

**Aquarion Water Company of New Hampshire**  
**2012 Annual WICA Surcharge Filing**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT  
CALCULATION OF SURCHARGE**

Line		Schedule Ref.	
1			
2	Total Investment through 09/30/2012	TD-1, Pg 3 Col 6 Ln 13	\$ 2,492,141
3			
4	Allowed Return on Rate Base	TD-1, Pg 2 Col 8	<u>7.72%</u>
5			
6	Allowed Return on Investment	Ln 17	\$ 192,393
7			
8	Income Tax on Equity Component		
9			
10			
11			
12			
13			
14	Debt		3.64%
15	Equity		<u>4.08%</u>
16			
17			7.72%
18			
19	Total Eligible Investment (Line 2 above)		\$ 2,492,141
20			
21	Income Tax Expense	Ln 16 Col D X Ln 18	69,032
22			
23	Depreciation Expense	TD-1, Pg 3 Col 8 Ln 41	39,538
24			
25	Property Tax Expense	TD 1, Pg 3 Col 10 Ln 41	42,690
26			
27	Adjustment: Annual Revenues Allowed	Lines 6 through 25	<u>\$ 343,654</u>
28			
29			
30	Base Revenues on which Adjustment will be applied		
31	Revenues allowed DW 08-098		\$ 6,094,612
32	Misc. Charges not subject to WICA		<u>(137,480)</u>
33			<u>\$ 5,957,132</u>
34			
35	Surcharge Percent (Line 27 divided by Line 33)		5.7688%
36			

Aquarion Water Company of New Hampshire  
2012 Annual WICA Surcharge Filing

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT  
COMPLETED PROJECTS

Line	Project Name or Class Category **	1	2	3	4	5	6	7	8	9	10 = (4 x 8) + 5 + 6 + 7
		Estimated Completion Date**	Actual Completion Date	Estimated Project Cost**	Actual Project Cost	Depreciation Expense	Property Tax Expense	Income Tax Expense	Rate of Return	Annual Retail Revenues	WICA Adjustment Dollars
<b>Project Surcharge Approved in DW 10-293</b>											
2	Production Meters	30-Sep-10	30-Sep-10	\$ *	\$ 1,414	\$ 62	\$ 33	\$ 39	7.72%	\$ 6,094,612	\$ 243
3	Atlantic Avenue- Mill Road to Woodland Road	30-Sep-10	30-Sep-10	\$ 588,000	\$ 570,697	\$ 6,765	\$ 10,852	\$ 15,808	7.72%	\$ 6,094,612	\$ 77,483
4	Customer Meters	30-Sep-10	30-Sep-10	\$ 125,000	\$ 104,061	\$ 1,251	\$ 640	\$ 2,882	7.72%	\$ 6,094,612	\$ 12,807
5	Hydrants	30-Sep-10	30-Sep-10	\$ 20,000	\$ 11,774	\$ 188	\$ 133	\$ 326	7.72%	\$ 6,094,612	\$ 1,556
6	Services	30-Sep-10	30-Sep-10	\$ 20,000	\$ 15,797	\$ 243	\$ 267	\$ 438	7.72%	\$ 6,094,612	\$ 2,167
7	Valves	30-Sep-10	30-Sep-10	\$ 5,000	\$ 14,480	\$ 724	\$ 284	\$ 401	7.72%	\$ 6,094,612	\$ 2,527
<b>Project Surcharge Approved in DW 11-238</b>											
10	Production Meters	30-Sep-11	30-Sep-11	\$ 8,000	\$ 6,690	\$ 294	\$ 137	\$ 185	7.72%	\$ 6,094,612	\$ 1,133
11	Atlantic Avenue- House 106 to Woodland Road	30-Sep-11	30-Sep-11	\$ 789,519	\$ 698,937	\$ 8,139	\$ 13,057	\$ 19,361	7.72%	\$ 6,094,612	\$ 94,514
12	Customer Meters	30-Sep-11	30-Sep-11	\$ 125,000	\$ 135,061	\$ 3,346	\$ 1,724	\$ 3,741	7.72%	\$ 6,094,612	\$ 19,238
13	Hydrants	30-Sep-11	30-Sep-11	\$ 20,000	\$ 32,133	\$ 611	\$ 488	\$ 890	7.72%	\$ 6,094,612	\$ 4,469
14	Services	30-Sep-11	30-Sep-11	\$ 27,000	\$ 43,986	\$ 713	\$ 779	\$ 1,218	7.72%	\$ 6,094,612	\$ 6,106
15	Valves	30-Sep-11	30-Sep-11	\$ 5,000	\$ 22,449	\$ 1,122	\$ 460	\$ 622	7.72%	\$ 6,094,612	\$ 3,937
<b>Project Surcharge Proposed Herein</b>											
18	Atlantic Avenue - H539 to Maple Road	30-Sep-12	30-Sep-12	\$ 574,500	\$ 553,908	\$ 6,394	\$ 9,076	\$ 15,343	7.72%	\$ 6,094,612	\$ 73,575
19	Customer Meters	30-Sep-12	30-Sep-12	\$ 230,860	\$ 224,539	\$ 8,323	\$ 3,890	\$ 6,220	7.72%	\$ 6,094,612	\$ 35,767
20	Hydrants	30-Sep-12	30-Sep-12	\$ 32,700	\$ 10,395	\$ 152	\$ 116	\$ 288	7.72%	\$ 6,094,612	\$ 1,359
21	Services	30-Sep-12	30-Sep-12	\$ 80,600	\$ 32,086	\$ 524	\$ 521	\$ 889	7.72%	\$ 6,094,612	\$ 4,411
22	Valves	30-Sep-12	30-Sep-12	\$ 10,800	\$ 13,734	\$ 687	\$ 234	\$ 380	7.72%	\$ 6,094,612	\$ 2,361
23	TOTALS			\$2,661,979	\$ 2,492,141	\$ 39,538	\$ 42,690	\$ 69,032			\$ 343,654

\* Emergency Replacement  
\*\* Per Docket Filing DW 11-238

**Aquarion Water Company of New Hampshire**  
2012 Annual WICA Surcharge Filing

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT**  
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6-7) x 2 Depreciation Expense	9 Town State Mill Rates	Total	10 = ((6-7)/(1000) x 9) Prop. Tax Expense**		
<b>Project Surcharge Approved in DW 10-293</b>																
1	Production Meters		Stratham	328	4.40%	Other Pumping Equipment	9/30/2010	11/1/2010	\$ 1,414	\$ -	\$ -	62	6.60	23.08	\$ 33	
2	Production Meters		North Hampton	343	1.20%	Main Replacement	9/30/2010	11/1/2010	\$ 570,697	\$ 6,941	\$ 6,765	62	6.60	19.25	\$ 10,852	
3	Atlantic Avenue- Mill Road to Woodland Road		North Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 12,139	\$ 8,296	\$ -	146	6.60	19.25	\$ 74	
4	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 76,508	\$ 52,287	\$ 920	920	6.60	20.48	\$ 486	
5	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 15,415	\$ 10,535	\$ 185	185	6.60	14.26	\$ 70	
6	Customer Meters		North Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 2,466	\$ 1,950	\$ 12	12	6.60	19.25	\$ 10	
7	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 3,625	\$ 556	\$ 74	74	6.60	20.48	\$ 63	
8	Hydrants		Rye	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 5,682	\$ 1,444	\$ 102	102	6.60	14.25	\$ 60	
9	Hydrants		North Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$ 2,166	\$ 535	\$ 31	31	6.60	19.25	\$ 32	
10	Services		Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$ 13,611	\$ 2,138	\$ 212	212	6.60	20.48	\$ 235	
11	Services		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ 12,436	\$ -	\$ 622	622	6.60	20.48	\$ 255	
12	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ 2,044	\$ -	\$ 102	102	6.60	14.26	\$ 29	
13	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ -	\$ -	\$ -	-	6.60	20.48	\$ 235	
14	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ -	\$ -	\$ -	-	6.60	14.26	\$ 29	
<b>Project Surcharge Approved in DW 11-238</b>																
15	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2011	11/1/2011	\$ 6,660	\$ -	\$ -	284	6.60	20.48	\$ 137	
16	Production Meters		North Hampton	343	1.20%	Main Replacement	9/30/2011	11/1/2011	\$ 698,937	\$ 20,650	\$ 8,139	8,139	6.60	19.25	\$ 13,057	
17	Atlantic Avenue- House 106 to Woodland Road		North Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 18,681	\$ 6,560	\$ 461	461	6.60	19.25	\$ 233	
18	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 100,663	\$ 35,005	\$ 2,495	2,495	6.60	20.48	\$ 1,345	
19	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 15,717	\$ 5,462	\$ 300	300	6.60	14.26	\$ 146	
20	Customer Meters		North Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 4,207	\$ 561	\$ 88	88	6.60	19.25	\$ 70	
21	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 22,891	\$ 5,776	\$ 411	411	6.60	20.48	\$ 351	
22	Hydrants		Rye	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 5,035	\$ 349	\$ 112	112	6.60	14.26	\$ 67	
23	Hydrants		North Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$ 10,046	\$ 1,637	\$ 156	156	6.60	19.25	\$ 162	
24	Hydrants		Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$ 33,940	\$ 3,820	\$ 557	557	6.60	20.48	\$ 617	
25	Services		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ 22,449	\$ -	\$ 1,122	1,122	6.60	20.48	\$ 460	
26	Services		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ -	\$ -	\$ -	-	6.60	20.48	\$ 235	
27	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ -	\$ -	\$ -	-	6.60	14.26	\$ 29	
28	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ -	\$ -	\$ -	-	6.60	20.48	\$ 235	
29	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ -	\$ -	\$ -	-	6.60	14.26	\$ 29	
30	Atlantic Avenue - H539 to Maple Road		North Hampton	343	1.20%	Main Replacement	11/1/2012	9/30/2012	\$ 553,908	\$ 21,046	\$ 6,394	6,394	6.60	22.71	\$ 9,076	
31	Customer Meters		Hampton	346	3.80%	Meter Replacement	11/1/2012	9/30/2012	\$ 180,552	\$ 4,881	\$ 6,675	6,675	6.60	24.53	\$ 3,232	
32	Customer Meters		North Hampton	346	3.80%	Meter Replacement	11/1/2012	9/30/2012	\$ 24,105	\$ 143	\$ 911	911	6.60	22.71	\$ 408	
33	Customer Meters		Rye	346	3.80%	Meter Replacement	11/1/2012	9/30/2012	\$ 19,882	\$ 469	\$ 737	737	6.60	17.20	\$ 250	
34	Customer Meters		Hampton	348	2.40%	Hydrants	11/1/2012	9/30/2012	\$ 8,846	\$ 2,701	\$ 147	147	6.60	24.53	\$ 113	
35	Hydrants		North Hampton	348	2.40%	Hydrants	11/1/2012	9/30/2012	\$ 1,549	\$ 1,350	\$ 5	5	6.60	22.71	\$ 3	
36	Hydrants		Hampton	348	2.40%	Hydrants	11/1/2012	9/30/2012	\$ 32,086	\$ 3,760	\$ 524	524	6.60	24.53	\$ 521	
37	Services		Hampton	345	1.85%	Services	11/1/2012	9/30/2012	\$ 5,800	\$ -	\$ 290	290	6.60	22.71	\$ 99	
38	Valves		Hampton	349	5.00%	Other T&D Plant	11/1/2012	9/30/2012	\$ 7,934	\$ -	\$ 397	397	6.60	22.71	\$ 135	
39	Valves		North Hampton	349	5.00%	Other T&D Plant	11/1/2012	9/30/2012	\$ -	\$ -	\$ -	-	6.60	22.71	\$ 99	
40	Valves		North Hampton	349	5.00%	Other T&D Plant	11/1/2012	9/30/2012	\$ -	\$ -	\$ -	-	6.60	22.71	\$ 99	
41	Valves		North Hampton	349	5.00%	Other T&D Plant	11/1/2012	9/30/2012	\$ -	\$ -	\$ -	-	6.60	22.71	\$ 99	
									<b>TOTALS</b>	\$ 2,492,141	\$ 196,873	\$ 39,538	39,538	6.60	22.71	\$ 42,690
									to TD-1	\$ -	\$ -	\$ -	-	6.60	22.71	\$ -
									to TD-1	\$ -	\$ -	\$ -	-	6.60	22.71	\$ -

\* Type of Project (designations will be given for various types of projects)  
\*\*Property Tax Expense is for twelve months under the DW-10-293 and DW 11-238 surcharge portion and nine months for the 2012 proposed surcharge projects.

## WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT

In addition to the net charges provided for in this Tariff, a Water Infrastructure and Conservation Adjustment (“WICA”) surcharge of ~~3.7269~~ 5.7688% will apply to all bills with services rendered on or after January 1, ~~2012~~ 2013.

### I. General Description

Purpose: To recover the fixed costs (depreciation, property taxes and pre-tax return) of certain Commission-approved non-revenue producing system improvement projects completed and placed in service and to be recorded in the individual accounts, as noted below, between base rate cases. In addition, WICA provides the Company with the resources to accelerate asset replacement for infrastructure for the purpose of improving or protecting water quality and the reliability of service and to comply with evolving regulatory requirements imposed by the Safe Drinking Water Act.

Eligible Property: The WICA-eligible property will consist of the following:

services (account 333), meters (account 334) and hydrants (account 335) installed as in-kind (i.e., same size) replacements for customers;

mains and valves (account 331) installed as replacements for existing facilities that have either reached the end of their useful life, are worn out or are in deteriorated condition,

main cleaning and re-lining projects and relocations that are non-reimbursable (account 331);

replacement of production meters (account 304 ); and

replacement of pressure reducing valves (accounts 309, 331);

### II. Computation of the WICA

Calculation: The initial charge, effective January 1, 2011, will be calculated to recover the fixed costs of eligible plant additions that have not previously been reflected in the Company's rate base and will have been placed in service between January 1, 2010 and September 30, 2010. Thereafter, the WICA will be updated on an annual basis to reflect eligible plant additions placed in service during the twelve month period ending three months prior to the effective date of each WICA update. Thus, changes in the WICA rate will occur as follows:

Issued: January 1, ~~2012~~ 2013

Issued by: \_\_\_\_\_  
Donald Morrissey

Effective: January 1, ~~2012~~ 2013

Title: Chief Financial Officer

As authorized in order ~~25,311~~ XXXX in Case DW ~~11-238~~ 12-

<u>Effective Date Of WICA Change</u>	<u>Date To Which WICA Eligible Plant Additions Reflected</u>
January 1, 2XXX+1	September 30, 2XXX

The fixed costs of eligible infrastructure system improvement projects will consist of depreciation, property taxes and pre-tax return, calculated as follows:

**Depreciation:** The depreciation expense will be calculated by applying the depreciation rates employed in the Company's last base rate case for the plant accounts to the original cost of WICA-eligible property minus the corresponding retirement unit recorded.

**Property Taxes:** For the first year that a WICA for any particular project is in effect, the property tax expense will reflect an estimate of the tax expense for such projects based on the tax rate then in effect. If such property taxes will be due for only a portion of the calendar year, then the WICA for the first year shall reflect only the property taxes projected to be paid. For the second and subsequent years that a WICA for those projects is in effect, the WICA shall be determined using the taxes due and owing for such projects based on the tax bill for a full tax year. The WICA shall not be adjusted in subsequent years, regardless of any change in the taxes originally assessed.

**Pre-tax return:** The pre-tax return will be calculated using the state and federal income tax rates. The cost of equity and debt will be the rates approved in the Company's last base rate case, DW 08-098, or a subsequent docket.

**WICA Surcharge Amount:** The charge will be expressed as a percentage carried to four decimal places and will be applied to the effective portion of the total amount billed to each customer under the Company's otherwise applicable rates and charges.

**Formula:** The formula for calculation of the WICA surcharge is as follows:

$$\text{WICA} = \frac{(\text{ISI} \times \text{PTRR}) + \text{Dep} + \text{PT}}{\text{BRWR}}$$

Where:

Issued: September 25, 2009

Issued by: \_\_\_\_\_  
Donald Morrissey

Effective: September 25, 2009  
As authorized in order 25,019 in Case DW 08-098

Title: Chief Financial Officer

- ISI= the original cost to the Company of eligible infrastructure system improvement projects.
- PTRR= the pre-tax return rate applicable to eligible infrastructure system improvement projects.
- Dep= annual depreciation expense related to eligible infrastructure system improvement projects.
- PT= annual property taxes related to eligible infrastructure system improvement projects.
- BRWR= base retail water revenues as approved by the Commission in the Company's last rate proceeding, DW 08-098, or a subsequent docket.

Annual updates: Supporting data for each annual update will be filed with the Commission and the Office of Consumer Advocate sixty (60) days prior to the effective date of the update. The Company shall also provide notice to the Towns.

### III. Safeguards

Cap: The amount of the WICA applied between general rate case filings shall not exceed seven and one-half percent (7.5%) of the Company's annual retail water revenues as approved in its most recent rate filing, and shall not exceed five percent (5%) of such revenues for any twelve-month period.

Audits: The WICA will be subject to audit prior to the determination by the Commission.

New Base Rates: The WICA charge will be reset at zero as of the effective date of new base rates that provide for prospective recovery of the annual costs that had theretofore been recovered under the WICA. Thereafter, only the fixed costs of new eligible plant additions, that have not previously been reflected in the Company's rate base, would be reflected in the annual updates of the WICA.

Customer Notice: Customers shall be notified of changes in the WICA by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing. Before sending, the Company will review the notice with the Commission's Consumer Affairs division.

Issued: September 25, 2009

Issued by: \_\_\_\_\_  
Donald Morrissey

Effective: September 25, 2009  
As authorized in order 25,019 in Case DW 08-098

Title: Chief Financial Officer