6%	12.8%	3.5%	6.9%

Symbol H      MGD      Percent

Avg Day	12.746	42.27%
Max Day Incr	7.356	24.40%
Peak Hour Incr	<u>10.051</u>	<u>33.33%</u>
Total Peak Hour	30.152	100.00%

	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>Average</u>
Avg Day (mgd)	13.122	13.389	13.035	11.954	12.229	12.75
Max Day (mgd)	21.357	21.085	21.395	17.583	19.087	20.10

Symbol O Per Settlement in Docket No. 3373

	<u>% of Time</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Mains	50.00%	22.46%	14.99%	12.55%	0.00%	0.00%	0.00%
Hydrants	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%
Services	<u>20.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>20.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Total	100.0%	22.5%	15.0%	12.6%	20.0%	0.0%	30.0%

Symbol T

	<u>Plant Amt.</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Transmission	\$17,465,935	\$11,074,504	\$6,391,431	\$0	\$0	\$0	\$0
Distribution	<u>\$73,124,828</u>	<u>\$30,910,500</u>	<u>\$17,839,385</u>	<u>\$24,374,943</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total	\$90,590,764	\$41,985,005	\$24,230,816	\$24,374,943	\$0	\$0	\$0
		46.35%	26.75%	26.91%	0.00%	0.00%	0.00%



**PAWTUCKET WATER SUPPLY BOARD**

**FIRE SERVICE CHARGES**

PUBLIC FIRE SERVICE

Annual Charge/Hydrant	\$688.36
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PRIVATE FIRE SERVICE

SERVICE SIZE <u>(inches)</u>	ANNUAL <u>CHARGE</u>
2	\$187.96
4	\$533.28
6	\$902.69
8	\$1,440.17
10	\$1,809.54
12	\$2,321.47

**PAWTUCKET WATER SUPPLY BOARD**

**ALLOCATION OF FIRE SERVICE EXPENSES  
TO PUBLIC AND PRIVATE FIRE SERVICE**

	<u>NUMBER</u>	<u>DEMAND FACTOR (1)</u>	<u>NO. OF EQUIVS.</u>	<u>PERCENT OF DEMAND</u>	<u>NON-HYDR. REQUIRED</u>	<u>DIRECT HYDRANT</u>	<u>TOTAL</u>
PUBLIC FIRE SERVICE							
Hydrants	1,912	111.31	212,826.5	77.10%	\$415,115	\$901,029	\$1,316,144
PRIVATE FIRE SERVICE							
SIZE (IN)							
2	18	6.19	111.4				
4	29	38.32	1,111.3				
6	354	111.31	39,404.1				
8	88	237.21	20,874.2				
10	4	426.58	1,706.3				
12	<u>0</u>	<u>689.04</u>	<u>0.0</u>				
Subtotal	493		63,207.2	22.90%	\$123,285	\$0	\$123,285
TOTAL	2,405		276,033.7	100.00%	\$538,399	\$901,029	\$1,439,429
Total Fire Allocation		\$1,439,429					
Less Direct Fire		<u>\$901,029</u>					
Net Non-Hydrant		\$538,399					

Note:

(1) Based on size to the 2.63 power.

**PAWTUCKET WATER SUPPLY BOARD**

**DETERMINATION OF FIRE SERVICE CHARGES**

<u>PUBLIC FIRE PROTECTION</u>		<u>CALCULATED CHARGE</u>
PUBLIC FIRE ALLOCATION (1)	\$1,316,144	
----- =	----- =	\$688.36 per year
NUMBER OF PUBLIC HYDRANTS	1,912	

**PRIVATE FIRE PROTECTION**

PRIVATE FIRE ALLOCATION (1,2)	\$123,285	
----- =	----- =	\$1.95 /EQUIV.
NO. OF EQUIV. UNITS	63,207.25	

<u>SIZE (IN)</u>	<u>DEMAND FACTOR</u>	<u>DEMAND CHARGE</u>	<u>SERVICE LINE CHRG</u>	<u>BILLING CHARGE</u>	<u>CALCULATED CHARGE</u>
2	6.19	\$12.07	\$171.44	\$4.45	\$187.96
4	38.32	\$74.74	\$454.09	\$4.45	\$533.28
6	111.31	\$217.11	\$681.14	\$4.45	\$902.69
8	237.21	\$462.67	\$973.05	\$4.45	\$1,440.17
10	426.58	\$832.04	\$973.05	\$4.45	\$1,809.54
12	689.04	\$1,343.97	\$973.05	\$4.45	\$2,321.47

Notes:

(1) Allocation from Schedule 4.1

(2) Private Fire includes allocated service maintenance costs as detailed below:

Service Line Maintenance C	\$922,627	(Total Metering O&M less Meter Dept)
Service Line Capital Cost	275,837	(Based on Service Line Investment)
Total Allocation to Fire Ser	\$346,898	(28.95%)

**PAWTUCKET WATER SUPPLY BOARD**  
**DETERMINATION OF SERVICE CHARGES**

BILLING CHARGE

CUST. BILLING ALLOC.		\$408,551	
-----	=	-----	= \$4.45 PER BILL
NUMBER OF BILLINGS		91,869	

METER CHARGE

CUST. METER ALLOC. (1)		\$1,510,942	
-----	=	-----	= \$57.55 PER EQ. METER/YR
NO. EQUIV. METERS		26,254	

TOTAL SERVICE CHARGES

<u>METER SIZE (IN)</u>	<u>QUARTERLY ACCOUNTS</u>			<u>MONTHLY ACCOUNTS</u>		
	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>
5/8	\$14.39	\$4.45	\$18.83	\$4.80	\$4.45	\$9.24
3/4	\$19.94	\$4.45	\$24.38	\$6.65	\$4.45	\$11.09
1	\$28.77	\$4.45	\$33.22	\$9.59	\$4.45	\$14.04
1 1/2	\$58.58	\$4.45	\$63.02	\$19.53	\$4.45	\$23.97
2	\$76.05	\$4.45	\$80.50	\$25.35	\$4.45	\$29.80
3	\$86.32	\$4.45	\$90.77	\$28.77	\$4.45	\$33.22
4	\$201.42	\$4.45	\$205.87	\$67.14	\$4.45	\$71.59
6	\$302.14	\$4.45	\$306.58	\$100.71	\$4.45	\$105.16
8	\$431.62	\$4.45	\$436.07	\$143.87	\$4.45	\$148.32

Note:

(1) Less allocation of Service Maintenance Costs to Private Fire Service - see Schedule 4.2.

PAWTUCKET WATER SUPPLY BOARD

ALLOCATION OF GENERAL WATER EXPENSES  
TO CUSTOMER CLASSES

**Class Demands**

CUSTOMER CLASS	AVERAGE DEMANDS		MAX DAY EXTRA CAPACITY			
	(CCF/DAY)	PERCENT	FACTOR	(CCF/DAY)	XTRA CCF/DAY	PERCENT
<i>Retail</i>						
Small (5/8 - 1")	8,482	60.86%	2.50	21,204	12,723	68.56%
Medium (1.5 - 2" & By pass)	2,091	15.01%	2.00	4,183	2,091	11.27%
Large (3" and up)	1,862	13.36%	1.80	3,352	1,490	8.03%
<i>Wholesale</i>						
Cumberland	1,502	10.78%	2.50	3,755	2,253	12.14%
Seekonk	0	0.00%	2.50	0	0	0.00%
Total	13,937	100.00%		32,494	18,557	100.00%

CUSTOMER CLASS	AVERAGE DEMANDS		PEAK HOUR EXTRA CAPACITY			
	(CCF/DAY)	PERCENT	FACTOR	(CCF/DAY)	XTRA CCF/DAY	PERCENT
<i>Retail</i>						
Small (5/8 - 1")	8,482	60.86%	3.50	29,686	8,482	63.40%
Medium (1.5 - 2" & By pass)	2,091	15.01%	3.00	6,274	2,091	15.63%
Large (3" and up)	1,862	13.36%	2.50	4,656	1,304	9.74%
<i>Wholesale</i>						
Cumberland	1,502	10.78%	3.50	5,256	1,502	11.23%
Seekonk	0	0.00%	3.50	0	0	0.00%
Total	13,937	100.00%		45,872	13,379	100.00%

**Allocation of Retail Metered Sales Costs to Classes (Amounts per Schedule 1.3)**

CUSTOMER CLASS	BASE COSTS		MAX. DAY EXTRA CAPACITY		PEAK HR. EXTRA CAPACITY		TOTAL AMOUNT
	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	
<i>Retail</i>							
Small (5/8 - 1")	68.21%	\$7,235,933	78.03%	\$2,005,443	71.41%	\$986,069	\$10,227,445
Medium (1.5 - 2" & By pass)	16.82%	\$1,784,257	12.83%	\$329,672	17.61%	\$243,148	\$2,357,077
Large (3" and up)	14.98%	\$1,588,699	9.14%	\$234,831	10.98%	\$151,549	\$1,975,079
Total	100.00%	\$10,608,889	100.00%	\$2,569,946	100.00%	\$1,380,765	\$14,559,601
		72.9%		17.7%		9.5%	

## PAWTUCKET WATER SUPPLY BOARD

### CALCULATION OF METERED WATER RATES

#### Small (5/8 - 1")

Total Expense (2)	\$10,227,445		
----- =	-----	=	\$3.304 per ccf
Metered Sales (HCF) (1)	3,095,831		

#### Medium (1.5 - 2" & By pass)

Total Expense (2)	\$2,357,077		
----- =	-----	=	\$3.088 per ccf
Metered Sales (HCF) (1)	763,379		

#### Large (3" and up)

Total Expense (2)	\$1,975,079		
----- =	-----	=	\$2.906 per ccf
Metered Sales (HCF) (1)	679,711		

#### Wholesale

Total Expense (3)	\$1,403,438		
----- =	-----	=	\$2.560 per ccf
Metered Sales (HCF) (1)	548,162		

#### Notes:

- (1) Per Schedule 2
- (2) Per Schedule 6.0.
- (3) Per Schedule 1.3

<u>Metered Rates</u>		<u>Current (4/1/05)</u>	<u>Cost of Service</u>	<u>% Change</u>
<u>Retail</u>				
Small (5/8 - 1")		\$2.571	\$3.304	28.5%
Medium (1.5 - 2" & By pass)		\$2.395	\$3.088	28.9%
Large (3" and up)		\$2.265	\$2.906	28.3%
Extra Large		\$2.120	\$2.906	37.1%
<u>Wholesale</u>		\$2.132	\$2.560	20.1%
<u>Service Charges</u>				
	Size (Inches)			
Quarterly	5/8	\$21.16	\$18.83	-11.0%
	3/4	\$26.49	\$24.38	-8.0%
	1	\$36.73	\$33.22	-9.6%
	1 1/2	\$73.71	\$63.02	-14.5%
	2	\$117.78	\$80.50	-31.7%
	3	\$235.67	\$90.77	-61.5%
	4	\$368.37	\$205.87	-44.1%
	6	\$736.63	\$306.58	-58.4%
	8	\$1,694.23	\$436.07	-74.3%
Monthly	5/8	\$11.99	\$9.24	-22.9%
	3/4	\$13.76	\$11.09	-19.4%
	1	\$16.57	\$14.04	-15.3%
	1 1/2	\$26.09	\$23.97	-8.1%
	2	\$39.26	\$29.80	-24.1%
	3	\$78.56	\$33.22	-57.7%
	4	\$122.79	\$71.59	-41.7%
	6	\$245.54	\$105.16	-57.2%
	8	\$564.74	\$148.32	-73.7%
<u>Fire Service (annual)</u>				
<u>Private</u>				
	2	\$189.95	\$187.96	-1.0%
	4	\$449.20	\$533.28	18.7%
	6	\$734.00	\$902.69	23.0%
	8	\$1,641.76	\$1,440.17	-12.3%
	10	\$2,712.50	\$1,809.54	-33.3%
	12	\$4,354.30	\$2,321.47	-46.7%
<u>Public</u>	per Hydrabt	\$527.50	\$688.36	30.5%

# PAWTUCKET WATER SUPPLY BOARD

## IMPACT OF COST OF SERVICE RATES

(quarterly bills unless otherwise noted)

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	<----- COST OF SERVICE ----->		
			NEW BILL	\$ INCREASE	% INCREASE
Metered Service (Quarterly Bills)					
Small					
5/8	2,000	\$72.58	\$84.91	\$12.33	16.99%
5/8	2,500	\$85.44	\$101.43	\$16.00	18.72%
5/8	4,000	\$124.00	\$150.99	\$26.99	21.77%
5/8	5,000	\$149.71	\$184.03	\$34.32	22.92%
5/8	7,500	\$213.99	\$266.63	\$52.65	24.60%
5/8	10,000	\$278.26	\$349.23	\$70.97	25.50%
5/8	15,000	\$406.81	\$514.43	\$107.62	26.45%
5/8	20,000	\$535.36	\$679.63	\$144.27	26.95%
5/8	25,000	\$663.91	\$844.83	\$180.92	27.25%
1	30,000	\$808.03	\$1,024.42	\$216.39	26.78%
1	40,000	\$1,065.13	\$1,354.82	\$289.69	27.20%
1	75,000	\$1,964.98	\$2,511.22	\$546.24	27.80%
Medium					
1 1/2	100,000	\$2,468.71	\$3,151.02	\$682.31	27.64%
1 1/2	200,000	\$4,863.71	\$6,239.02	\$1,375.31	28.28%
2	300,000	\$7,302.78	\$9,344.50	\$2,041.72	27.96%
2	400,000	\$9,697.78	\$12,432.50	\$2,734.72	28.20%
Large					
3	250,000	\$5,898.17	\$7,355.77	\$1,457.60	24.71%
3	500,000	\$11,560.67	\$14,620.77	\$3,060.10	26.47%
4	750,000	\$17,355.87	\$22,000.87	\$4,645.00	26.76%
6	1,000,000	\$21,936.63	\$29,366.58	\$7,429.95	33.87%
6	3,000,000	\$64,336.63	\$87,486.58	\$23,149.95	35.98%
Fire Service (Annual Bill)					
Municipal Fire Service	200 hydrants	\$105,500.00	\$137,672.00	\$32,172.00	30.49%
	1400 hydrants	\$738,500.00	\$963,704.00	\$225,204.00	30.49%
Private Fire Service	4 Inch Service	\$449.20	\$533.28	\$84.08	18.72%
	6 Inch Service	\$734.00	\$902.69	\$168.69	22.98%
	8 Inch Service	\$1,641.76	\$1,440.17	-\$201.59	-12.28%



# PAWTUCKET WATER SUPPLY BOARD

## REVENUE RECONCILIATION

### Service Charge:

	Number	Current		Cost of Service	
		Rate	Revenue	Rate	Revenue
<u>Quarterly</u>					
5/8	21,243	\$21.16	\$1,798,008	\$18.83	\$1,600,023
3/4	239	\$26.49	\$25,324	\$24.38	\$23,307
1	474	\$36.73	\$69,640	\$33.22	\$62,985
1 1/2	230	\$73.71	\$67,813	\$63.02	\$57,978
2	374	\$117.78	\$176,199	\$80.50	\$120,428
3	24	\$235.67	\$22,624	\$90.77	\$8,714
4	10	\$368.37	\$14,735	\$205.87	\$8,235
6	4	\$736.63	\$11,786	\$306.58	\$4,905
8	0	\$1,694.23	\$0	\$436.07	\$0
<u>Monthly</u>					
5/8	8	\$11.99	\$1,151	\$9.24	\$887
3/4	4	\$13.76	\$660	\$11.09	\$532
1	11	\$16.57	\$2,187	\$14.04	\$1,853
1 1/2	6	\$26.09	\$1,878	\$23.97	\$1,726
2	28	\$39.26	\$13,191	\$29.80	\$10,013
3	16	\$78.56	\$15,084	\$33.22	\$6,378
4	6	\$122.79	\$8,841	\$71.59	\$5,154
6	3	\$245.54	\$8,839	\$105.16	\$3,786
8	0	\$564.74	\$0	\$148.32	\$0

### Consumption Charge:

Small (5/8 - 1")	3,095,831	\$2.571	\$7,959,382	\$3.304	\$10,228,626
Medium (1.5 - 2" & By	763,379	\$2.395	\$1,828,293	\$3.088	\$2,357,314
Large (3" and up)	367,351	\$2.265	\$832,050	\$2.906	\$1,067,522
Extra Large	312,360	\$2.120	\$662,203	\$2.906	\$907,718
<i>Wholesale</i>	548,162	\$2.132	\$1,168,681	\$2.560	\$1,403,295

**PAWTUCKET WATER SUPPLY BOARD**

**REVENUE RECONCILIATION**

	<u>Number</u>	<u>Current</u>		<u>Cost of Service</u>	
		<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
<b>Fire Protection:</b>					
Public Hydrants	1,912	\$527.50	\$1,008,580	\$688.36	\$1,316,144
Private Fire Protection					
2	18	\$189.95	\$3,419	\$187.96	\$3,383
4	29	\$449.20	\$13,027	\$533.28	\$15,465
6	354	\$734.00	\$259,836	\$902.69	\$319,552
8	88	\$1,641.76	\$144,475	\$1,440.17	\$126,735
10	4	\$2,712.50	\$10,850	\$1,809.54	\$7,238
12	0	\$4,354.30	<u>\$0</u>	\$2,321.47	<u>\$0</u>
Total			\$16,128,757		\$19,669,898
Plus: Misc Revenues			<u>\$303,226</u>		<u>\$303,226</u>
Pro Forma Revenue			\$16,431,983		\$19,973,124
Required Revenue			<u>\$19,972,083</u>		<u>\$19,972,083</u>
Difference			-\$3,540,101		\$1,040
Increase in Revenues					\$3,541,141
Percent Increase in Total Revenues					21.6%
Percent Increase in Rate Revenues (non-misc)					22.0%

**PAWTUCKET WATER SUPPLY BOARD**

**CUMBERLAND TAX SURCHARGE/PROPOSED METERED RATES**

Calculation of Surcharge

FY 2004 Tangible Tax	\$487,068
Estimated RY Tax	\$530,812
Sales to Cumberland (hcf)	
Retail	367,982
Wholesale	548,162
Total	916,144
Surcharge (\$/ccf)	\$0.579
Annual Revenue	\$530,447
Non-Cumberland Sales (hcf)	4,170,939
Rate Reduction to Others	-\$0.127

Comparison of Current & Proposed Rates with Surcharge

	<u>Current</u>	<u>Proposed w/o Surcharge</u>	<u>Proposed w/ Surcharge</u>
<u>Metered Rates (no change to others)</u>			
<u>Non-Cumberland</u>			
Small (5/8 - 1")	\$2.571	\$3.304	\$3.177
Medium (1.5 - 2" & By pass)	\$2.395	\$3.088	\$2.961
Large (3 - 4')	\$2.265	\$2.906	\$2.779
Very Large (6" and up)	\$2.120	\$2.906	\$2.779
Wholesale	\$2.132	\$2.560	\$2.433
<u>Cumberland</u>			
Small (5/8 - 1")	\$2.571	\$3.304	\$3.883
Medium (1.5 - 2" & By pass)	\$2.395	\$3.088	\$3.667
Large (3 - 4')	\$2.265	\$2.906	\$3.485
Very Large (6" and up)	\$2.120	\$2.906	\$3.485
Wholesale	\$2.132	\$2.560	\$3.139

**PAWTUCKET WATER SUPPLY BOARD**

**COMPARISON OF BILLS UNDER CURRENT RATES WITH  
PROPOSED RATES WITH AND WITHOUT CUMBERLAND SURCHARGE**

Impact of Proposed Surcharges on Quarterly Bills

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	PROPOSED	
			W/O SURCHARGE	W/ SURCHARGE
<u>Metered Service (Quarterly Bills)</u>				
<i>Small</i>				
5/8 Non-Cumberland	2,000	\$72.58	\$84.91	\$82.37
5/8 Cumberland		\$72.58	\$84.91	\$96.49
5/8 Non-Cumberland	2,500	\$85.44	\$101.43	\$98.26
5/8 Cumberland		\$85.44	\$101.43	\$115.91
5/8 Non-Cumberland	4,000	\$124.00	\$150.99	\$145.91
5/8 Cumberland		\$124.00	\$150.99	\$174.15
5/8 Non-Cumberland	5,000	\$149.71	\$184.03	\$177.68
5/8 Cumberland		\$149.71	\$184.03	\$212.98
5/8 Non-Cumberland	7,500	\$213.99	\$266.63	\$257.11
5/8 Cumberland		\$213.99	\$266.63	\$310.06
5/8 Non-Cumberland	10,000	\$278.26	\$349.23	\$336.53
5/8 Cumberland		\$278.26	\$349.23	\$407.13
5/8 Non-Cumberland	15,000	\$406.81	\$514.43	\$495.38
5/8 Cumberland		\$406.81	\$514.43	\$601.28