THE COMMONWEALTH OF MASSACHUSETTS

RETURN

OF

AQUARION WATER COMPANY OF MASSACHUSETTS

TO THE

DEPARTMENT OF PUBLIC UTILITIES

OF MASSACHUSETTS

For the Year Ended December 31, 2016

Name of Officer to whom correspondence should be addressed regarding this report,

Troy Dixon

Official Title

Director, Rate & Regulations

Office Address: **600 Lindley Street**

Bridgeport, CT 06606

General Information

Principal and Salaried Officers*

Titles	Names	Addresses	Annual Salaries
President Chief Executive Officer	Charles V. Firlotte	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$425,261.60 * $22,726.14 charged to MA.
Executive Vice President, Treasurer, Secretary and Clerk	Donald J. Morrissey	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$300,111.53 * $15,786.24 charged to MA.
Vice President of Operations	John P. Walsh	Aquarion Water Company of Massachusetts, Inc. 835 Main St., Bridgeport, CT 06604	$206,426.89 * $33,462.26 charged to MA.
Vice President Corporate Communications	Bruce T. Silverstone	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$175,068.52 * $0 charged to MA.

Directors*

Names		Addresses	Fees Paid During Year
Charles V. Firlotte		Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$0
Donald J. Morrissey		Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$0
John P. Walsh		Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$0

*By General Laws, Chapter 164, Section 83, the Return must contain a "List of names of all their salaried officers and the amount of the salary paid to each," and by Section 77, the department is required to include in its annual report "the names and addresses of the principal officers and of the directors."

Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

GENERAL INFORMATION

1. Full corporate title company Aquarion Water Company of Massachusetts Telephone No. (781) 740-6693

2. Location of principal business office 900 Main Street Hingham, MA 02043

3. Date of organization _____ August 9, 1879 4. Date of incorporation March 21, 1879

5. Whether incorporated under general or special law Special

6. If under special law, give chapter and year of act Chapter 139 Act of 1879

7. Give chapter and year of any subsequent special legislation affecting the Company Chapters 59, 88, 54, 168, 482 of Acts 1881, 1886, 1910, 1914, and 1924 respectively

8. Territory covered by charter rights Towns of Hingham, Hull, Millbury, Oxford, and parts of Cohasset and Norwell

9. Capital stock authorized by charter, $5,000,000

10. Capital stock issued prior to August 1, 1914, $300,000

11. Capital stock issued with approval of Board of Gas and Electric Light Commissioners or the Department of Public Utilities since August 1, 1914

37,571 shares of par value of $100.00 each	$3,757,100.00

12. If additional stock has been issued during the last fiscal period, give the date, amount and price thereof, the date or dates on on which the same was paid in, and the number of shares so sold and the amounts realized: _____D.P.U. No.

NONE

13. Management Fees and Expenses during the Year

List all individuals, associations, corporations or concerns with whom the company has any contract or agreement covering management or supervision of its affairs such as accounting, financing, engineering, construction, purchasing, operation, etc. and show the total amount paid to each for the year.

Aquarion Company	$115,184
Aquarion Water Company of Connecticut	$1,476,973

14. Date when Company first began to distribute and sell water July 3, 1880

15. Total number of stockholders One

16. Number of stockholders resident in Massachusettes NONE

17. Amount of stock held in Massachusettes, number of shares , amount N/A

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Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consitent with those in the supporting schedules on the pages indicated.
All credit items hereunder should be in red ink

Line No.	Balance at Beginning of Year (a)	Assets (b)	Balance at close of Year (c)	Net Change During Year (d)
1		**INVESTMENTS**		
2	$ 68,591,852	101-113 Plant Investments (p202)	$ 71,966,963	$ 3,375,110
3	$ 2,438,605	114-119 General Equipment (p202)	$ 2,635,432	$ 196,827
4	$ 730,104	201 Unfinished Construction(p202)	$ 371,345	$ (358,759)
5	$ 1,401	202 Miscellaneous Physical Property (p203)	$ 1,401	$ -
6	$ 28,209	203 Other Investments (p203)	$ 34,844	$ 6,635
7	**$ 71,790,171**	**Total Investments**	**$ 75,009,985**	**$ 3,219,814**
8		**CURRENT ASSETS**		
9	$ 274	204 Cash	$ 180	$ (94)
10	$ -	205 Special Deposits	$ -	$ -
11	$ 473,033	206 Notes Receivable	$ 37,099	$ (435,934)
12	$ 1,229,426	207 Accounts Receivable	$ 1,075,822	$ (153,604)
13	$ -	208 Interest and Dividends Receivable	$ -	$ -
14	$ 268,615	209 Materials and Supplies	$ 265,667	$ (2,948)
15	$ 2,016,032	210 Other Current Assets	$ 2,328,226	$ 312,194
16	**$ 3,987,380**	**Total Current Assets**	**$ 3,706,994**	**$ (280,386)**
17		**RESERVE FUNDS**		
18	$ -	211 Sinking Funds	$ -	$ -
19	$ -	212 Insurance and Other Funds	$ -	$ -
20	**$ -**	**Total Reserve Funds**	**$ -**	**$ -**
21		**PREPAID ACCOUNTS**		
22	$ -	213 Prepaid Insurance	$ 458	$ 458
23	$ -	214 Prepaid Interest	$ -	$ -
24	$ 27,843	215 Other Prepayments	$ 31,202	$ 3,359
25	**$ 27,843**	**Total Prepaid Accounts**	**$ 31,660**	**$ 3,817**
26		**UNADJUSTED DEBITS**		
27	$ 159,857	216 Unamortized Dept Discount Exp (p203)	$ 134,466	$ (25,391)
28	$ -	217 Property Abandoned	$ -	$ -
29	$ 8,722,434	218 Other Unadjusted Debits (p203)	$ 9,958,046	$ 1,235,611
30	**$ 8,882,291**	**Total Unadjusted Debits**	**$ 10,092,512**	**$ 1,210,221**
31				
32	**$ 84,687,685**	**GRAND TOTAL**	**$ 88,841,151**	**$ 4,153,466**

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Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2016**

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consitent with those in the supporting schedules on the pages indicated. All debit items hereunder should be in red ink.

Line No.	Balance at Beginning of Year (a)	Liabilities (b)	Balance at close of Year (c)	Net Change During Year (d)
1		**CAPITAL STOCK**		
2				
3	$ 3,757,100	301 Common Stock (p. 204)	$ 3,757,100	$ -
4	$ -	302 Preferred Stock (p. 204)	$ -	$ -
5	$ -	303 Employees' Stock (p. 204)	$ -	$ -
6	**$ 3,757,100**	**Total Capital Stock**	**$ 3,757,100**	**$ -**
7				
8	$ 1,135,450	304 Premium on Capital Stock	**$ 1,135,450**	$ -
9				
10		**BONDS, COUPON AND LONG TERM NOTES**		
11				
12	$ 18,985,000	305 Bonds (p. 204)	$ 18,810,000	$ (175,000)
13	$ -	306 Coupon and Long Term Notes (p. 204)	$ -	$ -
14	**$ 18,985,000**	**Total Bonds, Coupon and Long Term Notes**	**$ 18,810,000**	**$ (175,000)**
15				
16		**CURRENT LIABILITIES**		
17	$ -	307 Notes Payable (p. 205)	$ 1,500,000	$ 1,500,000
18	$ 1,877,397	308 Accounts Payable	$ 788,420	$ (1,088,978)
19	$ 1,548	309 Consumers' Deposits	$ 1,642	$ 94
20	$ -	310 Matured Interest Unpaid	$ -	$ -
21	$ -	311 Dividends Declared	$ -	$ -
22	$ -	312 Other Current Liabilities	$ -	$ -
23	**$ 1,878,945**	**Total Current Liabilities**	**$ 2,290,062**	**$ 411,117**
24				
25		**ACCRUED LIABILITIES**		
26	$ (91)	313 Tax Liability	$ (91)	$ -
27	$ 152,124	314 Interest Accrued	$ 151,912	$ (212)
28	$ 94,836	315 Other Accrued Liabilities	$ 116,292	$ 21,456
29	**$ 246,869**	**Total Accrued Liabilities**	**$ 268,113**	**$ 21,244**
30				
31		**UNADJUSTED CREDITS**		
32	$ 44,307	316 Premium on Bonds (p. 205)	$ 38,523	$ (5,784)
33	$ 8,384,155	317 Other Unadjusted Credits (p. 205)	$ 8,554,945	$ 170,790
34				
35	**$ 8,428,462**	**Total Unadjusted Credits**	**$ 8,593,468**	**$ 165,006**
36				
37		**RESERVES**		
38	$ -	318 Insurance and Casualty Reserve	$ -	$ -
39	$ 16,648,344	319 Depreciation Reserve (p. 206)	$ 18,198,293	$ 1,549,949
40	$ 10,288,715	320 Other Reserves	$ 11,655,057	$ 1,366,342
41	**$ 26,937,059**	**Total Reserves**	**$ 29,853,350**	**$ 2,916,291**
42				
43		**APPROPRIATED SURPLUS**		
44	$ -	321 Sinking Fund Reserves	$ -	$ -
45	$ 12,624,583	323 Contributions for Extensions	$ 12,647,332	$ 22,749
46	$ 3,844,050	324 Surplus Invested in Plant	$ 3,844,050	$ -
47	**$ 16,468,633**	**Total Appropriated Surplus**	**$ 16,491,382**	**$ 22,749**
48				
49	$ 6,850,167	400 Profit and Loss Balance (p. 301) +	$ 7,642,226	$ 792,058
50	**$ 23,318,800**	**Total Corporate Surplus +**	**$ 24,133,608**	**$ 814,808**
51	**$ 84,687,685**	**GRAND TOTAL**	**$ 88,841,151**	**$ 4,153,466**

PLANT INVESTMENT ACCOUNTS

Show for all items of plant, classified in accordance with the prescribed Uniform System of Accounts, the particulars called for by the column headings Credits in column (d) for plant retired during the year should be fully explained in a footnote. Col. (e). "Adjustments made during the year, "should be interpreted to mean modifications of entries made in prior accounting periods. When any adjusting entry is made in Col. (e), the credit to the account should be shown in red; in case the amount is transferred to some other account in the same schedule, the debit amount should appear in the same column in black.

When the whole or any part of "Unfinished Construction" is transferred to the Plant accounts, the amounts transferred should appear in Col. (e) in red and the amounts debited should appear in Col. (c) in black.

Line No.	NAME OF ACCOUNT (a)	Balance at Beginning of Year (b)	Additions During Year (c)	Plant Retired During Year (d)	Adjustments During Year (e)	Balance at Close of Year (f)
1	**INTANGIBLE PROPERTY**					
2	Organization	82,595	-	-	-	82,595
3	Misc. Intangible Invest.	-	-	-	-	-
4	**Total Intangible Property**	**82,595**	**-**	**-**	**-**	**82,595**
5	**TANGIBLE PROPERTY**					
6	Land	243,845	-	-	-	243,845
7	Structures	16,868,440	106,077	(1,101)	-	16,973,416
8	Pumping Plant Equipment	1,800,241	243,480	(67,094)	-	1,976,627
9	Misc. Pumping Plant Equipment	117,646	-	-	-	117,646
10	Purification System	3,242,630	380,990	-	-	3,623,620
11	Trans'n and Dist'n Mains	34,548,524	2,359,132	(8,006)	-	36,899,650
12	Services	7,309,258	189,012	(17,986)	-	7,480,284
13	Consumers' Meters	2,296,258	319,399	(209,361)	-	2,406,295
14	Consumers' Meter Installation	672,540	-	-	-	672,540
15	Hydrants	575,064	21,055	(985)	-	595,134
16	Fire Cist'ns, Basins, Fount'ns				-	-
17	Water Rights				-	-
18	Other Trans'n & Dist'n Plant	834,812	60,497	-	-	895,310
19	Miscellaneous Expenditures				-	-
20	**Total Plant Investment**	**68,509,257**	**3,679,642**	**(304,532)**	**-**	**71,884,368**
21	**GENERAL EQUIPMENT**					
22	Office Equipment	1,028,886	242,391	-	-	1,271,278
23	Shop Equipment	274,614	20,984	-	-	295,598
24	Stores Equipment	133,892	-	-	-	133,892
25	Transportation Equipment	727,805	73,002	(144,600)	-	656,206
26	Laboratory Equipment	36,005	-	-	-	36,005
27	Miscellaneous Equipment	237,404	5,050	-	-	242,454
28	**Total General Equipment**	**2,438,605**	**341,427**	**(144,600)**	**-**	**2,635,432**
29	Unfinished Construction	730,104	(358,759)	-	-	371,345
30	**Total Cost of All Property**	**71,760,562**	**3,662,310**	**(449,132)**	**-**	**74,973,739**
31	Assessed Value of Real Estate	17,112,285	106,077	(1,101)	-	17,217,261
32	Assessed Value of Other Property	53,835,579	3,914,993	(448,032)	-	57,302,540
33	**Total Assessed Value**	**70,947,864**	**4,021,069**	**(449,132)**	**-**	**74,519,801**

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MISCELLANEOUS PHYSICAL PROPERTY

Give particulars of all investments of the respondent in physical property not devoted to utility operation.

Line No.	DESCRIPTION AND LOCATION OF MISCELLANEOUS PHYSICAL PROPERTY HELD AT END OF YEAR (a)	Book Value at End of Year (b)	Revenue for the Year (c)	Expense for the Year (d)	Not Revenue for the Year (e)
1	Easement Right-of-Way	$1,401			$1,401
2					
3					
4					
5	**Totals**	$1,401			$1,401

OTHER INVESTMENTS

Give particulars of investments in stocks, bonds, etc., held by the respondent at end of year.

	(a)				
6	Investment in CoBank, ACB	$28,209	$6,635		$34,844
7					
8					
9					
				Total	**$34,844**

UNAMORTIZED DEBT DISCOUNT AND EXPENSE

Give an analysis of the respondent's accodiscount and (or) expense on bonds, coupon or short term notes. If the account represents only the expenseincurred in connection with the issue, the word "Discount" should be erased. Entries in Col (d) should be consistant with the returns made on page 301, Schedules of Income and Profit and Loss.

	NAME OF SECURITY (a)	Unextinguished Discount at Beginning of Year (b)	Discount on Bonds etc., Issued During Year (c)	Discount Written off During Year (d)	Unextinguished Discount at Close of Year (e)
10	General Mtg Bonds 7.71%	$ 23,417		$ 2,958	$ 20,459
11	General Mtg Bonds 9.64%	$ 12,890		$ 2,148	$ 10,742
12	MA Water Pollution Abatement Trust Loan - 0.0%	$ 22,638		$ 2,985	$ 19,653
13	CoBank, ACB Swap 4.11%	$ 100,913	$ -	$ 17,299	$ 83,614
14					
15	**TOTALS**	**$ 159,858**	**$ -**	**$ 25,391**	**$ 134,466**

OTHER UNADJUSTED DEBITS

Give an analysis of the abvove-entitled account as of close of year, showing in detail each item or subaccount amounting $500 or more. Items less than '$500 may be combined in a single entry "Minor Items _____ in number, each less than $500," giving the number of items thus combined.'

	DESCRIPTION AND CHARACTER OF UNADJUSTED DEBITS	Balance at Beginning of Year (b)	Amount Added During Year (c)	Amount Written off During Year (d)	Balance at Close of Year (e)
16	Deferred Taxes	$ 3,669,872	$ 1,264,459	$ 378,266	$ 4,556,065
17	Deferred Pension	$ 1,068,227	$ 335,106	$ 42,806	$ 1,360,527
18	Deferred FAS 106	$ 31,615	$ -	$ 31,615	$ 0
19	Deferred Rate Proceedings	$ 19,877	$ -	$ 19,877	$ 0
20	Deferred Perchlorate Costs	$ 966	$ -	$ 966	$ 0
21	Additional Security Costs	$ 10,333	$ -	$ 10,333	$ 0
22	FAS 158 Deferred Debits	$ 3,730,027	$ 154,509	$ -	$ 3,884,536
23	Deferred Well Maintenance	$ 191,517	$ 19,708	$ 54,307	$ 156,918
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35	**TOTALS**	**$ 8,722,434**	**$ 1,773,782**	**$ 538,170**	**$ 9,958,046**

CAPITAL STOCK

Give particulars of the various issues of capital stock of the respondent, as called for in the following schedule. In stating the amount of Capital Stock authorized in Col. (d) show only the amount authorized by the regulatory body.

Line No.	Decription (a)			Number of Shares Authorized (b)	Par Value of One Share (c)	Amount of Capital Stock Authorized (d)		Amount Actually Out-standing at End of Year (e)	Total Premium At End of Year (f)
1	Capital Stock: Common			50,000	$ 100		$ 5,000,000	$ 3,757,100	$ 4,979,500
2	Preferred								
3	Employee								
4									
5		**Totals**					**$ 5,000,000**	**$ 3,757,100**	**$ 4,979,500**

BONDS, COUPONS, AND LONG TERM DEBT

Give particulars of various issues of bond, coupons, and long term notes as called for in the following schedule, giving the names of any underlying issues that may have been assumed by the respondent. The total of col. (h) should be consistant with return made on page 301, Income Schedule (line 20).

	NAME AND CHARACTER OF OBLIGATION (a)	Date of Issue (b)	Date of Maturity (c)	Par Value Authorized (d)	Par Value Actually Outstanding at End of Year (e)	INTEREST PROVISIONS Rate Per Cent (f)	Dates Due (g)	Interest Accrued During Year Charged to Income (h)	Interest Paid During Year (i)
6	Mortgage Bonds:								
7	General Mortgage	11/93	6/23	$ 7,000,000	$ 7,000,000	7.71%	Jun/Dec	$ 539,700	$ 539,700
8	General Mortgage	12/91	9/21	$ 1,400,000	$ 1,400,000	9.64%	Mar/Sep	$ 134,960	$ 134,960
9	MA Water Pollution Abatement Trust Loan	03/03	08/23	$ 1,410,000	$ 1,410,000	0.00%	-	$ -	$ -
10	General Mortgage - swap loan	11/11	11/21	$ 9,000,000	$ 9,000,000	4.11%	Feb/May/Aug/Nov	$ 376,496	$ 376,708
11	**Total Bonds**			**$ 18,810,000**	**$ 18,810,000**			**$ 1,051,156**	**$ 1,051,368**
12	Coupon and Long Term Notes:								
13									
14									
15									
16									
17	Total Coupon & Long Term Notes								
18		**Grand Total**					**Totals**	**$ 1,051,156**	**$ 1,051,368**

SUNDRY CURRENT LIABILITIES

NOTES PAYABLE

Line No.	Name of Creditor (a)	Date of Issue (b)	Date of Maturity (c)	How Secured (d)	Rate of Interst (e)	Amount (f)
1	Aquarion Company					$ 1,500,000
2						
3						
4						
5						
6						
7						
8					TOTAL	$ 1,500,000

PREMIUM ON BONDS

Give an analysis of the respondent's accounts covering premium on bonds or other evidences of indebtedness. Entries in Col. (d) should be consistent with the returns made on page 301. Schedule of Income and Profit and Loss

	NAME OF SECURITY (a)		Unextinguished Premium at Beginning of Year (b)	Premium on Bonds Issued During Year (c)	Premium Written Off During Year (d)	Unextinguished Premium at End of Year (e)
9	MWPAT Unamortized Premium					$ 38,523
10						
11						
12		TOTALS				$ 38,523

OTHER UNADJUSTED CREDITS

Give the names in Col. (a) and indicate the character, in Col. (b) of the several subaccounts which appear as "Other Unadjusted Credits." For items less than $1,000 a single entry may be made under the caption "Minor accounts..... in number, each less than $1,000," stating the number

	NAME OF SUBACCOUNT (a)	Character of Subaccount (b)	Amount (c)
13	Advances for Construction		$ 370,915
14	Deferred OPEB		$ 2,057,221
15	Funded pension contribution		$ 5,377,626
16	Unrealized (gain) loss on swap		$ 176,237
17	Tax benefit due ratepayer		$ 20,165
18	Deferred OPEB costs		$ 552,781
19	Other deferred credits		$ -
20			
21			
22			
23		Total	$ 8,554,945

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DEPRECIATION RESERVE

Line No.	(a)	Amount (b)
1	**Balance at beginning of year**	16,648,344
2	Credits to Depreciation Reserve during year:	
3	Account 610-10 Depreciation	2,043,758
4	Other Accounts (Specify):	
5	Loss of Disposition of Assets	
6	Depreciation charged to contributed property schedule	
7	Accumulated Depr - Transfer of 2 vehicles from AWC-CT	-
8	**CHARGES DURING YEAR**	**2,043,758.00**
9	Net Charges for Plant Retired:	
10	Book Cost of Plant Retired	449,133
11	Cost of Removal	**48,723**
12	Salvage (credit in red)	(4,047.50)
13	**NET CHARGES DURING YEAR**	**493,808.60**
14	**Balance at end of year**	**18,198,293.40**

BASIS OF DEPRECIATION CHARGES

Give in detail the rules and rate by which the respondent determined the amount charged to operating expenses and other accounts, and credited to Depreciation Reserves. report also depreciation taken for the year for federal income tax purposes.

15		
16		
17		
18		
19		
20		

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Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2016**

INCOME STATEMENT FOR THE YEAR

Give the Income Account of the respondent for the year ended December 31, 2016 in accordance with the Uniform System of Accounts for Water Companies.

Line No.	Acc't No.	Item (a)	Amount (b)	Comparison with Previous Year. (c)
1		**OPERATING INCOME**		
2	500	Operating Revenues (p. 302)	$ 16,054,888	$ 133,553
3	600	Operating Expenses (p. 303)	$ 13,585,870	$ 188,892
4		**Net Operating Revenues**	**$ 2,469,018**	**$ (55,339)**
5	550	Uncollectible Operating Revenues	$ 12,169	$ (36,153)
6	551	Taxes (p. 303B)	$ 807,258	$ (416,244)
7		**Net Operating Income**	**$ 1,649,592**	**$ 397,059**
8		**NON-OPERATING INCOME**		
9	560	Mdse. and Jobbing Revenue*	$ 56,854	$ 5,662
10	561	Rent from Appliances	$ -	$ -
11	562	Miscellaneous Rent Income	$ -	$ -
12	563	Interest and Dividend Income	$ -	$ -
13	564	MWPAT Loan - Net Subsidy	$ 23,656	$ 6,400
14	565	MWPAT Amortization of Debt Premium	$ 5,784	$ -
15	566	Miscellaneous Non-operating Income	$ 164,269	$ 51,735
16		**Total Non-operating Income**	**$ 250,563**	**$ 63,797**
17		**GROSS INCOME**	**$ 1,900,155**	**$ 460,856**
18		**DEDUCTIONS FROM GROSS INCOME**		
19	575	Miscellaneous Rents	$ -	$ -
20	576	Interest on Bonds and Coupon Notes	$ 1,105,561	$ 48,402
21	577	Miscellaneous Interest Deductions	$ -	$ -
22	578	Amortization of Discount (p. 203)	$ 25,391	$ -
23	579	Miscellaneous Deductions from Income	$ 36,868	$ -
24		**Total Deductions from Gross Income**	**$ 1,167,820**	**$ 48,402**
24		**Income Balance transferred to Profit and Loss**	**$ 732,334**	**$ 412,453**

PROFIT AND LOSS STATEMENT

Show hereunder the items of the Profit and Loss Account of the respondent, classified in accordance with the Uniform System of Accounts for Water Companies.

Line No.	Acc't No.	Item (a)	Debits (b)	Credits (c)
26		**CREDITS**		
27	401	Credit Balance at Beginning of Fiscal Period (p.201)		$ 6,850,167
28	402	Credit Balance transferred from Income Acct. (p.301)		$ 732,334
29	403	Miscellaneous Credits, (transfer from paid-in-capital)		$ -
30		**DEBITS**		
31	411	Debit Balance at Beginning of Fiscal Period (p.201)		
32	412	Debit Balance transferred from Income Acct. (p.301)		
33	413	Accumulated other comprehensive gain on swap	$ -	$ 59,724
34	414	Dividend Appropriation of Surplus (p.302)	$ -	
35	415	Appropriations of Surplus for Depreciation (p.204)		
36	416	Dic'nt on Bonds Exting'd through Surplus (p.203)		
37	417	Other Deductions from Surplus for Depreciation (p.204)		
38	418	Appropriations of Surplus for Construction		
39		Balance carried Forward to Balance Sheet		$ (59,724)
		TOTALS		**$ 7,642,226**

(Note) Explain below amounts entered as Other Deductions from Surplus or Miscellaneous Credits:

*In case the Merchandising and Jobbing business shows a loss, the amount should appear in red.

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Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2016**

OPERATING REVENUES

State the operating revenues of the respondent for the year ended December 31, 2016, classified in accordance with the Uniform System of Accounts.

Line No.	Acc't No.	CLASS OF WATER OPERATING REVENUE	Amount of Revenue for Year	Comparison with Previous Year
1		**REVENUES FROM SALE OF WATER**		
2	501	Metered Sales to General Consumers	$ 14,401,675	$ 120,435
3	502	Flat-rate Sales to General Consumers	$ 683,796	$ 6,596
4	503	Sales to Other Water Companies	$ -	$ -
5	504	Municipal Hydrants	$ 910,116	$ 368
6	505	Miscellaneous Municipal Revenues	$ -	$ -
7		**Total Revenues from Water Operations**	**$ 15,995,588**	**$ 127,400**
8		**MISCELLANEOUS REVENUES**		
9	506	Rent from Property used in Operation	$ -	$ -
10	507	Miscellaneous Operating Revenues	$ 59,300	$ 6,153
11		**Total Revenues from Miscellaneous Operation**	**$ 59,300**	**$ 6,153**
12		**Total Operating Revenues**	**$ 16,054,888**	**$ 133,553**

DIVIDENDS DECLARED DURING THE YEAR

Give particulars of dividends on each class of stock during the year, and charged to Profit and Loss. This schedule shall include only dividends that have been declared by the Board of Directors during the fiscal year.

Line No.		NAME OF SECURITY ON WHICH DIVIDEND WAS DECLARED (a)	RATE PER CENT Regular (b)	RATE PER CENT Extra (c)	Amount of Capital Stock on which Dividend was Declared (d)	Amount of Dividend (e)	DATE Declared	DATE Payable
13		Common Stock				$ -		
14								
15								
16								
17								
19								
20								
21								
22								
23								
24		**Totals**				$ -		

Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2016**

OPERATING EXPENSES

(For companies having average operating revenues of more than $15,000.)

State the operating expenses of the respondent for the year ended December 31, 2016 classifying them in accordance with the Uniform System of Accounts.

Line No.	Acc't No.	Item (a)	Amount (b)	Comparison with Previous Year. (c)
1		**SOURCE OF WATER SUPPLY EXPENSES**		
2	601-1	Maintenance of Water Supply Buildings and Fixtures	$ 10,333	$ (30,997)
3	601-2	Maintenance of Surface Source of Supply Facilities	$ -	$ -
4	601-3	Maintenance of Ground Source of Water Supply	$ 397,023	$ 119,597
5		**Total Source of Water Supply Expenses**	**$ 407,356**	**$ 88,600**
6	602	**Water Purchased for Resale**	**$ 496,922**	**$ 461,614**
7		**PUMPING EXPENSES**		
8	603-1	Pumping Labor	$ 153,574	$ 4,587
9	603-2	Boiler Fuel	$ -	$ -
10	603-3	Water for Steam	$ -	$ -
11	603-4	Electric Power Purchased	$ 723,815	$ 8,222
12	603-5	Miscellaneous Pumping Station Supplies and Expenses	$ 112,511	$ 16,843
13	604-1	Maintenance Power Pumping Buildings and Fixtures	$ 16,184	$ (12,562)
14	604-2	Maintenance of Pumping Equipment	$ 112,365	$ (12,234)
15	604-3	Maintenance of Miscellaneous Pumping Plant Equipment	$ -	$ -
16		**Total Pumping Expenses**	**$ 1,118,448**	**$ 4,855**
17		**PURIFICATION EXPENSES**		
18	605-1	Purification Labor	$ 309,859	$ 33,034
19	605-2	Purification Supplies and Expenses	$ 3,497,523	$ 47,621
20	606-1	Maintenance of Purification Buildings and Fixtures	$ 33,105	$ (27,390)
21	606-2	Maintenance of Purification Equipment	$ 305,031	$ (111,088)
22		**Total Purification Expenses**	**$ 4,145,517**	**$ (57,824)**
23		**TRANSMISSION AND DISTRIBUTION EXPENSES**		
24	607	Inspecting Customers' Installation	$ 17,026	$ 4,449
25	608	Miscellaneous Trans. and Dist, Supplies and Expenses	$ 734,925	$ 125,835
26	609-1	Maintenance of Trans. and Dist. Buildings and Fixtures	$ 6,853	$ (6,635)
27	609-2	Maintenance of Trans. and Dist. Mains	$ 356,860	$ (94,574)
28	609-3	Maintenance of Storage, Reservoirs, Tanks and Standpipes	$ 6,651	$ (11,548)
29	609-4	Maintenance of Services	$ 231,618	$ 25,062
30	609-5	Maintenance of Meters	$ 184,733	$ 5,298
31	609-6	Maintenance of Hydrants	$ 16,376	$ 10,142
32	609-7	Maintenance of Fountains and Troughs	$ -	$ -
33		**Total Trans. and Dist. Expenses**	**$ 1,555,043**	**$ 58,030**
34		**GENERAL AND MISCELLANEOUS EXPENSES**		
35	610-1	Salaries of General Officers and Clerks	$ 428,187	$ 37,865
36	610-2	General Office Supplies and Expenses	$ 1,989,773	$ 72,618
37	610-3	Law Expense - General	$ 205,395	$ (550,757)
38	610-4	Insurance	$ 872,358	$ (83,510)
39	610-5	Accidents and Damages	$ -	$ -
40	610-6	Store Expenses	$ -	$ -
41	610-7	Transportation Expenses	$ 17,311	$ 1,767
42	610-8	Inventory Adjustments	$ -	$ -
43	610-9	Maintenance of General Structures	$ -	$ -
44	610-10	Depreciation	$ 1,821,208	$ 301,468
45	610-11	Miscellaneous General Expenses	$ 528,353	$ (145,833)
46		**Total General and Miscellaneous Expenses**	**$ 5,862,584**	**$ (366,383)**
47		**GRAND TOTAL OPERATING EXPENSES**	**$ 13,585,870**	**$ 188,892**

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Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

OPERATING EXPENSES (CONT'D)

(For companies having average operating revenues not exceeding $15,000.)

State the operating expenses of the respondent for the year ended December 31, 2016 classifying them in accordance with the Uniform System of Accounts.

Line No.	Kind of Tax (a)	Federal	State	Municipal	Total
48	FIT	$ (355,044)			$ (355,044)
49	FICA	$ 170,398			$ 170,398
50	FUTA	$ 856			$ 856
51	Property Tax			$ 1,071,917	$ 1,071,917
52	SUTA		$ 5,994		$ 5,994
53	SIT		$ (86,864)		$ (86,864)
54	Other General Taxes			$ -	$ -
55					
56					
57					
58					
59					
60	**TOTALS**	**$ (183,790)**	**$ (80,870)**	**$ 1,071,917**	**$ 807,258**

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Real Estate Information - Hingham

1. Land owned by the Company

	Location	Use	
A	Whiting Street, Accord Pond	Surface water supply, pump station, elevated tank	
B	South Pleasant Avenue Fulling Mill	Water Pump Station	
C	Free Street	Well Pump Stations	
D	Turkey Hill Lane	Standpipe	
E	Downing Street	Well Pump Stations	
F	Scotland Street	Well Pump Stations	
G	Prospect Street	Well Pump Stations	

	Area	When Bought	Cost
A	43.53 Acres	1882, 85, 96, 97, 98, 1916	$10,177
B	117.04 Acres	1885, 1900, 02-06, 16, 23	$29,092
C	72.14 Acres	1942, 1951	$3,763
D	0.22 Acres	1963	$4,766
E	10.91 Acres	1965	$14,579
F	24.20 Acres	1955 - 1975	$7,596
G	9.22 Acres	1966 - 1970	$83,384

2. Buildings owned by the Company

	Location	Use
A	Fulling Mill Pond	Pump Station
B	Fulling Mill Pond	Storehouse and Garage
C	Accord Pond - Gravity & Pump	Outlet Structure and Pump Station
D	Free Street #4	Well Pump Stations
E	Free Street #3	Well Pump Stations
F	Free Street #2	Filter Building And Garage, Well Pump Station
G	Scotland Street	Well Pump Stations
H	Downing Street	Well Pump Stations
I	Prospect Street	Well Pump Stations

	Size	Material	When Built	Cost
A	5755	Brick	1919, 20, 21, 62, 67, 68, 96	
B	800	Steel	1969	
C	1200	Brick	1995	
D	450	Brick	1942 - 1968	
E	258	Brick	1952	
F	2780	Brick & Block	1969-70	
G	326	Cement Block	1956	
H	340	Cement Block	1966	
I	360	Brick & Block	1971	

* By cost is meant the original cost of Installation, not the Book Value

Real Estate Information - Millbury

1. Land owned by the Company

	Location	Use
A	Millbury Avenue	Location of Well & Pump Station
B	Burbank Hill	Location of Reservoir
C	Howe Avenue	Location Basins #1, #2 & #3
D	Oak Pond Avenue	Oak Pond Pump Station
E	North Main Street @ Jacques Curve	#1 & #2 North Main Street Pump Station
F	Sutton Road	Location of Booster Station

	Area	When Bought	Cost
A	3.00 Acres	1849	
B	3.00 Acres	1895	$25,802
C	55.23 Acres	1895 - 1913	$3,823
D	97,129 Square Feet	1957	$4,106
E	20.39 Acres	1965	$16,824
F	10,051 Square Feet	1994	$11,999

2. Buildings owned by the Company

	Location	Use
A	Oak Pond Avenue	Pump Station
B	North Main Street #2 Well	Pump Station
C	North Main Street #1 Well	Pump Station
D	34 Sutton Road	Booster Pump Station
E	Horne Way	Booster Pump Station
F	North Main St. WTP	Water Treatment Plant
G	35 Millbury Ave.	Raw Water Pump Station
H	35 Millbury Ave.	Water Treatment Plant

	Size	Material	When Built	Cost
A	19' x 16'	Concrete Block	1958	
B	20' x 17'	Concrete Block	1966	
C	20' x 17'	Concrete Block	1966 - 67	
D	17' x 22'	Brick & Concrete	1994	
E	22' x 33'	Wood	2000	
F	29' x 67'	Metal	2003	
G	17' x 18'	Concrete Block	2002	
H	45' x 100'	Concrete Block	2002	

* By cost is meant the original cost of Installation, not the Book Value

Annual report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2016**

Real Estate Information -Oxford

1. Land owned by the Company

	Location		Use	
A	Main St, Oxford, MA		Well & Pump station	
B	Prospect Hill, Oxford, MA		Right of way for standpipe	
C	Prospect Hill, Oxford, MA		Land adjacent to standpipe	
D	Off Holbrook Road- Oxford, Massachusetts		Land for standpipe	
E	From Old Depot Rd to Burbank St Oxford, Mass		Right of way pipeline to standpipe	
	Area		**When Bought**	**Cost**
A	9.04 Acres		1906	$4,312
B	1.00 Acre		1907	$319
C	13.30 Acres		1944	$438
D	0.52 Acres		1957	$6,527
E	25.70 Acres		1958 - 1959	$16,338

2. Buildings owned by the Company

	Location		Use	
A	North Main Street Oxford, Massachusetts		Pump Station	
B	North Main Street Oxford, Massachusetts		Pump Station	
C	Off Nelson Street Oxford, Massachusetts		Pump Station	
D	Sutton Ave. Oxford, Massachusetts		Booster Pump Station	
	Size	**Material**	**When Built**	**Cost**
A	20' x 17'	Cement Block	1959	
B	20' x 17'	Cement Block	1959	
C	16' x 10' x 19'9"	Cement Block	1959, 1964, 1967	
D	12' x 20'	Prefab. Metal	1999	

* By cost is meant the original cost of Installation, not the Book Value

SUPPLY INFORMATION - Hingham

1. Give a full and complete description of the sources from which water is obtained. State whether these sources are owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health regarding each of these sources of supply.

See attached Schedule

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A. Fulling Mill Pond	67.79 acres	1902, 04, 06, 23	Included on page 400
B. Accord Pond	40.916 acres	1882, 85-87	

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

Fulling Mill Pond - January 4, 1886 - $2,000
Accord Pond - May 26, 1912 - $1,500

Water registration for withdrawal of water issued by Commonwealth of Massachusetts in 1988 and renewed in 1998 and 2008.

(Item 1 Page 401)

Annual Report of Aquarion Water Company of Massachusetts

Year ended December 31, 2016

Give a full and complete description of the source or sources from which water is obtained. State whether these sources are owned or leased by the Company. If they are leased, quote the terms of the leases. Give the date of the latest opinion of the Department of Public Health regarding each of these sources of supply.

Water is obtained from Accord Pond, Fulling Mill Well and from several other wells.
Fulling Mill Well is owned by respondent. The right to withdraw water from
all sources was registered under the Massachusetts Water Management Act of 1988.
Two satellite wells, Fulling Mill #1 & #2, both 18" diameter ,#1 is 48' deep and #2 is 42' deep, were added at Fulling Mill.
An 18" diameter well, 58' deep was constructed off Prospect Street in 1971. The well
was approved by the Department of Public Health in 1970. A 24" diameter well, Free Street #2,
72' deep, was constructed off Free Street in 1951, the pump was installed in 1952.
A replacement well 18" in diameter and 80' deep for #2 , Free St. #2A, was put into service in December 2007. An 18"
diameter well, 45' deep, was constructed off Scotland Street in 1955. An 24" satellite well, Scotland St. #1A, 58' deep,
was completed and put into service in May 2008. A 24"diameter well, 66' deep was constructed off Downing Street in 1965,
pump installed in 1966, Free Street Well #3, 88' 8" deep, was
constructed adjacent to Free Street Well #1 in 1967, the pump was
installed in 1998. Testing and approval by the Department of
Environmental Protection was not required as this well was in same well field as
Free Street Well #1. Free Street #1 has been abandoned since late
in the 1960's; it has been filled and capped. The land around this
well is leased for a 99 year term at no cost other than payment of
real estate taxes. A 24" diameter well 86' deep, Free Street #4
was completed in December, 1982, and Department of Environmental Protection
approval was given in 2008. Free Street Well #5 is a 16" diameter well which was
constructed in 2001 as a satellite well to Free Street Well #3. All sources are
sampled in accordance with state and federal regulations. All sources are
currently in compliance with those regulations.

SUPPLY INFORMATION - Millbury

1. Give a full and complete description of the sources from which water is obtained. State whether these sources sre owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health reguarding each of these sources of supply.

Water is supplies from four wells all owned by the Company. All are approved public drinking water sources according to Massachusetts DEP.

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A. Parcel E & F - Howe Ave	8.50 acres	1909	Included on page 400
B. Parcel G, West of E & F - Howe Ave	29.29 acres	1910	
C. West of G - Howe Ave	3.18 acres	1913	

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

The Millbury water system holds both a Registration Statement (21218602) and Permit (9P-2-12-186.01) under the Water Management Act issued by the Commonwealth of Massachusetts. The Registration Statement was renewed in 2008 and is good through December 31, 2017. The Water Management Act Permit was renewed in February 2010 and is good through February 28, 2029.

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

SUPPLY INFORMATION - Oxford

1. Give a full and complete description of the sources from which water is obtained. State whether these sources sre owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health reguarding each of these sources of supply.

The responent owns three gravel packed wells. All wells are approved for use as public water supply sources of the Massachusetts DEP.

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A.			
B.			
C.			
D.			

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

The Oxford water system holds a Registration Statement (21022601) under the Water Management Act issued by the Commonwealth of Massachusetts. The Registration Statement was renewed in 2008 and is good through December 31, 2017.

SUPPLY INFORMATION - Continued - Hingham

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Fulling Mill Well	40' x 19'	21' 8"	Covered	1903	
B. Free Street Well #2	24"	73"	Covered	1951	
C. Scotland Street Well	18"	45"	Covered	1955	
D. Dowing Street Well	24"	66' 6"	Covered	1966	Combined
E. Free Street Well #3	18'	88' 6"	Covered	1967	
F. Prospect St. Well	18"	58'	Covered	1971	
G. Free Street Well #4	24"	86'	Covered	1982	
H. Free Street Well #5	16"	68'3"	Covered	2001	$354,696
I. Free Street Well #2A	12"	80'	Covered	2007	$265,151
J. Fulling Mill Well #1	12"	48'	Covered	2008	$243,694
K. Fulling Mill Well #2	12"	42'	Covered	2008	$221,718
L. Scotland St. Well #1A	18"	58'	Covered	2008	$348,459

5. Give a full and complete description of the wells

See attached sheet

6. Reservoirs

Location	Area at Surface When Full	Full Capacity in Gallons		When Built	Cost
A. Accord Pond	100 Acres	247,000,000			
B. Fulling Mill Pond	14 acres	23,109,000			
C. Fulling Mill Basin	Undetermined				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

Accord Pond is a natural lake. At natural outlet an embankment was built with concrete core walls. Fulling Mill is an artificial pond with an earth embankment with concrete core walls. Accord Pond provides water to the Hingham/Hull District Water Treatment Facility. The seven basins at Fulling Mill Pump Station are natural depressions from which trees have been cut. These basins feed into underground strata supplying the Fulling Mill Well. This source is then pumped to the Hingham/Hull Distrcit Water Treatment Facility for treatment.

5. Give a full and complete description of the wells

(A) Inside walls 6' from bottom are built of stone laid dry. From that point upwards, the wall is dome shaped made of concrete with suitable opening on top. The water from the well is pumped by the Fulling Mill Station.

(B) Drilled in 1951, well pump installed in 1952. 30' of 24" stainless steel screen, 43' of 24" transite solid casing, gravel packed and concrete sealed. In 1995, replaced, well pump and redeveloped this well. The casing was lined with steel pipe in 1999. Redeveloped in 2005 and 2015.

(C) Drilled in 1955, well pump installed in 1956. 30' of solid steel casing, 15' of 24" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1978; casing reduced from 24" to 18" with 15' of 18" stainless steel screen. Redeveloped in 1987, 1998 and 2014.

(D) Drilled in 1965, well pump installed in 1966. 55' of 6" of solid steel casing, 10' of 24" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1988.

(E) Drilled in 1967, well pump installed in 1968. 78' of solid steel casing, 10' of 8" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1988 and 2015.

(F) Drilled well in 1971, well pump installed in 1998. 48' of solid steel casing, 10' of 18" stainless steel screen, gravel packed and concrete sealed. Redeveloped 2015.

(G) Well drilled in 1981, pump installed in 1982. 66' of 24" solid steel casing, 20' of 24" variable slot stainless steel screen, gravel packed and concrete sealed. Redeveloped in 2003, 2015, and 2016.

(H) Well drilled in 2001 pump installed in July 2001. 80' of 16" steel casing, 15' of 10" stainless steel screen, gravel packed and concrete sealed. Redeveloped 2015.

(I) Replacement/satellite well drilled in 2007 pump installed December 2007. 80' of 18" steel casing, 18' of 12" stainless steel screen, gravel packed. Includes a meter vault. Redeveloped in 2014 and 2016.

(J) Replacement/satellite well drilled in 2008 pump installed June 2008. 48' of 18" steel casing, 8' of 12" stainless steel screen, gravel packed. Includes a meter vault. Redeveloped in 2015 and 2016.

(K) Replacement/satellite well drilled in 2008 pump installed June 2008. 42' of 18" steel casing, 18' of 12" stainless steel screen, gravel packed. Includes a meter vault. Redeveloped in 2015 and 2016.

(L) Replacement/satellite well drilled in 2008 pump installed May 2008. 42' of 24" steel casing, 12' of 18" stainless steel screen, gravel packed. Includes a meter vault. Redeveloped in 2014 and 2015.

SUPPLY INFORMATION - Continued - Millbury

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Millbury Avenue	25'	36'20"	Covered	1984	
B. Oak Pond Avenue	24"	30'	Covered	1958	$5,255
C. Jacques Well Station #2	24"	70'	Covered	1965	$32,389
D. Jacques Well Station #1	24"	53'	Covered	1966	$11,681
E. Jacques WTF	30' x 66 '		Covered	2005	$1,517,819
F.					

5. Give a full and complete description of the wells

6. Reserviors

Location	Area at Surface When Full	Full Capacity in Gallons	When Built	Cost
A.				
B.				
C.				
D.				
E.				
F.				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

(A.) Hand dug in 1884 lined with fieldstone 35' deep

(B.) 18" diameter 31' deep 8" stainless steel screen redeveloped 2014, installed 1958

(C.) 24" diameter 72' deep 10" stainless steel screen installed 1965 gravel packed, redeveloped 2011

(D.) 24" diameter 63' deep 10' stainless steel screen gravel packed, installed 1966

(E.) 2- 24" diameter 65' deep 8" stainless steel screen gravel packed, installed 1966

SUPPLY INFORMATION - Continued - Oxford

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Oxford, MA	24"	65'	Covered	1950-59	$53,994
B. Oxford, MA	24"	67'	Covered	1950-59	$50,128
C. Oxford, MA	24"	66'	Covered	1961	$20,383
D. Oxford, MA	12"	66'	Covered	2007	$269,981

5. Give a full and complete description of the wells

Three 24" diameter gravel packed wells, one with tansite casting and two stainless steel castings.

6. Reservoirs

Location	Area at Surface When Full	Full Capacity in Gallons	When Built	Cost
A.				
B.				
C.				
D.				
E.				
F.				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

(A.) #1 N Main drilled 1950 16" diameter 63' deep 10' stainless steel screen, gravel packed

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Pumping Information - Hingham

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Respondent owns twelve wells/ pump stations. Water is pumped from Fulling Mill Station, Fulling Mill Well #1, Fulling Mill Well #2, Free St. Well #2, Free St. Well #2A, Free St. Well #3 & #5, Free St. Well #4, Scotland St. Well, Scotland St. #1A, Prospect St.,, and Accord Pond to the Hingham/Hull District Water Treatment Facility for treatment. Water from the Downing St. Well is pumped directly to the distribution system after treatment. An abandoned booster station in Hull, MA was refurbished and placed in service in 1998.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	Fulling Mill #1	Hor Cent	Fairbanks-Morse	2015	*
B	Fulling Mill #2	Hor Cent	Fairbanks-Morse	2008	*
C	Free Street Well #2	Vert Turb	Bryon Jackson	1999	*
D	Scotland Street Well	Vert Turb	Goulds	2014	*
E	Downing Street Well	Vert Turb	Bryon Jackson	1996	*
F	Free Street Well #3	Vert Turb	Grundfos	2015	*
G	Prospect Street Well	Vert Turb	Goulds	2015	*
H	Free Street Well #4	Submersible	Goulds	2015	*
I	Beacon Road Booster	Hor Cent	Aurora	1999	*
J	Accord #3	Hor Cent	Fairbanks-Morse	2015	*
K	Accord #4	Hor Cent	Fairbanks-Morse	2015	*
L	Accord #5	Hor Cent	Fairbanks-Morse	2015	*
M	Beacon Road, Hull	Hor Cent	Aurora	1998	*
N	Free Street #5	Submersible	Grundfos	2015	*
O	Free Street #2A	Submersible	Goulds	2016	*
P	Fulling Mill Well #1	Submersible	Goulds	2008	*
Q	Fulling Mill Well #2	Submersible	Goulds	2008	*
R	Scotland St. Well #1A	Submersible	Goulds	2015	*
S	Baker Hill Booster #1	Hor Cent	Aurora	2006	*
T	Baker Hill Booster #2	Hor Cent	Aurora	2006	*
U	Baker Hill Booster #3	Hor Cent	Aurora	2006	*
V	Baker Hill Booster #4	Hor Cent	Aurora	2006	*
W	Baker Hill Booster #5	Hor Cent	Aurora	2006	*

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE**	DIAM. OF PISTONS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A		Double Suction	1,180 RPM	5"	N/A	Electric	1,440,000
B		Double Suction	1,180 RPM	5"	N/A	Electric	381,600
C		3 stage	1,770 RPM	13" Disc	N/A	Electric	2,016,000
D		1 stage	1,770 RPM	8"	N/A	Electric/Gas	1,008,000
E		7 stage	1,750 RPM	6"	N/A	Electric/Gas	829,440
F		7 stage	1,770 RPM	5"	N/A	Electric/Gas	216,000
G		1 stage	1,770 RPM	6"	N/A	Electric	504,000
H		2 stage	3,600 RPM	8"	N/A	Electric	864,000
I		1 stage	3,600 RPM	4"	N/A	Electric	1,008,000
J		2 stage	1,770 RPM	6"	N/A	Electric	2,016,000
K		2 stage	1,185 RPM	5"	N/A	Electric	1,008,000
L		2 stage	1,185 RPM	6"	N/A	Electric	2,016,000
M		1 stage	1,800 RPM	6"	N/A	Electric	1,008,000
N		1 stage	3,450 RPM	4"	N/A	Electric	432,000
O		3 stage	3,600 RPM	12"	N/A	Electric	1,804,320
P		2 stage	3,600 RPM	12"	N/A	Electric	2,880,000
Q		2 stage	3,600 RPM	12"	N/A	Electric	2,880,000
R		1 stage	3,600 RPM	12"	N/A	Electric	1,080,000
S		1 stage	3,500 RPM	2"	N/A	Electric	86,400
T		1 stage	3,500 RPM	2"	N/A	Electric	86,400
U		1 stage	3,500 RPM	3"	N/A	Electric	216,000
V		1 stage	3,500 RPM	3"	N/A	Electric	216,000
W		1 stage	1,800 RPM	8"	N/A	Electric	1,728,000

* Cost of pump separately unavailable

**Diameter of impeller

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Pumping Information - Millbury

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Water is supplied from four wells all owned by the company. All are approved public drinking water sources according to the Massachusetts DEP.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	Millbury Avenue	Turbine	Floway	2003	
B	Millbury Avenue	Turbine	Floway	2003	
C	Millbury Avenue	Turbine	Floway	2003	
D	Millbury Avenue	Turbine	Floway	2003	
E	Oak Pond	Turbine	Goulds	2008	
F	North Main Street Well #2	Turbine	Goulds	2004	
G	North Main Street Well #1	Turbine	Goulds	2004	
H	Sutton Road Booster	Cent	EFI	1993	
I	Millbury Avenue	Turbine	Floway	2003	
J	Millbury Avenue	Turbine	Floway	2003	
K	Brierly Pond	Cent	PENTAIR	2003	
L	Brierly Pond	Cent	PENTAIR	2003	
M	Brierly Pond	Cent	PENTAIR	2003	
N	Brierly Pond	Cent	PENTAIR	2003	
O	Brierly Pond	Cent	PENTAIR	2003	

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE	DIAM. OF PISTINS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A			1,790 RPM	Turbine		Electric Motor	1,296,000
B			1,790 RPM	Turbine		Electric Motor	1,296,000
C			1,790 RPM	Turbine		Electric Motor	1,296,000
D			1,180 RPM	Turbine		Electric Motor	1,296,000
E			1,760 RPM	Turbine		Electric Motor	864,000
F			1,760 RPM	Turbine		Electric Motor	457,920
G			1,750 RPM	Turbine		Electric Motor	835,200
H			3,450 RPM	Cent		Electric Motor	864,000
I			1,785 RPM	Turbine		Electric Motor	1,584,000
J			1,785 RPM	Turbine		Electric Motor	1,584,000
K			3,500 RPM	Cent		Electric Motor	1,440,000
L			1,750 RPM	Cent		Electric Motor	172,800
M			1,750 RPM	Cent		Electric Motor	172,800
N			3,500 RPM	Cent		Electric Motor	86,400
O			3,500 RPM	Cent		Electric Motor	86,400

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Pumping Information - Oxford

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Water is pumped from company owned pump stations into distribution system containing a standpipe which floats on the system.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	North Main Street #1	Turbine	Bryon Jackson	1959	
B	North Main Street #2	Turbine	Deming	1959	
C	Nelson Street #3	Turbine	Goulds	2005	
D	Sutton Ave. Booster	Turbine	G & L Goulds	1999	
E	Sutton Ave. Booster	Turbine	G & L Goulds	1999	
F	North Main Street #1A	Submersible	Goulds	2007	

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE	DIAM. OF PISTINS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A		Turbine	1,750 RPM			LP. Gen	432,000
B		Turbine	1,750 RPM			LP. Gen	576,000
C		Turbine	1,750 RPM			Kohler L.P. Gen	1,152,000
D		Turbine	3,500 RPM			Electric Motor	72,000
E		Turbine	3,500 RPM			Electric Motor	72,000
F		Submersible	3,500 RPM			Electric Motor	432,000

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Pumping Information - Continued Hingham

6. Gas Producers

This schedule not presently used

7. Internal combustion engines

	Location		Name of Builder	When Installed	Type of Drive	Cost
A	Scotland Street		Continental	1956	Gear Dr	*
B	Downing Street		Continental	1966	Gear Dr	*
C	Free Street Well #3		Allis Chalmers	1968 1969	Gear Dr	*

				Dimensions of Cylinders			
	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Diameter	Stroke	2 or 4 Stroke Cycle	Rated H.P.
A	L.P. Gas	6	Single	4	4 13/16	4	75
B	Natural Gas	6	Single	3 5/16	4 3/8	4	46 1/2
C	Natural Gas	6	Single	3 7/8	4 1/2	4	64

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	Fulling Mill #1	U.S. Electric	1996	*
B	Fulling Mill #2	U.S. Electric	1996	*
C	Free Street Well #2	U.S. Electric	1952	*
D	Scotland Street Well	U.S. Motors	1998	*
E	Downing Street Well	U.S. Electric	1966	*
F	Free Street Well #3	U.S. Electric	1998	*
G	Free Street Well #2	General Electric	1969	*
H	Prospect Street	U.S. Electric	1998	*
I	Free Street Well #4	U.S. Electric	1968	*
J	Accord #3	U.S. Electric	1996	*
K	Accord #4	U.S. Electric	1996	*
L	Accord #5	U.S. Electric	1996	*
M	Beacon Road, Hull	U.S. Motor	1998	*
N	Free Street Well #5	Franklin	2001	*
O	Free Street Well#2A	Centripro	2007	*
P	Fulling Mill Well#1	Centripro	2008	*
Q	Fulling Mill Well #2	Centripro	2008	*
R	Scotland Street #1A	Centripro	2008	*
S	Baker Hill Booster #1	Aurora	2006	*
T	Baker Hill Booster #2	Aurora	2006	*
U	Baker Hill Booster #3	Aurora	2006	*
V	Baker Hill Booster #4	Aurora	2006	*
W	Baker Hill Booster #5	Aurora	2006	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	460	Direct	15
B	A.C. 3 Phase	460	Direct	15
C	A.C. 3 Phase	480	Direct	100
D	A.C. 3 Phase	220/440	Direct	25
E	A.C. 3 Phase	220/440	Direct	40
F	A.C. 3 Phase	230/460	Direct	60
G	A.C. 3 Phase	460	Direct	25
H	A.C. 3 Phase	230/460	Direct	20
I	A.C. 3 Phase	460	Direct	25
J	A.C. 3 Phase	460	Direct	40
K	A.C. 3 Phase	460	Direct	50
L	A.C. 3 Phase	460	Direct	75
M	A.C. 3 Phase	240	Direct	20
N	A.C. 3 Phase	460	Direct	5
O	A.C. 3 Phase	460	Direct	175
P	A.C. 3 Phase	460	Direct	15
Q	A.C. 3 Phase	460	Direct	15
R	A.C. 3 Phase	460	Direct	20
S	A.C. 3 Phase	480	Direct	5
T	A.C. 3 Phase	480	Direct	5
U	A.C. 3 Phase	480	Direct	8
V	A.C. 3 Phase	480	Direct	8
W	A.C. 3 Phase	480	Direct	50
			Total Horse Power	815

* Cost of motor separately unavailable

Pumping Information - Continued Millbury

6. Gas Producers

This schedule not presently used

7. Internal combustion engines.

	Location	Name of Builder	When Installed	Type of Drive	Cost
A	Jacques Well Station #1	Kohler	2010	Generator	
B	Jacques Well Station #2	Kohler	2006	Generator	
C	Oak Pond Well	Cummings	1988	Generator	
D	Sutton Road Booster	Kohler	1994	Generator	
E	Brierly Pond Booster	Generac	2003	Generator	

	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Dimensions of Cylinders		2 or 4 Stroke Cycle	Rated H.P.
				Diameter	Stroke		
A	Fuel Oil	4	Single	4.19	5	4	158
B	Fuel Oil	6	Single	4	4 3/8	4	125
C	L.P. Gas	6	Double	5 1/4	15-24 centimeter	4	175
D	L.P. Gas	4	Single	4	5	4	150
E	Gas	8	Double	5 1/4	5	4	175

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	Jacques Well Station #1	U.S. Electric	2005	
B	Jacques Well Station #2	U.S. Electric	2005	
C	Oak Pond	U.S. Electric	2008	
D	Sutton Rd. Booster	EFI	1993	
E	Brierly Pond Booster	U.S. Electric	2003	
F	Brierly Pond Booster	U.S. Electric	2003	
G	Brierly Pond Booster	U.S. Electric	2003	
H	Brierly Pond Booster	U.S. Electric	2003	
I	Brierly Pond Booster	U.S. Electric	2003	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	230/460	Direct	60
B	A.C. 3 Phase	230/460	Direct	60
C	A.C. 3 Phase	230/460	Direct	100
D	A.C. 3 Phase	230/460	Direct	60
E	A.C. 3 Phase	230/460	Direct	40
F	A.C. 3 Phase	230/460	Direct	10
G	A.C. 3 Phase	230/460	Direct	10
H	A.C. 3 Phase	230/460	Direct	5
I	A.C. 3 Phase	230/460	Direct	5
			Total Horse Power	350

Pumping Information - Continued Oxford

6. Gas Producers

This schedule not presently used

7. Internal combustion engines.

	Location	Name of Builder	When Installed	Type of Drive	Cost
A	#1 North Main Street	Koehler	2012	Generator	
B	#2 North Main Street	Koehler	2012	Generator	
C	#3 Nelson Street	Koehler	2005	Generator	
D	Sutton Ave.	Koehler	2000	Generator	

				Dimensions of Cylinders			
	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Diameter	Stroke	2 or 4 Stroke Cycle	Rated H.P.
A	Diesel	4	Double	4.19	5	4	197
B	Diesel	4	Double	4.19	5	4	197
C	L.P. Gas	8	Single	4	4 3/8	4	125
D	L.P. Gas	6	Single	4	3.98	4	82

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	#1 North Main Street	U.S. Motors	1990	
B	#2 North Main Street	U.S. Motors	1990	
C	#3 Nelson Street	U.S. Motors	2005	
D	Sutton Ave. Booster	Baldor	1999	
E	#1A North Main Street	Franklin	2007	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	575	Direct	60
B	A.C. 3 Phase	575	Direct	60
C	A.C. 3 Phase	480	Direct	100
D	A.C. 3 Phase	230/460	Direct	5
E	A.C. 3 Phase	575	Direct	60
			Total Horse Power	285

Pumping Information - Continued. - Hingham

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

Pumping Information - Continued. - Millbury

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

Pumping Information - Continued. - Oxford

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

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Pumping Information - Continued Hingham

11. Station log System Delivery Summary - Hingham/Hull District Water Treatment Facility Only

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	153,300		83.168	744		
February	139,300		79.288	696		
March	128,100		82.801	744		
April	142,450		82.760	720		
May	129,850		110.436	744		
June	189,000		134.044	720		
July	207,200		150.505	744		
August	214,550		116.450	744		
September	187,950		92.701	720		
October	139,650		81.881	744		
November	138,250		71.011	720		
December	124,250		72.658	744		
Totals	1,893,850	0	1,157.702	8,784	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 3.163 MG (366 days)

14. Maximum gallons pumped in a day 5.520 MG

15. Date of same, June 28, 2016

16. Range of pressure in main 45-95 psi

17. Average pressure in main 82 psi

408	System Delivery Summary - Hingham/Hull District Water Treatment Facility Only	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.14	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	1,893,850	Kwhrs

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Pumping Information - Continued Hingham

11. Station log **Accord Pond to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	2,977		0.172	48		
February	4,107		8.759	264		
March	3,384		3.858	240		
April	2,706		13.046	672		
May	3,393		27.896	744		
June	9,918		44.434	720		
July	13,058		47.749	744		
August	10,920		30.911	744		
September	4,347		11.958	480		
October	527		0.000	0		
November	1,379		0.000	0		
December	2,236		0.000	0		
Totals	58,952	0	188.784	4,656	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.516 MG (366days)

14. Maximum gallons pumped in a day 2.21 MG

15. Date of same, June 4, 2016

16. Range of pressure in main 5-10 psi

17. Average pressure in main 10 psi

408	Accord Pond to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.15	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	58,952	Kwhrs

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Pumping Information - Continued Hingham

11. Station log **Fulling Mill Well 1 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	20,527		6.092	744		
February	18,415		4.601	696		
March	14,412		6.080	744		
April	15,845		6.011	720		
May	8,517		5.900	384		
June	19,925		14.409	720		
July	19,441		12.921	744		
August	17,322		9.748	720		
September	14,008		8.215	720		
October	12,115		8.357	744		
November	14,184		7.846	720		
December	14,962		8.973	744		
Totals	189,673	0	99.152	8,400	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.271 MG (366 days)

14. Maximum gallons pumped in a day 0.612 MG

15. Date of same, June 4, 2016

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

408	Fulling Mill Well 1 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.14	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	189,673	Kwhrs

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Pumping Information - Continued Hingham

11. Station log **Fulling Mill Well 2 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			3.565	624		
February			1.732	456		
March			1.403	528		
April			1.690	672		
May			2.194	288		
June			5.954	720		
July			4.018	744		
August			2.466	696		
September			2.771	648		
October			3.172	720		
November			3.013	720		
December			3.143	720		
Totals	0	0	35.120	7,536	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.096 MG (366 days)

14. Maximum gallons pumped in a day 0.432 MG

15. Date of same, January 4, 2016

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

Pumping Information - Continued Hingham

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	see Fulling Mill 1 meter
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	see Fulling Mill 1 meter

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Pumping Information - Continued Hingham

11. Station log **Fulling Mill Cistern to Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			0.000	0		
February			0.000	0		
March			0.005	24		
April			0.000	0		
May			0.000	0		
June			0.422	72		
July			0.000	24		
August			0.000	0		
September			0.000	0		
October			0.000	0		
November			0.000	0		
December			0.000	0		
Totals	0	0	0.427	120	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.001 MG (366 days)

14. Maximum gallons pumped in a day 0.215 MG

15. Date of same, June 3, 2016

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

Pumping Information - Continued Hingham

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	see Fulling Mill 1 meter
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	see Fulling Mill 1 meter

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Pumping Information - Continued Hingham

11. Station log **Scotland St 1 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	15,774		21.804	744		
February	14,051		19.126	696		
March	10,848		20.293	744		
April	12,314		16.660	720		
May	11,223		17.567	744		
June	14,202		17.260	720		
July	13,406		16.454	744		
August	11,347		13.055	744		
September	9,054		11.844	720		
October	7,499		11.177	744		
November	8,375		10.044	720		
December	6,958		10.813	744		
Totals	135,051	0	186.096	8,784	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.508 MG (366 days)

14. Maximum gallons pumped in a day 0.896 MG

15. Date of same, January 3, 2016

16. Range of pressure in main 5-10 psi

17. Average pressure in main 8 psi

408	Scotland St 1 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.15	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		135,051	Kwhrs

Pumping Information - Continued Hingham

11. Station log **Scotland St 1A to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			6.996	744		
February			4.253	600		
March			4.926	744		
April			4.526	648		
May			5.850	744		
June			5.685	720		
July			4.955	744		
August			4.068	744		
September			4.248	720		
October			4.218	744		
November			3.431	720		
December			3.978	744		
Totals	0	0	57.132	8,616	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.156 MG (365 days)

14. Maximum gallons pumped in a day 0.288 MG

15. Date of same, January 3, 2016

16. Range of pressure in main 5-10 psi

17. Average pressure in main 8 psi

408	Scotland St 1A to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	See Scotland Street Meter	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	See Scotland Street Meter	

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Pumping Information - Continued Hingham

11. Station log **Downing Street Well**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	1,583		0.000	0		
February	1,359		0.000	0		
March	598		0.000	0		
April	1,821		0.000	0		
May	2,221		0.000	0		
June	2,516		0.000	0		
July	2,221		0.000	0		
August	2,318		0.000	0		
September	106		0.000	0		
October	93		0.000	0		
November	98		0.000	0		
December	69		0.000	0		
Totals	15,003	0	0.000	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (366 days)

14. Maximum gallons pumped in a day 0 MG

15. Date of same,

16. Range of pressure in main 80-95 psi

17. Average pressure in main 82 psi

408	Downing Street Well	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.16	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	15,003	Kwhrs

Pumping Information - Continued Hingham

11. Station log **Prospect Street to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	4,006		8.417	744		
February	3,978		5.884	624		
March	2,619		7.754	744		
April	3,726		7.810	720		
May	3,037		8.162	744		
June	3,854		7.810	720		
July	3,618		7.286	744		
August	3,310		5.978	744		
September	2,753		5.636	720		
October	2,383		4.433	696		
November	1,534		2.644	576		
December	1,772		2.478	504		
Totals	36,590		74.291	8,280	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.203 MG (366 days)

14. Maximum gallons pumped in a day 0.384

15. Date of same, June 1, 2016

16. Range of pressure in main 5-10 psi

17. Average pressure in main 10 psi

408	Prospect Street to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.15	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	36,590	Kwhrs

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Pumping Information - Continued Hingham

11. Station log **Free Street #2 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			7.855	288		
February			0.000	0		
March			0.008	24		
April			0.003	24		
May			0.000	0		
June			0.000	0		
July			1.207	72		
August			0.000	0		
September			0.000	0		
October			0.000	0		
November			0.000	0		
December			0.000	0		
Totals	0	0	9.073	408	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.025 MG (366 days)

14. Maximum gallons pumped in a day 1.077

15. Date of same, January 11, 2016

16. Range of pressure in main 50-60 psi

17. Average pressure in main 55 psi

Pumping Information - Continued Hingham

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	See Free Street # 2A
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	See Free Street # 2A

Pumping Information - Continued Hingham

11. Station log **Free Street #2A to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	37,800		16.509	576		
February	43,470		19.250	696		
March	28,770		16.960	744		
April	27,090		12.199	720		
May	21,840		13.384	744		
June	22,260		13.109	720		
July	26,250		21.669	672		
August	21,630		17.893	744		
September	17,010		17.050	720		
October	15,960		18.035	744		
November	16,170		14.459	720		
December	18,270		15.845	744		
Totals	296,520	0	196.361	8,544	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.537 MG (366 days)

14. Maximum gallons pumped in a day 1.147 MG

15. Date of same, July 30, 2016

16. Range of pressure in main 50-60 psi

17. Average pressure in main 55 psi

408	Free Street #2A to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued		Hingham

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.15	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		296,520	Kwhrs

Pumping Information - Continued Hingham

11. Station log **Free Street #3 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	29,800		0.000	0		
February	28,160		0.000	0		
March	25,880		0.000	0		
April	32,040		0.000	0		
May	38,680		0.000	0		
June	54,720		0.000	0		
July	73,680		0.000	0		
August	59,760		0.000	0		
September	57,000		0.000	0		
October	51,920		0.000	0		
November	50,120		0.000	0		
December	39,360		0.000	0		
Totals	541,120	0	0.000	0	0	0

Free St #3,4,5 uses same electric meter

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (366 days)

14. Maximum gallons pumped in a day 0.000 MG

15. Date of same,

16. Range of pressure in main 50 -60 psi

17. Average pressure in main 55 psi

408	Free Street #3 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued		Hingham

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.13	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		541,120	Kwhrs

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Pumping Information - Continued Hingham

11. Station log **Free Street #4 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			5.583	240		
February			18.939	648		
March			18.104	744		
April			9.581	552		
May			16.088	744		
June			16.766	672		
July			20.581	744		
August			15.413	744		
September			15.800	720		
October			16.369	744		
November			14.324	720		
December			13.906	744		
Totals	0	0	181.454	8,016	0	0

Free St #3,4,5 uses same electric meter

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.497 MG (365 days)

14. Maximum gallons pumped in a day 0.864 MG

15. Date of same, June 1, 2016

16. Range of pressure in main 50 -60 psi

17. Average pressure in main 55 psi

Pumping Information - Continued Hingham

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	See Free St # 3 meter
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	See Free St # 3 meter

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Pumping Information - Continued Hingham

11. Station log **Free Street #5 to Water Treatment Facility**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			8.893	528		
February			0.620	120		
March			2.825	216		
April			10.703	648		
May			14.239	744		
June			13.956	720		
July			16.338	744		
August			14.334	744		
September			13.862	720		
October			14.652	744		
November			12.953	720		
December			13.049	744		
Totals	0	0	136.422	7,392	0	0

Free St #3,4,5 uses same electric meter

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.373 MG (366 days)

14. Maximum gallons pumped in a day 0.632 MG

15. Date of same, January 3, 2016

16. Range of pressure in main 50 -60 psi

17. Average pressure in main 55 psi

408	Free Street #5 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	See Free St # 3 meter	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	See Free St # 3 meter	

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Pumping Information - Continued Millbury

11. Station Log **Total System**

Year and Month 2016	Kwhrs Used	Purchased Water (MG)	Million Gallons of Water Pumped	Hours of Pumping	Total System (MG) Includes Purchased Water	Average Total Static Head	Average Total Dynamic Head
January	86,700	0.230	37.780	1,376	38.010		
February	84,120	0.800	41.828	1,499	42.628		
March	93,640	2.300	45.998	1,604	48.298		
April	81,010	10.580	35.985	1,310	46.565		
May	60,990	15.680	36.056	1,393	51.736		
June	85,310	12.980	43.501	1,678	56.481		
July	94,550	12.866	44.347	2,251	57.213		
August	99,910	9.425	44.003	2,347	53.428		
September	100,790	14.362	33.341	1,753	47.703		
October	72,520	8.527	36.220	1,576	44.747		
November	84,770	1.122	44.261	2,010	45.383		
December	99,960	1.696	41.584	1,691	43.280		
Totals	1,044,270	90.568	484.904	20,488	575.472	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 1.572 MG (366 days)

14. Maximum gallons pumped in a day 2.198 MG

15. Date of same, June 15, 2016

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

408	Total System	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Millbury		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.16	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	1,044,270 Kwhrs	

Pumping Information - Continued Millbury

11. Station Log **Millbury Ave. Station**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	13,900		5.153	134		
February	19,900		8.175	203		
March	23,300		11.218	278		
April	23,500		7.588	192		
May	14,500		7.028	179		
June	26,800		12.293	314		
July	20,100		7.700	194		
August	22,900		8.362	219		
September	19,500		4.626	126		
October	15,200		3.151	89		
November	19,600		6.491	173		
December	21,900		7.149	198		
Totals	241,100	0	88.934	2,299	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.243 MG (366 days)

14. Maximum gallons pumped in a day 0.969 MG

15. Date of same, June 26, 2016

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

408	Millbury Ave. Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Millbury		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.17	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	241,100	Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Pumping Information - Continued Millbury

11. Station Log **Oak Pond Station**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	16,800		7.184	403		
February	18,720		10.616	593		
March	21,440		10.367	575		
April	14,560		6.993	391		
May	11,040		8.171	463		
June	16,960		10.108	566		
July	16,800		10.213	569		
August	16,160		10.804	623		
September	17,440		8.985	583		
October	17,920		9.134	641		
November	17,120		10.186	698		
December	20,960		10.332	699		
Totals	205,920	0	113.093	6,804	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.309 MG (366 days)

14. Maximum gallons pumped in a day 0.528 MG

15. Date of same, July 17, 2016

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

408	Oak Pond Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Millbury		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.15	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	205,920	Kwhrs

Pumping Information - Continued Millbury

11. Station Log **Jacques #1 N. Main St. Station**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	48,100		24.500	744		
February	42,200		23.037	703		
March	45,700		24.353	746		
April	41,000		21.355	723		
May	34,050		20.857	751		
June	39,900		19.777	696		
July	34,950		17.524	744		
August	33,750		17.505	754		
September	37,900		17.223	711		
October	38,150		22.406	752		
November	33,250		18.065	599		
December	41,150		23.388	745		
Totals	470,100	0	249.990	8,668	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.683 MG (366 days)

14. Maximum gallons pumped in a day 1.021 MG

15. Date of same, February 7, 2016

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

408	Jacques #1 N. Main St. Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continu	Pumping Information - Continued Millbury	

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.15	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		470,100	Kwhrs

Pumping Information - Continued Millbury

11. Station Log **Jacques #2 N. Main St. Station**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	7,900		0.943	95		
February	3,300		0.000	0		
March	3,200		0.060	5		
April	1,950		0.049	4		
May	1,400		0.000	0		
June	1,650		1.323	102		
July	22,700		8.910	744		
August	27,100		7.332	751		
September	25,950		2.507	333		
October	1,250		1.529	94		
November	14,800		9.519	540		
December	15,950		0.715	49		
Totals	127,150	0	32.887	2,717	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.090 MG (366 days)

14. Maximum gallons pumped in a day 1.003 MG

15. Date of same, November 13, 2016

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

Pumping Information - Continued Millbury

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.19	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		127,150	Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Pumping Information - Continued Oxford

11. Station Log **Total System**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	38,920		16.468	974		
February	42,920		17.106	939		
March	39,560		17.517	999		
April	39,360		18.936	1,055		
May	39,400		22.848	1,255		
June	54,360		27.205	1,486		
July	52,960		26.356	1,478		
August	50,237		24.138	1,179		
September	39,636		20.315	980		
October	34,696		17.922	853		
November	29,462		16.171	772		
December	35,942		17.533	847		
Totals	497,453	0	242.515	12,817	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.663 MG (366 days)

14. Maximum gallons pumped in a day 1.146 MG

15. Date of same, June 26, 2016

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 psi

408	Total System	
Annual report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2016
Pumping Information - Continued Oxford		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.16	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	497,453	Kwhrs

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Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #1**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	9,800		0.032	2		
February	22,600		0.020	2		
March	18,600		0.035	2		
April	12,800		0.000	0		
May	16,200		0.091	6		
June	27,800		1.722	108		
July	27,200		2.176	128		
August	23,200		0.409	26		
September	12,600		0.105	7		
October	7,000		0.259	14		
November	4,400		0.223	14		
December	6,400		0.129	8		
Totals	188,600	0	5.201	317	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.014 MG (366 days)

14. Maximum gallons pumped in a day 0.518 MG

15. Date of same, July 27, 2016

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 lbs per sq in

408	North Main St. Well #1	
Annual report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2016
Pumping Information - Continued Oxford		

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.17	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	188,600	Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #1A**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	0		0.532	47		
February	0		0.101	9		
March	0		0.016	1		
April	0		0.000	0		
May	0		0.000	0		
June	0		0.000	0		
July	0		0.000	0		
August	0		0.000	0		
September	0		0.000	0		
October	0		0.000	0		
November	0		0.000	0		
December	0		0.000	0		
Totals	(See station # 1 for totals)		0.649	57	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.002 MG (366 days)

14. Maximum gallons pumped in a day 0.116 MG

15. Date of same, January 27, 2016

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 psi

408	North Main St. Well #1A	
Annual report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2016
Pumping Information - Continued Oxford		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	see North Main Street #1 meter	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	see North Main Street #1 meter	

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #2**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	0		3.460	175		
February	0		11.460	601		
March	0		6.413	333		
April	0		7.626	366		
May	0		10.772	515		
June	0		13.531	652		
July	0		11.885	632		
August	0		7.278	415		
September	0		4.259	248		
October	0		1.814	110		
November	0		1.256	75		
December	0		2.205	131		
Totals	(See station # 1 for totals)		81.959	4,253	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.224 MG (366 days)

14. Maximum gallons pumped in a day 0.593 MG

15. Date of same, May 26, 2016

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 psi

* One electric meter is used for 1, 1A & 2

408	North Main St. Well #2	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2016
Pumping Information - Continued Oxford		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	see North Main Street #1 meter	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	see North Main Street #1 meter	

11. Station Log **Nelson St. #3**

Year and Month 2016	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Total Static Head	Average Total Dynamic Head
January	29,120		12.444	750		
February	20,320		5.525	327		
March	20,960		11.053	663		
April	26,560		11.310	689		
May	23,200		11.985	734		
June	26,560		11.952	726		
July	25,760		12.295	718		
August	27,037		16.451	738		
September	27,036		15.951	725		
October	27,696		15.849	729		
November	25,062		14.692	683		
December	29,542		15.199	708		
Totals	308,853	0	154.706	8,190	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.423 MG (366 days)

14. Maximum gallons pumped in a day 0.602 MG

15. Date of same, September 15, 2016

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 psi

18. Kind of coal			
19. Average price per net ton, delivered			
20. Average price of wood per cord, delivered			
21. Average price per gas per M. cubic feet			
22. Average price per gasoline per gallon, delivered			
23. Average price of fuel oil per gallon, delivered			
24. Average price of electric power per Kwhr	$	0.15	
25. Wood consumed durind the year			
26. Gas consumed during the year			
27. Gasoline consumed during the year			
28. Fuel oil consumed during the year			
29. Electric Power used during the year		308,853	Kwhrs

409 Hingham

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
24"	Ductile		10,285				10,285
20"	Lock Joint		13,909				13,909
20"	Cast Iron		26,921				26,921
20"	Cast Iron Cement Lined		277				277
20"	Ductile		10,285				10,285
16"	Lock Joint		112				112
16"	Cast Iron		5,531				5,531
16"	Cast Iron Cement Lined		104				104
16"	Ductile		3,767				3,767
14"	Cast Iron		5,936				5,936
14"	Ductile		110				110
12"	Cast Iron		51,372				51,372
12"	Cast Iron Cement Lined		29,648				29,648
12"	Ductile		46,734				46,734
12"	Transite		12,602				12,602
12"	HDPE					2,785	2,785
10"	Cast Iron		11,459				11,459
8"	Cast Iron		40,519				40,519
8"	Cast Iron Cement Lined		114,469				114,469
8"	Ductile		174,740				174,740
8"	Transite		43,273				43,273
8"	Steel		70				70
8"	HDPE		1,620				1,620
6"	Cast Iron		116,694				116,694
6"	Cast Iron Cement Lined		74,764				74,764
6"	Ductile		13,075			85	13,160
6"	Transite		87,134				87,134
6"	HDPE		1,451			609	2,060
4"	Cast Iron		31,508				31,508
4"	Cast Iron Cement Lined		77				77
4"	Ductile		12,247				12,247
4"	Galvanized		256				256
4"	Plastic		500				500
3"	Cast Iron		1,323				1,323
3"	Galvanized		82				82
3"	Plastic		525				525
2 1/4"	Cast Iron Cement Lined		37,595	516			37,079
2"	Steel		400				400
2"	Galvanized		19,999				19,999
2"	Plastic		1,282				1,282
1 1/2 "	Galvanized		2,449				2,449
1 1/4"	Galvanized		802				802
1"	Plastic		0				0
1"	Copper		339				339
1"	Galvanized		3,831				3,831
3/4"	Galvanized		100				100
3/4"	Copper		49				49
		TOTALS	1,010,225	516	0	3,479	1,013,188

2. Cost of repairs per mile of pipe including valves $ 2,577

3. Number of leaks in mains, during the year 31

4. Number of leaks per mile 0.1600

5. Length of mains less than 4 inches in diamater 68,260 miles 12.93

409 Milbury

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
16	Cast Iron		6,575		730	730	6,575
12	C. I. & Ductile		39,123			174	39,297
10	Cast Iron		17,691	10		10	17,691
8	C.I. & Ductile		119,394			500	119,894
6	C.I. & Ductile		66,760		174		66,586
4	Cast Iron		1,323				1,323
3	Cast Iron		935				935
2 1/4	Cast Iron		12,751				12,751
2	Cast Iron		3,605	34	500		3,071
8	Transite		1,497				1,497
6	Transite		3,609				3,609
2	Plastic		835			34	869
		TOTALS	274,098	44	1,404	1,448	274,098

2. Cost of repairs per mile of pipe including valves $ 2,119

3. Number of leaks in mains, during the year 13

4. Number of leaks per mile 0.2504

5. Length of mains less than 4 inches in diamater 17,626 miles 3.34

409 Oxford

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2016**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
16	Ductile		3,328				3,328
12	C.I. & Ductile		29,153			1,522	30,675
10	C.I. & Ductile		1,674				1,674
8	C.I. & Ductile		81,394	1,533		11	79,872
6	C.I. & Ductile		55,521	42		63	55,542
3	C.I. & Ductile		200				200
2 1/4	C.I. & Ductile		3,665				3,665
2	C.I. & Ductile		11,413				11,413
8	Transite		5,518				5,518
6	Transite		22,422	21			22,401
4	Ductile		354				354
2	Plastic		31				31
		TOTALS	214,673	1,596	0	1,596	214,673

2. Cost of repairs per mile of pipe including valves $ 530

3. Number of leaks in mains, during the year 5

4. Number of leaks per mile 0.1230

5. Length of mains less than 4 inches in diamater 15,309 miles 2.90

DISTRIBUTION INFORMATION

6. Water towers or stand pipes

	Location	Land		
		Area	When Bought	Cost
A	Turkey Hill	23	1963	$4,766
B	Accord Tank			
C	Accord Tank on land adjacent to Accord Pond - included there			

	Capacity in Gallons	When Bought	Cost
A	2,000,000	1963	$103,921
B	750,000	1967	$145,359
C			
	2,750,000		$249,280

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
3/4" - 10"	Copper-WI-Steel				
	Plastic Galv	10,300	21		10,279
3/4"	Plastic	0			0
3/4"	Copper	269	7		262
1"	Plastic	1,013			1,013
1"	Copper	840		44	884
2"	Plastic	235		3	238
4"	DICL	110		1	111
6"	DICL	112		1	113
8"	DICL	78			78
12"	DICL	2			2
	TOTALS	12,959	28	49	12,980

8. Average length of service pipe 25 feet

9. Average cost of service laid during the year $ 5,017

10. Percentage of services that are metered All except for fire services

11. Percentage in income that is metered

12. Leaks in service during the year 51

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION

6. Water towers or stand pipes Millbury

	Location	Land		
		Area	When Bought	Cost
A	Burbank Hill	3.00 Acres	1895	
B				
C				
D				

	Inside Diameter	Capacity in Gallons	When Bought	Cost
A	130'	1,500,000	1895	$25,802
B				
C				
D				

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
12	Cast Iron Ductile	1			1
10	Cast Iron	2			2
8	Cast Iron Ductile	22			22
6	Cast Iron Ductile	73			73
4	Cast Iron Ductile	54			54
3	Cast Iron	1			1
2 1/4	Cast Iron	7			7
2	Cast Iron	25			25
1 1/4	Cast Iron	0			0
1 1/2	Copper	0			0
3/4	Copper	1,476	12		1,464
3/4	Plastic	609			609
1	Copper	434	1	16	449
1	Plastic	504			504
1	Cement Lined	489			489
2	Plastic	29			29
2	Copper	2			2
	TOTALS	3,728	13	16	3,731

Also 11 residential services in the Town of Auburn that are included in the above totals

8. Average length of service pipe 27 feet

9. Average cost of service laid during the year $ 4,212

10. Percentage of services that are metered all except fire service

11. Percentage in income that is metered

12. Leaks in service during the year 5

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION

6. Water towers or stand pipes

	Location	Land		
		Area	When Bought	Cost
A	N. Main St., Oxford , MA	1 Acre	1905	$319
B		13.4 Acres	1944	$438
C				
D				

	Inside Diameter	Capacity in Gallons	When Bought	
A	27	215,000	1905	
B				
C				
D				

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
12	Cast Iron Ductile	1			1
8	Cast Iron Ductile	4			4
6	Cast Iron Ductile	28			28
2 1/4	Cast Iron	10			10
2	Galv Iron	0			0
1 1/2	Copper	0			0
1 1/4	Copper	0			0
1	Copper	282	1	30	311
3/4	Copper	1,468	14		1,454
2	Cast Iron	5			5
4	Cast Iron Ductile	6			6
3/4	Plastic	239	10		229
1	Plastic	550	3		547
2	Plastic	31	1	2	32
1	Galv Iron	18			18
	TOTALS	2,642	29	32	2,645

8. Average length of service pipe: 27 feet

9. Average cost of service laid during the year: $ 3,675

10. Percentage of services that are metered: all except fire service

11. Percentage in income that is metered:

12. Leaks in service during the year: 4

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
24	Butterfly Valves	17			17
20	Butterfly Valves	18			18
16	Butterfly Valves	8			8
14	Butterfly Valves	5			5
12	Butterfly Valves	19			19
12	Check Valve	1			1
20	Gate Valves	11			11
16	Gate Valves	11			11
14	Gate Valves	16		2	18
12	Gate Valves	306		7	313
10	Gate Valves	34			34
8	Gate Valves	941			941
6	Gate Valves	816		2	818
4	Gate Valves	209			209
3	Gate Valves	1			1
2 1/4 - 2 1/2	Gate Valves	85			85
2	Gate Valves	201		1	202
1 1/2	Gate Valves	9			9
1 1/4	Gate Valves	17			17
1	Gate Valves	270	1		269
3/4	Gate Valves	80			80
	Totals	3,075	1	12	3,086

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
16	Butterfly	2			2
16	Gate Valve	6			6
12	Gate Valve	71		1	72
10	Gate Valve	25			25
8	Gate Valve	247			247
6	Gate Valve	343	3	3	343
4	Gate Valve	3			3
3	Gate Valve	6			6
2 1/4	Gate Valve	31	1		30
2	Gate Valve	25			25
3/4	Gate Valve	2			2
	Totals	761	4	4	761

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
16	Butterfly	5			5
16	Gate Valve	0			0
12	Gate Valve	57		4	61
10	Gate Valve	3			3
8	Gate Valve	181	5	2	178
6	Gate Valve	295	2	2	295
2 1/2	Gate Valve	18			18
2	Gate Valve	11			11
1 1/4	Gate Valve	2			2
1	Gate Valve	8			8
4	Gate Valve	1			1
	Totals	581	7	8	582

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4 1/2		0			0
4 1/4		0			0
5		461	15		446
5 1/4		450		16	466
TOTALS		911	15	16	912

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Customer/Town Purchased & Installed
Town Owned

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
5		3			3
4 1/2		0			0
4 1/4		6			6
5		34			34
5 1/4		250		1	251
Metered		122			122
TOTALS		415	0	1	416

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer/Town Purchased & Installed

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4 1/2	2 - 2 1/2	27	2		25
5	2 - 2 1/2, 1- 4	1			1
5 1/4	2 - 2 1/2, 1- 4	57		2	59
4 1/4	2 - 2 1/2, 1- 4	65			65
4 1/2	2 - 2 1/2, 1- 4	61			61
4 3/4	2 - 2 1/2, 1- 4	8			8
4 1/4	2 - 2 1/2, 1- 4	1	Hydrant is located in town of Auburn		1
	TOTALS	220	2	2	220

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Hydrants installed on new main extensions are paid by developers.

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2	28			28
4 1/2	2 - 2 1/2, 1- 4	13			13
4 1/4	2 - 2 1/2, 1- 4	5			5
5 1/4	2 - 2 1/2, 1- 4	64		10	74
	TOTALS	110	0	10	120

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer Purchased

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2	28			28
4	3 - 2 1/2	0			0
4 1/4	2 - 2 1/2, 1- 4	3			3
4 1/2	2 - 2 1/2, 1- 4	69			69
5	2 - 2 1/2, 1- 4	5			5
4	2 - 2 1/2, 1- 4	1			1
5 1/4	2 - 2 1/2, 1- 4	79		1	80
	TOTALS	185	0	1	186

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Hydrants installed on new main extensions are paid for by developers.

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2, 1- 4	13	1		12
5 1/4	2 - 2 1/2, 1- 4	0			0
	TOTALS	13	1	0	12

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer Purchased

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year In Use	Number at Beginning of Year On Hand	Bought Since	Condemned Since and Removed	Number at Close of Year In Use	Number at Close of Year On Hand
1/2						
5/8	11,998	244	1,700	1,651	12,037	254
3/4	16	6	0	2	16	4
1	365	0	49	45	365	4
1 1/2	78	17	0	5	79	11
2	159	18	11	19	157	12
3	0	0			0	0
4	3	0			3	0
6	3	0			3	0
8	4	0			4	0
Totals	12,626	285	1,760	1,722	12,664	285

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year In Use	Number at Beginning of Year On Hand	Bought Since	Condemned Since and Removed	Number at Close of Year In Use	Number at Close of Year On Hand
1/2						
5/8	3,472	12	330	257	3,521	36
3/4	1	0	0	0	1	0
1	58	3	2	2	58	3
1 1/2	17	6	2	4	17	4
2	45	9	7	14	45	2
3	1	0	0	0	1	0
4	4	0	0	0	4	0
5						
8						
Totals	3,598	30	341	277	3,647	45

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

Company owned meters at pump stations:

Oak Pond Station 1-8" Honeywell Flow
#1 Jacques 1-8" Chessel Flow
#2 Jacques 1-8" Chessel Flow
5-1" mtrs for make up water - 1-Oak Pond, 1-#1 Jacques, 1-#2 Jacques, 2-Millbury Ave. Filter Plant
Millbury Ave. - 5-6" Primary Flow Signal Flow Meters
Millbury Ave. - 3-8" Primary Flow Signal Flow Meters

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year In Use	Number at Beginning of Year On Hand	Bought Since	Condemned Since and Removed	Number at Close of Year In Use	Number at Close of Year On Hand
1/2						
5/8	2,523	3	220	214	2,528	4
3/4	0	0	0	0	0	0
1	60	0	6	5	61	0
1 1/2	11	0	0	0	11	0
2	16	0	4	3	18	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
6	3	0	0	0	3	0
8	0	0	0	0	0	0
Totals	2,613	3	230	222	2,621	4

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

Company owned meters N Main St. & #1A N. Main St.
N. Main St. #1 1-8" Chessel flow
N. Main St. #2 1-8" Chessel flow
Nelson St. #3 1-8" Chessel flow
2-1" Meter for make up water
#1N. Main St.
#3 Nelson St.

Annual report of Aquarion Water Company of Massachusetts

Distribution Information - Concluded

25. Meters owned by Company

		Size (inches)										
Maker	**Type**	**1/2**	**5/8**	**3/4**	**1**	**1 1/2**	**2**	**3**	**4**	**6**	**8**	**Total**
Neptune	Disc		12,219	20	361		161					12,761
Neptune	Turbine					90			2		2	94
Neptune	Compound						3				1	4
Neptune	Protectus									2		2
Badger	Turbine										1	1
Trident	Disc		72		8		5					85
Kent	Disc								1			1
Hersey	Turbine									1		1
Totals		0	12,291	20	369	90	169	0	3	3	4	12,949

Distribution Information - Concluded

25. Meters owned by Company

		Size										
Maker	Type	1/2	5/8	3/4	1	1 1/2	2	3	4	6	8	Total
Neptune	Disc		3,540	1	61	21	43	0				3,666
Badger	Disc		13									13
Neptune	Turbine								0			0
Kent	Disc		4									4
Rockwell	Disc						1					1
Sensus	Disc						2	1				3
Trident	Disc						1		4			5
Totals		0	3,557	1	61	21	47	1	4	0	0	3,692

Distribution Information - Concluded

25. Meters owned by Company

		Size										
Maker	Type	1/2	5/8	3/4	1	1 1/2	2	3	4	6	8	Total
Neptune	Disc		2,514	0	61	11	18					2,604
Badger	Disc		13									13
Neptune	Fullcrest									3		3
Rockwell	Disc											0
Kent	Disc		5									5
Neptune	Protectus											0
Totals		0	2,532	0	61	11	18	0	0	3	0	2,625

415 Hingham

Annual report of Aquarion Water Company of Massachusetts American Water Company Year ended December 31, 2016

CONSUMPTION INFORMATION

	Permanent	Seasonal
1. Estimated total population of territory covered by franchise	34,263	44,556
2. Estimated population reached by the distribution system,	34,263	44,556
3. Estimated population actually supplied,	34,263	44,556

4. Total consumption during the year (1)	1,195,574,882	gallons
5. Average daily consumption (2)	3,266,598	gallons
6. Day on which greatest amount was pumped	June 28, 2016	
7. Gallons pumped on above day	5,519,518.00	gallons
8. Week during which greatest amount was pumped	July 22 - July 28	
9. Gallons pumped during above week	5,088,192	gallons
10. Gallons per day per service (3)	206	gallons
11. Consumption metered	954,653,000	gallons
12. Consumption metered	80.00%	Percent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
13,100	0	41	13,141

Name of City, Town or District	Number of Customers as of December 31, 2016
Hingham	8,188
Hull	4,623
Cohasset	330

(1) Represents Total Water Production During the Year including purchased water
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire services.

415 Millbury

Annual report of Massachusetts American Water Company **Year ended December 31, 2016**

CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise,	13,261	
2. Estimated population reached by the distribution system,	8,434	
3. Estimated population actually supplied,	8,434	
4. Total consumption during the year (1)	575,472,000	gallons
5. Average daily consumption (2)	1,572,000	gallons
6. Day on which greatest amount was pumped	June 15, 2016	
7. Gallons pumped on above day	2,198,000	gallons
8. Week during which greatest amount was pumped	July 25 - July 31	
9. Gallons pumped during above week	22,322,000	gallons
10. Gallons per day per service (3)	373	gallons
11. Consumption metered	497,740,000	gallons
12. Consumption metered	86.49%	Per cent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
3,763		54	3,817

Name of City, Town or District	Number of Customers as of December 31, 2016
Millbury	3,817

(1) Represents Total Water Production During the Year
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire Services.

415 Oxford

Annual report of Massachusetts American Water Company **Year ended December 31, 2016**

CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise,	12,293	
2. Estimated population reached by the distribution system,	6,208	
3. Estimated population actually supplied,	6,208	
4. Total consumption during the year (1)	242,515,000	gallons
5. Average daily consumption (2)	663,000	gallons
6. Day on which greatest amount was pumped	June 26, 2016	
7. Gallons pumped on above day	1,146,000	gallons
8. Week during which greatest amount was pumped	June 20 - June 26	
9. Gallons pumped during above week	6,979,000	gallons
10. Gallons per day per service (3)	200	gallons
11. Consumption metered	191,846,000	gallons
12. Consumption metered	79.11%	Per cent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
2,660		8	2,668

Name of City, Town or District	Number of Customers as of December 31,2016
Oxford	2,668

(1) Represents Total Water Production During the Year
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire Services.

CONSUMPTION INFORMATION - Concluded

By Meter… SEE ATTACHED RATE TARIFF SHEETS DATED JANUARY 1, 2015

……

……

……

Per faucet, per year……

Per hose connection, per year,……

Per bath tub, per year,……

Per shower bath, per year, ……

Per foot tub, per year,……

Per wash tub, per year,……

Per urinal, per year,……

Per water closet, per year,……

Per sink, per year,……

Per bowl, per year……

Per private hydrant, per year,……

For sprinkler systems,……

For water motors,……

Per drinking fountain, per year,……

Per public hydrant, per year,……

For watering troughs,……

Minimum charge,……

Give any contact rates that are in force and state what discounts are allowed for prompt payment and what fines are charged for delayed payment……

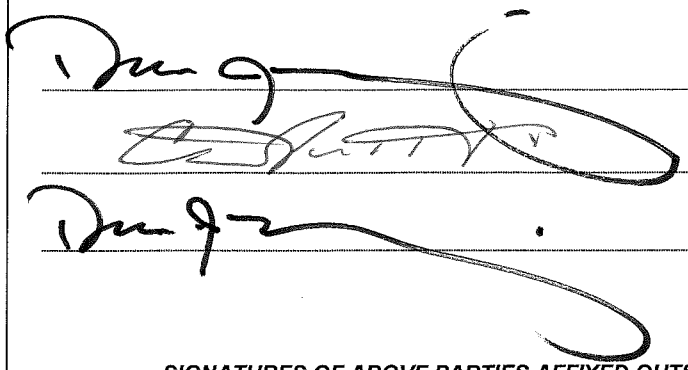
……

……

Are payments required in advance?……

When are meters read and bills rendered?……

THIS RETURN IS SIGNED UNDER THE PENALTIES OF PERJURY



Executive Vice President, Treasurer, Secretary and Clerk

Director

Director

SIGNATURES OF ABOVE PARTIES AFFIXED OUTSIDE THE COMMONWEALTH OF MASSACHUSETTS MUST BE PROPERLY SWORN TO

State of Connecticut

County of Fairfield as March 28, 2017

Then personally appeared Donald J Morrissey, Executive Vice President, Treasurer, Secretary, Clerk, and Director of Aquarion Water Company of Massachusetts, and Charles V. Firlotte, Director of Aquarion Water Company of Massachusetts

and severally made oath to the truth of the foregoing statement by them subscribed according to their best knowledge and belief.

Shawna Salato

Signature

Notary Public or Justice of the Peace

Expiration of Commission

SHAWNA SALATO
NOTARY PUBLIC
MY COMMISSION EXPIRES JULY 31, 2017

RATE FOR METERED SERVICE – SERVICE AREA A

AVAILABILITY
This rate is available to customers located in the following towns on the mains of the Company within the Company's franchise area, for all purposes except fire protection, subject to the Rules and Regulations of the Company: Cohasset (North Cohasset), Hingham, Hull and Norwell.

WATER CHARGE
A water charge will be made for all water used as registered by the meter, as set forth below:

Rate Per Hundred Cubic Feet (CCF)

RATE R1 - Applies to all metered residential usage by customers classified as such on the Company's records.

First 12 CCF per Quarter/ 4 CCF per Month	$2.874
Over 12 CCF per Quarter/ 4 CCF per Month	$3.915

RATE G1 - Applies to all metered commercial usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 12 CCF per Quarter/ 4 CCF per Month	$2.107
Over 12 CCF per Quarter/ 4 CCF per Month	$2.638

RATE G2 - Applies to all metered public authority usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 12 CCF per Quarter / 4 CCF per Month	$2.107
Over 12 CCF per Quarter/ 4 CCF per Month	$2.496

RATE G3 - Applies to all metered industrial usage by customers classified as such on the Company's records, which do not qualify for Rate G4. All Usage $2.239

RATE G4 - Applies to the total monthly usage by qualifying non-residential customers, classified as such on the Company's records, as per the following criteria: All Usage $1.572

Monthly billed amounts:	not less than 10,000,000 gallons, and not more than 40,000,000 gallons
Past 12 months total billed amount	not less than 120,000,000 gallons.

Usage which does not meet these criteria shall be charged at the appropriate G1, G2 or G3 Rate.

SERVICE CHARGE
In addition, all metered general water service customers shall pay a service charge on the size of each meter installed. Customers with multiple meters shall be charged for each meter at the indicated rate.

	Service Charge	
Size of Meter	**Per Month**	**Per Quarter**
5/8"	$ 15.61	$ 46.83
3/4"	$ 23.73	$ 71.19
1"	$ 38.09	$ 114.27
1 1/2"	$ 74.31	$ 222.93
2"	$ 117.71	$ 353.13
3"	$ 219.19	$ 657.57
4"	$ 363.27	$ 1,089.81
6"	$ 725.15	$ 2,175.45
8"	$ 1,159.77	$ 3,479.31

TERMS OF PAYMENT
The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1, 2012

By:_____ Title: Vice President, Treasurer
Donald J. Morrissey

RATE FOR METERED SERVICE – SERVICE AREA B

AVAILABILITY

This rate is available to customers located in the following towns on the mains of the Company within the Company's franchise area, for all purposes except fire protection, subject to the Rules and Regulations of the Company: Millbury, Oxford.

WATER CHARGE

A water charge will be made for all water used as registered by the meter, as set forth below:

	Rate Per Thousand Gallons(KGAL):
RATE R1 - Applies to all metered residential usage by customers classified as such on the Company's records.	
First 9 KGAL per Quarter/ 3 KGAL per Month	$3.841
Over 9 KGAL per Quarter/ 3 KGAL per Month	$5.233
RATE G1 - Applies to all metered commercial usage by customers classified as such on the Company's records, which do not qualify for Rate G4.	
First 9 KGAL per Quarter/ 3 KGAL per Month	$2.815
Over 9 KGAL per Quarter/ 3 KGAL per Month	$3.528
RATE G2- Applies to all metered public authority usage by customers classified as such on the Company's records, which do not qualify for Rate G4.	
First 9 KGAL per Quarter/ 3 KGAL per Month	$2.815
Over 9 KGAL per Quarter/ 3 KGAL per Month	$3.337
RATE G3- Applies to all metered industrial usage by customers classified as such on the Company's records, which do not qualify for Rate G4. All Usage	$2.992
RATE G4 - Applies to the total monthly usage by qualifying non-residential customers, classified as such on the Company's records, as per the following criteria: All Usage	$2.102

Monthly billed amounts:	not less than 10,000,000 gallons, and not more than 40,000,000 gallons
Past 12 months total billed amount	not less than 120,000,000 gallons.

Usage which does not meet these criteria shall be charged at the G1, G2 or G3 Rate.

SERVICE CHARGE

In addition, all metered general water service customers shall pay a service charge on the size of each meter installed. Customers with multiple meters shall be charged for each meter at the indicated rate.

	Service Charge	
Size of Meter	**Per Month**	**Per Quarter**
5/8"	$ 15.61	$ 46.83
3/4"	$ 23.73	$ 71.19
1"	$ 38.09	$ 114.27
1 1/2"	$ 74.31	$ 222.93
2"	$ 117.71	$ 353.13
3"	$ 219.19	$ 657.57
4"	$ 363.27	$ 1,089.81
6"	$ 725.15	$ 2,175.45
8"	$ 1,159.77	$ 3,479.31

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1,2012

By:_____ Title: Vice President, Treasurer

Donald J. Morrissey

RATE FOR PRIVATE FIRE PROTECTION

AVAILABILITY

This rate is available to customers located on the mains of the Company within the Company's franchise area for Private Fire Protection, subject to the Rules and Regulations of the Company.

RATE

	Per Year
For each service connection 4" or smaller	$ 513.47
For each service connection 6"	$ 1,077.88
For each service connection 8"	$ 1,868.07
For each service connection 10"	$ 2,884.02
For each service connection 12"	$ 4,125.73
For each privately owned fire hydrant serving Cohasset, Hingham, Hull, Millbury and Oxford	$ 735.39
For each privately owned fire hydrant outside Cohasset, Hingham, Hull, Millbury and Oxford	$ 924.04

TERMS OF PAYMENT

Bills shall be rendered and due monthly or quarterly in advance. The above rates are net and are payable within forty-five (45) days of the date of the bill. The Company reserves the right to disconnect the service of any customers not having their account paid in full within forty-five (45) days of the date of the bill.

SPECIAL PROVISIONS

(a) All water shall be used for fire protection purposes only.

(b) The Company reserves the right, if water is used in violation of (a) above, to install a meter on the connection at any time which will meet the requirements of the fire insurance companies. In the event a meter is installed, the established meter rates, including both water and service charges, will apply in lieu of the above rates for Private Fire Protection.

Issued: April 1,2012 Effective: April 1,2012

By:_____ Title: Vice President, Treasurer

RATE FOR PUBLIC FIRE PROTECTION

AVAILABILITY

This rate is available for Public Fire Protection only, and is subject to the Rules and Regulations of the Company.

RATES

For each Company owned public fire hydrant	$ 221.77
In addition, annual charges as follows:	
Town of Hingham	$ 354,424.00
Town of Hull	$ 203,951.00
Town of Cohasset	$ 16,788.00
Town of Millbury	$ 143,013.00
Town of Oxford	$ 99,487.00

TERMS OF PAYMENT

Bills shall be rendered and due monthly or quarterly in arrears. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1,2012

By:_____ Title: Vice President, Treasurer

SALE FOR RESALE

AVAILABILITY
This rate is available to municipalities, or political subdivisions thereof, for resale to customers resident in territory contiguous to that served by the Company.

RATE
For all water taken, subject to the minimum charge as provided below:

$ 2.00 per 1,000 gallons

MINIMUM CHARGE
A variable minimum charge will apply based on the minimum monthly delivery occurring over the preceding 12 months, but not less than 100,000 gallons per month, times the currently allowed rate per 1,000 gallons.

Example: given a minimum monthly billing of 500,000 gallons, the minimum charge
Would be $2.00 x 500 = $1,000 per month.

TERMS OF PAYMENT
The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

MISCELLANEOUS CHARGES

Drought Conditions

Termination and Restoration Fee – Business Hours*	$ 49.00
Termination and Restoration Fee – After Hours	$ 294.00

*Normal business hours are Monday through Friday, 8 am to 4 pm.

System Development Charge ("SDC")

Meter Size**	Capacity GPM	Ratio to 5/8" Meter	Fee
5/8"	20	1.00	$640
3/4"	30	1.50	$960
1"	50	2.50	$1,600
1 ½"	100	5.00	$3,200
2"	160	8.00	$5,120
3"	320	16.00	$10,240
4"	500	25.00	$16,000

*SDC is determined on a case by case basis for meter sizes greater than 4".

OTHER SERVICES

AVAILABILITY

This rate is available to all classes of customers located on the mains of the Company Subject to the Rules and Regulations of the Company.

Frozen Meters	Actual Cost of Meter	
Meter Test Fees 1" and less	$	50.00
Larger than 1"	$	75.00
Return Check Fee	$	20.00
Seasonal Meter Set & Turn On Fee	$	49.00
Seasonal Meter Removal Fee & Turn Off Fee	$	49.00
Turn-on Fee – Business Hours	$	49.00
After Hours Callout	$	294.00
Non-Payment Reconnect – Business Hours	$	49.00
Non-Payment Reconnect – After Hours	$	294.00
Theft of Service	$	1,000.00
(or triple the amount of damages which ever is greater)		
Cross Connection – One Device Testing	$	75.00
Each Additional	$	35.00

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

The following surcharges are applicable to all metered customers located in the following towns on the mains of the Company within the Company's franchise area: Cohasset, (North Cohasset), Hingham, Hull and Norwell.

SURCHARGE

	Service Charge	
Size of Meter	Per Month	Per Quarter
5/8"	10.25	$30.75
3/4"	$15.59	$46.77
1"	$25.01	$75.03
1 1/2"	$48.79	$146.37
2"	$77.28	$231.84
3"	$143.91	$431.73
4"	$238.52	$715.56
6"	$476.11	$1,428.33
8"	$761.47	$2,284.41

Consumption Charge per 100 cubic feet for Water Treatment Facility Lease $0.7342

Consumption Charge per 100 cubic feet for Water Treatment Operation and Maintenance $1.0119

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bills.

Issued: October 22, 2012 Effective: November 1, 2012

By:_____ Title: Vice President, Treasurer

PURCHASED WATER SURCHARGE

AVAILABILITY

All metered general water service customers falling under the G4 rate designation receiving water service from the Millbury system, the City of Worcester interconnection or a combination of both sources. G4 customers will be billed at the customary G4 rate under the Company's approved tariff schedule for water service received from the Millbury system based on readings of the Millbury system meter.

SURCHARGE AMOUNT

In addition, any G4 customer who receives water supplied from the City of Worcester interconnection will be billed an amount equal to the difference in the cost of water purchased from the City of Worcester and the volumetric rate paid by a G4 customer as per the Company's tariff.

To the extent that multiple customers qualify for the G4 rate, the cost of water service from the City of Worcester interconnection will be allocated among the qualifying customers based upon the respective water usage in the applicable billing period.

The surcharge for each forthcoming year will be calculated on December 1 based on the previous 12 months of applicable actual invoices from the City of Worcester. The surcharge will be charged to the customer in equal installments over the calendar year beginning with the January billing.

TERMS OF PAYMENT

The Company renders bills on a monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

The following Tangible Property Regulation ("TPR") surcharge is applicable to all metered and fire service customers located within the Company's franchise area.

The surcredit reflected below is being made by Aquarion Water Company of Massachusetts, Inc. (the "Company") through a tax benefit to the Company by the Internal Revenue Service ("IRS") pursuant to IRS Revenue Procedure 2014-16 ("Procedure"). The Procedure allows the Company to adopt an alternative method for determining how capital expenditures can be treated for federal tax purposes, allowing certain expenditures that were historically considered as capital for tax purposes to be treated as expenses for tax purposes.

The surcredit is a result of the Company's adoption of this alternative tax treatment related to mains, services and hydrants.

In the event that the IRS subsequently disallows all or part of the TPR credit that the Company has or was expecting to credit to customers, then, to the extent that the total amount that has been approved by the Department as the basis of the surcredit to customers is different than the amount allowed by the IRS:

a. Within ten days of the receipt by the Company of a formal notice from the IRS adjusting the amount of the TPR credit, the Company shall make a compliance filing with the Department reconciling the amount of the surcredit to customers' bills in order to reflect the amount of any such IRS adjustment on a going forward basis and the surcredit shall be adjusted or, in the case of complete disallowance by the IRS, eliminated; and.

b. The Company shall be authorized to defer on its accounting and financial records and include for recovery or refund in its next general rate application the amount that has been passed back to customers through the surcredit that is different from that amount allowed by the IRS.

SURCREDIT

The surcredit reduces customer rates by $410,000 or approximately 3.23 percent per customer and shall be applied over a twelve (12) month period.

TERMS OF SURCREDIT

The surcredit will apply for a period of 12 months, beginning on January 1, 2015. The surcredit shall not apply to the water treatment facility surcharges for the Company's Service Area A.

Issued: December 19, 2014 Effective: January 1, 2015

By: Troy M. Dixon Title: Director, Rates and Regulation